

Doctoral thesis

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Ole Kristian Aamot

Location for World Wide Web

Location Search on World Wide Web

NTNU
Norwegian University of Science and Technology
Thesis for the Degree of
Philosophiae Doctor
Faculty of Information Technology and Electrical
Engineering
Department of Computer Science



Norwegian University of
Science and Technology

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Trondheim, December 2023

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Chapter 1

Piperpal Geolocation Search Engine

Piperpal (<https://www.piperpal.com/>) is a geolocation search engine where you can tag geolocation with a location on World Wide Web and your current geopoint with a mobile device such as the Google Pixel 7 smartphones with Android 13 using the Piperpal application <https://play.google.com/store/apps/details?id=com.piperpal.api.android> with full source code available under the MIT License on <https://www.github.com/piperpal/>

Chapter 2

Location-based Queries

The discussion of Location-based Queries began in 2005 at the International Conference on Web-Age Information Management (Searching the World Wide Web for Local Services and Facilities: A Review on the Patterns of Location-Based Queries, Asadi, 2005) with the newly introduction of GPS (Global Position Satellite) mobile support and new smartphones such as Apple iPhone, Blackberry and Google Android-based smart mobile devices with GPS support in 2008.

Chapter 3

Locationaware Content Tag: <location>,&location markup

I am introducing the new <location> tag and &<location> syntax for document markup of locationbased content in HTML by creating the Data Type Definition published on <http://github.com/location>

The new tag will make it easier for content providers to state that the HTML content they are publishing is geographically positioned and meant for indexing and displaying on services like Google Maps / Google Now. The motivation behind this work is new locationbased content retrieval, and would open a range of new ways to advertise geographically within a given radius and time interval.

3.1 Example: &concert

HTML Document with <location> tag with &concert example Daryl Hall & John Oates playing a concert at the Greek Theater at UC Berkeley. The location tag is &concert.

Chapter 4

Piperpal: Location-aware markup

My idea is that the content on a website is marked up according to a location tag and that this tag decides which content that is meant to be indexed and eligible for placing a ad on. The content producers would tag their content with a location tag, the advertisements mark up their catalog with locationaware radius ads, and the users can embed the ads in their posts with a new location tag syntax such as &concert that could be implemented by Google services such as Gmail and Google+.

4.1 Pseudo code for logic of search for nearby matches

```
if (notBefore < NOW() < notAfter || ((&UserLoc  
radius) < (geo) < (&UserLoc + radius)) → display
```

Piperpal is the first site that I am implementing for making a resource for locationbased tags.

On <http://piperpal.com/> I added the form that lets the users insert the Name, Location, and Service parameter and pay by credit card (via Stripe) to add the entry. The mapping between the content produced by a content provider, the ad by the advertiser and the tagging by individual user is done on www.piperpal.com/<location> where the location tag example for <location> would be &concert and the URI would be www.piperpal.com/concert

Chapter 5

MariaDB Database Structure

A MariaDB (<http://www.mariadb.org/>) database structure for our implementation of “Location Search on World Wide Web” is given as SQL instructions here:

Listing 5.1: Insert code directly in your document

```
1 CREATE TABLE piperpal (  
2     id MEDIUMINT(8) UNSIGNED NOT NULL AUTO_INCREMENT,  
3     name VARCHAR(100) NOT NULL DEFAULT '',  
4     service VARCHAR(1024) NOT NULL,  
5     location VARCHAR(1024) NOT NULL,  
6     modified TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE  
       CURRENT_TIMESTAMP,  
7     created TIMESTAMP NULL DEFAULT NULL,  
8     glat DECIMAL(10, 8) NOT NULL,  
9     glon DECIMAL(11, 8) NOT NULL,  
10    paid MEDIUMINT(16) UNSIGNED NOT NULL,  
11    token VARCHAR(32) NOT NULL,  
12    type VARCHAR(32) NOT NULL,  
13    email VARCHAR(256) NOT NULL,  
14    PRIMARY KEY (id)  
15 );
```

Chapter 6

The Apache API mapping of “http://piperpal.com/concert”

```
RewriteEngine On  
RewriteRule ^([\saâÄ09]+)$ /api/ [L]
```


Chapter 7

Piperpal API and jQuery representation of <http://piperpal.com/concert>

The API will query the user's link location and geoposition through the AJAX script and present a user with content in the nearest geographical proximity according to the Haversine formula.

Piperpal provides a jQuery function with a variable with a the list of all location entries for a given location tag nearby a geographical position for the device. This jQuery function can then be used by thirdparty developers who want to show all entries for a given locationbased tag entry accepted on piperpal.com

Chapter 8

Computing shortest Haversine distance

The distance along the surface of the (spherical) Earth between two arbitrary points, in degrees is determined by the Spherical Cosine Law, also known as the Haversine Formula. We use this law to compute the nearest entries on piperpal.com measured from the user's geolocation.

Chapter 9

The jQuery function on “http://piperpal.com/concert”

The jQuery function on “http://piperpal.com/concert”

```
$(function()
{ var locations = '{
  "locations" : [' + '
    { "id": "11884992",
      "name": "Løren",
      "service": "Food",
      "location": "https://www.loren.no/",
      "modified": "2023-07-04 12:00:00",
      "created": "2023-07-05 12:00:00",
      "glat": "59.92929197",
      "glon": "10.79022856",
      "paid": "0",
      "token": "tok_1NPyQRAgJ7jHvJPRPHRLaktB",
      "type": "card",
      "distance": "44.61835617894167",
      "email": "ole@aamot.software"},
    { "id": "11884996",
      "name": "@HappyJuly4th",
      "service": "Food",
      "location": "https://www.piperpal.com/Food/@HappyJuly4th",
      "modified": "2023-07-18 12:00:00",
      "created": "2023-07-25 12:00:00",
      "glat": "59.92929074",
      "glon": "10.79037934",
      "paid": "1",
      "token": "tok_1NQ1oDAgJ7jHvJPRGaiDmiKR",
      "type": "card",
```

```
"distance": "44.62663072803127",  
"email": "ole@aamotsoftware.no"]}]';
```

Chapter 10

Future Piperpal work

Convolutional Neural Net to group the nearby points. Plan to do lookups with a Convolution Neural Network [CNN] using a matrix with all of the entries within a radius away from the user's location for a given time as computed by a convolution matrix for the longitude and latitude.

Provide control panel that costs \$25 per year/usage.

Wizard to define service or offer.

Service Category

Example: Shoes or clothing. Sports clothing/shoes. Describe your service/offer:

Shoes

Example: Welcome to Oslo's largest flip flop offers.

Upload/Connect image, url, video, audio.

Decide amount of clicks and enter the email address for accessing statistics.

Payment: Stripe / Paypal / Google Wallet / Android Pay

Statistics

Chapter 11

Perl Module – Piperpal.pm

The software programming module for our implementation of “Location Search on World Wide Web” is given as dynamically loadable Perl5 (version 5.24.1) Module here:

Listing 11.1: Insert code directly in your document

```
1 package Piperpal;
2
3 # Copyright (C) 2015 Ole Aamot
4 #
5 # Author: oka@oka.no
6 #
7 # Date: 2015-08-22T16:45:00+01
8 #
9 # Field: Incremental, prime number, sql, perl
10 #
11 # URL: https://www.piperpal.com/Piperpal.pm
12
13 #####
14 # LOAD MODULES
15 #####
16 use strict;
17
18 use lib '/home/4/p/piperpal/share/perl/5.10.1/';
19 use warnings FATAL => 'all';
20
21 use 5.008001;
22 use Encode qw();
23
24 use HTTP::Request::Common;
25 use DBI;
26 use CGI;
27 # use LWP;
28 use WWW::Mechanize;
```

```

29 use JSON --support_by_pp;
30 use HTML::Entities;
31 use Math::Round;
32 use DateTime;
33
34 my @Piperpal;
35
36 BEGIN {
37     @Piperpal = qw{input_location input_publisher lns_item
38         lns_market_item is_valid is_paid initialize update_location
39         select_location}
40 }
41
42 sub get_locations {
43     my $c = CGI->new;
44     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
45         piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx"
46         , { 'RaiseError' => 1});
47     $dbh->do ("SELECT_DISTINCT_name, glat , glon_FROM_yaylocation_WHERE_
48         paid_ '0' _ORDER_by_name;");
49     my $sth = $dbh->prepare ("SELECT_DISTINCT_name, glat , glon_FROM_
50         yaylocation_ORDER_by_name;");
51     $sth->execute();
52     while (my $ref = $sth->fetchrow_hashref()) {
53         if ( 'GET' eq $c->request_method && $c->param('locationservicename')
54             && $c->param('location')) {
55             if ($ref->{'name'} == $c->param('locationservicename')) {
56                 print "<option_selected_value=" . $ref->{'glat'} . "," . $ref
57                     ->{'glon'} . ">" . $ref->{'name'} . "</option>";
58             } else {
59                 print "<option_value=" . $ref->{'glat'} . "," . $ref->{'glon'}
60                     . ">" . $ref->{'name'} . "</option>";
61             }
62         }
63     }
64     $sth->finish();
65     $dbh->disconnect();
66     return;
67 }
68
69 sub get_services {
70     my $c = CGI->new;
71     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
72         piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx"
73         , { 'RaiseError' => 1});
74     $dbh->do ("SELECT_DISTINCT_service ,name, glat , glon_FROM_piperpal_
75         ORDER_by_service;");
76     my $sth = $dbh->prepare ("SELECT_DISTINCT_service ,name, glat , glon_
77         FROM_piperpal_WHERE_ORDER_by_service;");
78     $sth->execute();
79     if ( 'GET' eq $c->request_method && $c->param('service')) {
80         while (my $ref = $sth->fetchrow_hashref()) {
81             if ($ref->{'service'} == $c->param('service')) {

```

```

70         print "<option_selected_value=" . $ref->('glat') . "," . $ref
71             ->{'glon'} . ">" . $ref->{'service'} . "</option>";
72     } else {
73         print "<option_value=" . $ref->('glat') . "," . $ref->{'glon'}
74             . ">" . $ref->{'service'} . "</option>";
75     }
76 }
77 $sth->finish();
78 $dbh->disconnect();
79 return;
80 }
81 sub input_searchers {
82     my @radiuses = (1,2,5,10,25,50,100,250,500,
83                    750,1000,1250,1500,2000,2500,
84                    3000,4000,5000, 6000,7000,8000,9000,10000,
85                    20000,
86                    40075);
87     my $r;
88     my $sth;
89     my $dbh;
90     my $c = CGI->new;
91     my $servicep;
92     print "<form_onsubmit='updateGeo()' _method='GET' _action='https://
93         www.piperpal.com/#results _id='formID'>";
94     print '<table>';
95     if ('GET' eq $c->request_method && $c->param('query')) {
96         print '<tr><td><center><input_size="30" _type="text" _autofocus_class
97             ="input_form_custom" _id="query" _name="query" _placeholder="
98             Piperpal-search" _value="' . HTML::Entities::encode($c->param('
99             query')) . "' _autocomplete="query_webauthn" _/></center></td></
100             tr>';
101         # $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
102             piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxxxx
103             ", {'RaiseError' => 1});
104         # $dbh->{'mysql_enable_utf8'} = 1;
105         # if ($c->param('query')) {
106         #     $sth = $dbh->prepare ("SELECT name,location ,service FROM
107             piperpal WHERE (name LIKE '%" . $c->param('query') . "%' OR
108             service LIKE '%" . $c->param('query') . "%') ORDER by modified
109             DESC;");
110             $sth->execute();
111             while (my $ref = $sth->fetchrow_hashref()) {
112                 print '<tr><td></td><td>';
113                 $ins_item($ref->{'name'}, $ref->{'location'}, $ref->{'
114                     service'}, $ref->{'glat'}, $ref->{'glon'}, $ref->{'modified'},
115                     $ref->{'created'}, $ref->{'distance_in_km'});
116                 print '</td></tr>';
117             }
118         # }
119         # }
120         $sth->finish();
121         # $ref->{'name'}, $ref->{'location'}, $ref->{'service'}, $ref->{'
122             glat'}, $ref->{'glon'}, $ref->{'modified'}, $ref->{'created'},
123             $ref->{'distance_in_km'}

```

```

108 } else {
109     print '<tr><td><center><input_size="30" _type="text" _class="
        input_form_custom" _id="query" _name="query" _placeholder="Where_
        to_think&quest;" _/></center></td>>';
110     print '<td><select_size="8" _type="hidden" _name="radius" _id="radius" _
        value="1000" _class="input_form_custom">';
111     foreach $r (@radiuses) {
112         if ($c->param('radius')) {
113             if ($c->param('radius')==$r) {
114                 print "<option_value='" . $r . "' _selected>In_ . $r . "_km_
                    radius</option>";
115             } else {
116                 print "<option_value='" . $r . "'>In_ . $r . "_km_radius</
                    option>";
117             }
118         } else {
119             if ($r == 5) {
120                 print "<option_value='" . $r . "' _selected>In_ . $r . "_km_
                    radius</option>";
121             } else {
122                 print "<option_value='" . $r . "'>In_ . $r . "_km_radius</
                    option>";
123             }
124         }
125     }
126 }
127 print '</select></td>>';
128 }
129 print '<td>&nbsp;</td><td><input_type="submit" _id="search" _name="
        search" _value="Go" _/></td></tr></table>';
130 print "<span_id='status'><input_type='hidden' _name='glat' _/><input_
        type='hidden' _name='glon' _/></span>\n";
131 print "</form>";
132 print "<h3>Be_discovered_by_the_world_around_you</h3>";
133 print "<p><a_href='https://www.piperpal.com/google.html'>Submit_
        entries_in_Piperpal\'s_Location-aware_Search_Engine</a></p>";
134 #&Piperpal::input_publisher();
135 #&Piperpal::insert_publisher();
136 print "<p>Location_JavaScript_API:<a_href='http://api.piperpal.com
        /location/'>Piperpal</p>";
137 print "<p>Mobile_Browsers:<a_href='http://www.chromium.org/'>
        Chromium</a>,<a_href='http://www.mozilla.org/firefox'>Firefox
        </a>,<a_href='http://www.vivaldi.com/'>Vivaldi</a></p>";
138 print "<p><a_href='https://www.piperpal.com/?query=&radius=5&search
        =Go&service=Books&glat=55.6828273&glon=12.6082921#results'>
        Copenhagen</a>,<a_href='https://www.piperpal.com/?query=&
        radius=5&search=Go&service=Books&glat=37.419559&glon
        =-122.0897767#results'>Google_Visitor_Center</a>,<a_href='
        https://www.piperpal.com/?query=&radius=5&search=Go&service=
        Books&glat=51.5073219&glon=-0.1276474#results'>London</a>,<a_
        href='https://www.piperpal.com/?query=&radius=5&search=Go&
        service=Books&glat=40.6399278&glon=-73.7786925#results'>New_
        York</a>,<a_href='https://www.piperpal.com/?query=&radius=5&
        search=Go&service=Books&glat=48.8566969&glon=2.3514616#results

```

```

">Paris </a></p>';
139 print '<p>LLM: <a href="http://chat.openai.com/">ChatGPT</a>, <a href="https://ai.meta.com/llama2">Llama_2</a>, <a href="https://bard.google.com/">Bard</a>, <a href="http://ai.bing.com/">Bing</a></p>';
140 print '<p>Maps: <a href="http://maps.google.com/">Google_Maps</a>, <a href="http://www.openstreetmap.org/">Open_Street_Map</a>, <a href="http://www.bing.com/maps/">Bing_Maps</a>, <a href="http://maps.apple.com/">Apple_Maps</a></p>';
141 print '<p>Search: <a href="http://www.google.com/">Google</a>, <a href="http://www.duckduckgo.com/">DuckDuckGo</a>, <a href="http://www.bing.com/">Bing</a>, <a href="http://www.yahoo.com/">Yahoo!</a></p>';
142 }
143
144 sub input_publisher {
145
146     my $c = CGI->new;
147     print "<tr><td width=60>&nbsp;</td><td><form onsubmit='updateGeo()<br>_id='welcomeForm'<br>_name='welcomeForm'<br>_action='https://api.piperpal.com/location/push.php'<br>_method='POST'>";
148     print '<span class="input_form">';
149     print '_title="Name_of_Location-aware_Content_Tag"<br>_class="icon_form"<br>_height="70"<br>_width="70">';
150     if ($c->param('query')) {
151         print '<input type="text"<br>_id="name"<br>_class="input_form_custom"<br>_name="name"<br>_placeholder="Name"<br>_value=' . HTML::Entities::encode($c->param('query')) . '</>';
152     } else {
153         print '<input type="text"<br>_id="name"<br>_class="input_form_custom"<br>_name="name"<br>_placeholder="Name"</>';
154     }
155     print '</span>';
156     print '</td></tr><tr><td width=60>&nbsp;</td><td>';
157     print '<span class="input_form">';
158     print '_title="URL_of_Location-aware_Content_Tag"<br>_class="icon_form"<br>_height="70"<br>_width="70">';
159     print '<input type="text"<br>_id="location"<br>_class="input_form_custom"<br>_name="location"<br>_placeholder="http://">';
160     print '</span>';
161     print '</td></tr><tr><td width=60>&nbsp;</td><td>';
162     print '<span class="input_form">';
163     print '_title="Service_type_of_Location-aware_Content_Tag"<br>_class="icon_form"<br>_height="70"<br>_width="70">';
164     print '</td></tr><tr><td width=60>';
165     print '<select id="simple-search-location"<br>_class="input-large_js-search-location"<br>_id="service"<br>_name="service"<br>_class="biginput">
    <option value="Restaurant">Restaurant</option>
    <option value="Bar">Bar</option>
    <option value="Concert">Concert</option>
    <option value="Film">Film</option>
    <option value="Books">Books</option>
    <option value="Health">Health</option>
    <option value="Clothes">Clothes</option>
    <option value="Food">Food</option>
    <option value="Music">Music</option>
    <option value="Electronics">Electronics

```

```

        </option><option_value="Transport">Transport</option><option_
        value="Rental">Rental</option><option_value="Search">Search</
        option></select></td></tr>';
166     print '<input_type="text" _id="service" _name="service" _placeholder="
        Service">';
167     # print '<h3>News</h3>';
168     # print '<p><b>2021</b></p>';
169     # print '<p><i><a href="http://www.aamotsoftware.com/">Aamot
        Software</a>\`s second functional example of HTML with location
        tagging and fetching was stored on <a href="http://piperpal.
        com/cft/s/">http://piperpal.com/cft/s/</a></i></p>';
170     # print '<p><b>2020</b></p>';
171     # print '<p><i><a href="http://www.aamotsoftware.com/">Aamot
        Software</a>\`s Indexer for Piperpal written in the programming
        language Python can now recursively index location tags as
        specified on <a href="http://www.aamotsoftware.com/location.
        html">http://www.aamotsoftware.com/location.html</a> from web
        pages that are listed for such indexing on <a href="http://www.
        aamotsoftware.com/location-source.html">http://www.
        aamotsoftware.com/location-source.html</a></i></p>';
172     # print '<p><b>2015</b></p>';
173     # print '<p><i><a href="http://www.aamotsoftware.com/">Aamot
        Software</a>\`s first practical example of location tagging
        with Piperpal was stored on <a href="http://piperpal.com/Google
        ">http://piperpal.com/Google</a> at a lunch table with <a href
        ="http://www.norvig.com/">Peter Norvig</a> in the Google
        Visitor Center in Mountain View, California in 2015 where he
        mentioned crowd sourcing of location tags with a neural network
        filter as future work.</i></p>';
174     # print '<p><i><a href="http://www.aamotsoftware.com/">Aamot
        Software</a>\`s presentation for <a href="http://research.
        google.com/">Google Research</a>: <a href="http://www.piperpal.
        com/doc/3.0/Piperpal-Location-aware-ContentTag.pdf">Location-
        aware Content Tag: &lt;location&gt;,&location markup</a></p>';

175
176     print '<span_class="row_row-condensed_space-top-2_space-2">
177     <span_class="col-sm-6">
178     <label_for="simple-search-tourin" _class="screen-reader-only">
179     Tour_in
180     </label>
181     <input
182     id="simple-search-tourin"
183     type="text"
184     name="notBefore"
185     class="input-large_tourin_js-search-tourin"
186     placeholder="Not_Before">
187     </span>
188     <span_class="col-sm-6">
189     <label_for="simple-search-tourout" _class="screen-reader-only">
190     Tour_out
191     </label>
192     <input
193     id="simple-search-tourout"
194     type="text"

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195 .....name="notAfter"
196 .....class="input-large_tourout_js-search-tourout"
197 .....placeholder="Not_After">
198 .....</span>
199 .....</span>';
200 # print '</span>';
201 print "<span_id='status_publisher'>\n";
202 # print "<span class='input_form_custom'>";
203 print "<input_id='glat' _class='input_form_custom' _type='text' _name
    ='glat' _placeholder='Latitude' _size=35_/>\n";
204 # print "<span class='input_form_custom'>
205 print "<input_id='glon' _class='input_form_custom' _type='text' _name
    ='glon' _placeholder='Longitude' _size=35_/>\n";
206 print "</span>\n";
207 print "<input_type='hidden' _name='c' _value='INSERT' _/>\n";
208 print "<span_class='send_form'>";
209 print "<script_src='http://checkout.stripe.com/checkout.js' _class='
    stripe-button' _data-key='
    pk_live_9UbKhDJJWaAFnMjYQTBA8I9i00H8Z5eMmL' _data-amount='0' _
    data-name='Aamot_Software' _data-description='Piperpal_Entry_($0
    .01_USD)' _data-image='/img/Location_Icon.png'></script>";
210 # print "<input class='custom_send_button' type='submit' value='PAY
    WITH CARD'>";
211 print '</span>';
212 print '</form>';
213 print '</td></tr>';
214
215 # print "<input type='hidden' name='c' value='INSERT' />\n";
216 # print "<table cellpadding=5><tr>";
217 # print "<td><a href='http://www.piperpal.com/Piperpal'><img
    border=0 width=16 height=16 src='js-icon.png' /></td>";
218 # print "<td><input size=16 type=text name=name class=biginput id=
    name placeholder='Name' /></td>\n";
219 # print "<td><input size=20 type=text name=location class=biginput
    id=location placeholder='http://' /></td>\n";
220 #print "<td><input size=16 type=text name=service class=biginput id
    =service placeholder='Service' /></td>\n";
221 #print "<span id='status'><input type='hidden' name='glat'
    placeholder='Latitude' size=16 /><input type='hidden' name='
    glon' placeholder='Longitude' size=16 /></span>\n";
222 # print "<td><form action='http://www.piperpal.com/checkout.php'
    method='POST'><script src='https://checkout.stripe.com/checkout
    .js' class='stripe-button' data-key='
    pk_live_odDlc1NMTUJdPN4WC2VTLvvu' data-amount='0' data-name='
    Aamot Software' data-description='1 Hour Programming/Support
    (10 cent)' data-image='/128x128.png'></script></td>";
223 # print "</tr>\n";
224 # print "</form>\n";
225
226
227 }
228
229 sub input_advertiser {
230

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231 my $c = CGI->new;
232 print "<input_type='hidden' _name='c' _value='INSERT' _/>\n";
233 print "<table_cellpadding=5><tr>";
234 print "<td>Word</td><td><input_type=text_name=name_class=biginput_
      id=name_placeholder='Name'></textarea></td>\n";
235 print "<td><input_size=20_type=text_name=location_class=biginput_id
      =location_placeholder='http:// ' _/></td>\n";
236 print "<td><input_size=16_type=text_name=service_class=biginput_id=
      service_placeholder='Service' _/></td>\n";
237 # print '<td><span class="row row-condensed space-top-2 space-2">
238 #     <span class="col-sm-6">
239 #         <label for="simple-search-tourin" class="screen-reader-only">
240 #             Tour in
241 #         </label>
242 #         <input
243 #             id="simple-search-tourin"
244 #             type="text"
245 #             name="notBefore"
246 #             class="input-large tourin js-search-tourin"
247 #             placeholder="Not Before">
248 #         </span>
249 #     <span class="col-sm-6">
250 #         <label for="simple-search-tourout" class="screen-reader-only">
251 #             Tour out
252 #         </label>
253 #         <input
254 #             id="simple-search-tourout"
255 #             type="text"
256 #             name="notAfter"
257 #             class="input-large tourout js-search-tourout"
258 #             placeholder="Not After">
259 #         </span>
260 #     </span>';
261 print "<span_id='status'><input_type='hidden' _name='glat' _
      placeholder='Latitude' _size=16_><input_type='hidden' _name='
      glon' _placeholder='Longitude' _size=16_></span>\n";
262 print "<td><form_action='https://api.piperpal.com/location/push.php
      _method='POST'><script_src='http://checkout.stripe.com/
      checkout.js' _class='stripe-button' _data-key='
      pk_test_EeIOkTAXtAyW1ajpKukLZPm00ChuDtUP8' _data-amount='4500' _
      data-name='Aamot_Software' _data-description='1_Hour_Programming
      /Support_(45_USD)' _data-image='/img/Location_Icon.png'></script
      ></td>";
263 print "</tr>\n";
264 print "</form>\n";
265
266 }
267
268 sub lns_item {
269     my $c = CGI->new;
270     # my $dbh = DBI->connect ("DBI:mysql:database=piperpalcom02;host=
      piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx
      ", { 'RaiseError' => 1});
271

```

```

272 my $name = shift(@_);
273 my $location = shift(@_);
274 my $service = shift(@_);
275 my $glat = shift(@_);
276 my $glon = shift(@_);
277 my $modified = shift(@_);
278 my $created = shift(@_);
279 my $distance = shift(@_);
280
281 print "<tr><td_width=60>&nbsp;</td><td>";
282 print "<form_onsubmit='updateGeo()' '_id='lnsForm' '_name='lnsForm' '_
    action='https://api.piperpal.com/location/push.php' '_method='
    POST'>";
283 # print '<span class="name_form input_form">';
284 print "<location_name='\" . $name . \"' '_href='\" . $location . \"' '_
    service='\" . $service . \"' '_address='\" . $location . \"' '_lat='\" .
    $glat . \"' '_lon='\" . $glon . \"'><a_href='\" . $location . \"'><h2
    >\" . $name . \"</h2></a></location>";
285 # print "<h3>\" . nearest(0.1, $distance) . \" km away</h3>";
286 # print "<script type='text/javascript' lang='JavaScript'>";
287 # print "var latpoint = document.getElementById('glat');";
288 # print "var longpoint = document.getElementById('glon');";
289 # print "latpoint.value = position.coords.latitude;";
290 # print "longpoint.value = position.coords.longitude;";
291 # print "print latpoint.value;";
292 # print "print longpoint.value;";
293 # print "</script>";
294 # print "111.045*DEGREES(ACOS(COS(RADIANS(latpoint))*COS(RADIANS(
    glat))*COS(RADIANS(longpoint)-RADIANS(glon))+SIN(RADIANS(latpoint))
    *SIN(RADIANS(glat))))";
295 print "<table_valign='left'>";
296 print "<tr><td_width='60'>";
297 print "<a_href='\" . $name . \"'><img_src='/img/Name_Icon.png' _title
    ='Name_of_Location-aware_Content_Tag' _height='70' _width='70'></
    a>";
298 print "</td><td><input_type='text' _id='\" . $name . \"' '_name='name' _
    placeholder='Name' _value='\" . $name . \"'></td></tr>";
299 # print '</span>';
300 # print '<br>';
301 # print '<span class="website_form input_form">';
302 print "<tr><td_width='60'>";
303 print "<a_href='\" . $location . \"'><img_src='/img/Location_Icon.png
    ' _title='URL_of_Location-aware_Content_Tag' _height='70' _width
    ='70'></a>";
304 print "</td><td><input_type='text' _id='\" . $name . \"' '_location' . \"'
    _name='location' _placeholder='http://' _value='\" . $location . \"'
    >";
305 # print '</span>';
306 # print '<br>';
307 # print '<span class="service_form input_form">';
308 print "</td></tr><tr><td_width='60'>";
309 print "<a_href='/service/' . $service . \"'><img_src='/img/
    Service_Icon.png' _title='Service_type_of_Location-aware_Content
    _Tag' _height='70' _width='70'></a></td><td>";

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310     print '<input_type="text" _id="' . $name . ' _service' . ' _name="
        service" _placeholder="Service" _value="' . $service . '">';
311     print "</td></tr><tr><td_width='60'>";
312     #     print '<span class="row row-condensed space-top-2 space-2">
313     #         <span class="col-sm-6">
314     #             <label for="simple-search-tourin" class="screen-reader-only">
315     #                 Tour in
316     #             </label>
317     #             <input
318     #                 id="datepicker"
319     #                 type="text"
320     #                 name="notBefore"
321     #                 class="input-large tourin js-search-tourin"
322     #                 placeholder="Not Before" value="" . $created . '">
323     #         </span>
324     #         <span class="col-sm-6">
325     #             <label for="simple-search-tourout" class="screen-reader-only">
326     #                 Tour out
327     #             </label>
328     #             <input
329     #                 id="datepicker"
330     #                 type="text"
331     #                 name="notAfter"
332     #                 class="input-large tourout js-search-tourout"
333     #                 placeholder="Not After" value="" . $modified . '">
334     #         </span>
335     #     </span>';
336     #     print '</span>';
337     print "</td></tr><tr><td_width='60'>";
338     print "<span_id='status_lns'>\n";
339     #     print "<span class='service_form input_form'>";
340     print "<img_src='/img/Latitude_Icon.png' _alt='Icon2' _height='70' _
        width='70'></td><td><input_id='" . $name . " _glat' _type='text' _
        name='glat' _placeholder='Latitude' _size=35 _value='" . $glat . "
        ' _/>\n";
341     print "</td></tr><tr><td_width='60'>";
342
343     #</span>\n";
344
345     #     print "<span class='input_form_custom'><img src='img/Latitude_Icon
        .png' alt='Icon2' class='icon_form' height='70' width='70'><input
        id='" . $name . " _glat' class='input_form_custom' type='text' name
        ='glat' placeholder='Latitude' size=32 value='" . $glat . "' /></
        span>\n";
346
347     #     print "<span class='service_form input_form'>
348     print "</td></tr><tr><td_width='60'>";
349     print "<img_src='/img/Longitude_Icon.png' _alt='Icon2' _height='70' _
        width='70'></td><td><input_id='" . $name . " _glon' _type='text' _
        name='glon' _placeholder='Longitude' _size=35 _value='" . $glon .
        "' _/>\n";
350     #</span>\n";
351
352     #     print "<span class='input_form_custom'><img src='img/

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Longitude_Icon.png' alt='Icon2' class='icon_form' height='70'
width='70'><input id="" . $name . "_glon" class='input_form_custom
' type='text' name='glon' placeholder='Longitude' size=32 value=""
. $glon . "" /></span>\n";
353
354 print "</td></tr><tr><td_width='60'>";
355 print "<input_type='hidden' _name='c' _value='INSERT' _/>\n";
356 # print '<span class="send_form">';
357 # print "<script src='http://checkout.stripe.com/checkout.js' class
= 'stripe-button' data-key='pk_live_dg4Qj9EUNdnBicNW40nNoEJh' data-
amount='0' data-name='Aamot Software' data-description='Piperpal
Entry (1 dollar)' data-image='/img/Location_Icon.png'></script>";
358 # print '<input class="custom_send_button" type="submit" value="PAY
WITH CARD">';
359 # print '</span>';
360 print "</td></tr>";
361 print "</table>";
362 # print "<form action='http://www.piperpal.com/checkout.php?name="
. $name . "&service=" . $service . "' method='POST'>";
363 # print '<span class="name_form input_form">';
364 # print '';
365 # print '<input type="text" value="" . $name . "' id="" . $name .
"' class="input_form_custom" name="name" placeholder="" . $name
. "'>';
366 # print '</span>';
367 # print '<br>';
368 # print '<span class="website_form input_form">';
369 # print '';
370 # print '<input type="text" value="" . $location . "' id="location"
class="input_form_custom" name="location" placeholder="" .
$location . "'>';
371 # print '</span>';
372 # print '<br>';
373 # print '<span class="service_form input_form">';
374 # print '';
375 # print '<input type="text" value="" . $service . "' id="service"
class="input_form_custom" name="service" placeholder="" .
$service . "'>';
376 # print '</span>';
377 # print "<span id='status_lns'>\n";
378 # print "<span class='service_form input_form'>";
379 # print '';
380 # print "<input id='glat' value="" . $glat . "' class='
input_form_custom' type='text' name='glat' placeholder="" .
$glat . "' size=16 /></span>\n";
381 # print "<span class='service_form input_form'>";
382 # print '';
383 # print "<input id='glon' value="" . $glon . "' class='
input_form_custom' type='text' name='glon' placeholder="" .

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    $glon . " " size=16 /></span>\n";
384 # print "</span>\n";
385 # print "<input type='hidden' name='c' value='INSERT' />\n";
386 # print '<span class="send_form_item">';
387 # print "<script src='http://checkout.stripe.com/checkout.js' class
    ='stripe-button' data-key='pk_live_odDlc1NMTUJdPN4WC2VTLvvu'
    data-amount='500' data-name='Aamot Software' data-description
    =' " . $service . " (5 USD)' data-image='/img/icon2.png'></
    script>";
388 # print '</span>';
389 # print '</form>';
390
391 }
392
393 sub lns_market_item {
394     my $c = CGI->new;
395     # my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
        piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx
        ", { 'RaiseError' => 1 });
396
397     my $name = shift(@_);
398     my $location = shift(@_);
399     my $service = shift(@_);
400     my $glat = shift(@_);
401     my $glon = shift(@_);
402     my $modified = shift(@_);
403     my $created = shift(@_);
404     my $distance = shift(@_);
405     print "<tr><td_width=60>&nbsp;</td><td>";
406     print "<form_onsubmit='updateGeo()' _id='lnsForm' _name='lnsForm' _
        action='https://api.piperpal.com/location/push.php' _method='
        POST'>";
407     # print '<span class="name_form input_form">';
408     print "<location_name=' " . $name . "' _href=' " . $location . "' _lat
        =' " . $glat . "' _lon=' " . $glon . "'><a_href=' " . $location . "
        '>";
409     print "<h4><a_href=' " . $location . "'> " . $name . "</a></h4></
        location>";
410     print "<h5_style='color:_#aaaadd'> " . $service . "</h5>";
411     print "<h5> " . nearest(0.1, $distance) . " _km_away</h5>";
412     print "<h6><a_href=' " . $location . "'> " . $location . "</a></h6>";
413     # my $date = $created;
414     # my $long = $modified;
415     # my $dt = DateTime->now( time_zone => 'local' )->set_time_zone('
        floating');
416     # print "<p><b>Created: " . $dt->subtract_datetime($date) . " days
        ago<br />";
417     # print "Modified: "; print $dt->subtract_datetime($long) . " days
        ago</p>";
418     # print "<p><b>";
419     print "<table>";
420     print "<tr><td_width='60'>";
421     print '<a_href="/" . $name . "'><img_src="/img/Name_Icon.png' _title
        ='Name_of_Location-aware_Content_Tag' _height="70' _width="70'></

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```

a>';
422     print '</td><td><input_type="text" _id="' . $name . ' "_name="name" _
        placeholder="Name" _value="' . $name . '"></td></tr>';
423     # print '</span>';
424     # print '<br>';
425     # print '<span class="website_form input_form">';
426     print "<tr><td_width='60'>";
427     print '<a_href="' . $location . '"><img_src="/img/Location_Icon.png
        _title="URL_of_Location-aware_Content_Tag" _height="70" _width
        ="70"></a>';
428     print '</td><td><input_type="text" _id="' . $name . ' '_location' . '"
        _name="location" _placeholder="http://" _value="' . $location . '
        ">';
429     # print '</span>';
430     # print '<br>';
431     # print '<span class="service_form input_form">';
432     print "</td></tr><tr><td_width='60'>";
433     print '<a_href="/service/' . $service . '"><img_src="/img/
        Service_Icon.png" _title="Service_type_of_Location-aware_Content
        _Tag" _height="70" _width="70"></a></td><td>';
434     print '<select_id="simple-search-location" _class="input-large js-
        search-location" _id="service" _name="service" _class="biginput">
        option_selected_value="' . $name . ' ' . $service . '"> ' .
        $service . ' </option><option_value="Restaurant">Restaurant </
        option><option_value="Bar">Bar </option><option_value="Concert">
        Concert </option><option_value="Film">Film </option><option_value
        ="Books">Books </option><option_value="Health">Health </option><
        option_value="Clothes">Clothes </option><option_value="Food">
        Food </option><option_value="Music">Music </option><option_value
        ="Electronics">Electronics </option><option_value="Transport">
        Transport </option><option_value="Rental">Rental </option></
        select>';
435     print '<input_type="hidden" _id="paid_' . $name . ' '_service' . '" _
        name="paid" _placeholder="paid" _value="0">';
436     print "</td></tr><tr><td_width='60'></td><td>";
437     # print '<span class="row row-condensed space-top-2 space-2">
438     #     <span class="col-sm-6">
439     #         <label for="simple-search-tourin" class="screen-reader-only">
440     #             Tour in
441     #         </label>
442     #         <input
443     #             id="datepicker"
444     #             type="text"
445     #             name="notBefore"
446     #             class="input-large tourin js-search-tourin"
447     #             placeholder="Not Before" value="' . $created . '">
448     #     </span>
449     #     <span class="col-sm-6">
450     #         <label for="simple-search-tourout" class="screen-reader-only">
451     #             Tour out
452     #         </label>
453     #         <input
454     #             id="datepicker"
455     #             type="text"

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456 #         name="notAfter"
457 #         class="input-large tourout js-search-tourout"
458 #         placeholder="Not After" value="" . $modified . "">
459 #     </span>
460 # </span>';
461 # print '</span>';
462 print "</td></tr><tr><td_width='60'>";
463 print "<span_id='status_lns'>\n";
464 # print "<span class='service_form input_form'>";
465 print "<img_src='/img/Latitude_Icon.png' alt='Icon2' height='70' width='70'></td><td><input_id='" . $name . "_glat' type='text' name='glat' placeholder='Latitude' size=35 value='" . $glat . "' />\n";
466 #</span>\n";
467
468 # print "<span class='input_form_custom'><img src='img/Latitude_Icon.png' alt='Icon2' class='icon_form' height='70' width='70'><input id='" . $name . "_glat' class='input_form_custom' type='text' name='glat' placeholder='Latitude' size=32 value='" . $glat . "' /></span>\n";
469
470 # print "<span class='service_form input_form'>
471 print "</td></tr><tr><td_width='60'>";
472 print "<img_src='/img/Longitude_Icon.png' alt='Icon2' height='70' width='70'></td><td><input_id='" . $name . "_glon' type='text' name='glon' placeholder='Longitude' size=35 value='" . $glon . "' />\n";
473 #</span>\n";
474
475 # print "<span class='input_form_custom'><img src='img/Longitude_Icon.png' alt='Icon2' class='icon_form' height='70' width='70'><input id='" . $name . "_glon' class='input_form_custom' type='text' name='glon' placeholder='Longitude' size=32 value='" . $glon . "' /></span>\n";
476 print "</td></tr><tr><td_width='60'>";
477 print "<img_src='/img/Email_Icon.png' alt='Icon2' height='70' width='70'></td><td>";
478 print "<input_id='" . $name . "_expire' type='text' name='expire' placeholder='size=35 value='" . $modified . "' />\n";
479 print "</td></tr><tr><td_width='60'>";
480 print "<img_src='/img/Phone_Icon.png' alt='Icon2' height='70' width='70'></td><td>";
481 print "<input_id='" . $name . "_expire' type='text' name='expire' placeholder='size=35 value='" . $created . "' />\n";
482
483 print "</td></tr><tr><td_width='60'>";
484 print "<input_type='hidden' name='c' value='INSERT' />\n";
485 # print '<span class="send_form">';
486 # print "<script src='http://checkout.stripe.com/checkout.js' class='stripe-button' data-key='pk_live_dg4Qj9EUNdnBicNW40nNoEJh' data-amount='0' data-name='Aamot Software' data-description='Piperpal Entry (1 dollar)' data-image='/img/Location_Icon.png'></script>";
487 # print '<input class="custom_send_button" type="submit" value="PAY WITH CARD">';

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486 #     print '</span>';
487 print "</td></tr>";
488 print "</table>";
489 # print "<form action='http://www.piperpal.com/checkout.php?name="
      . $name . "&service=" . $service . "' method='POST'>";
490 # print '<span class="name_form input_form">';
491 # print '';
492 # print '<input type="text" value="" . $name . "' id=" . $name .
      "' class="input_form_custom" name="name" placeholder=" . $name
      . "'>';
493 # print '</span>';
494 # print '<br>';
495 # print '<span class="website_form input_form">';
496 # print '';
497 # print '<input type="text" value="" . $location . "' id="location"
      class="input_form_custom" name="location" placeholder=" .
      $location . "'>';
498 # print '</span>';
499 # print '<br>';
500 # print '<span class="service_form input_form">';
501 # print '';
502 # print '<input type="text" value="" . $service . "' id="service"
      class="input_form_custom" name="service" placeholder=" .
      $service . "'>';
503 # print '</span>';
504 # print "<span id='status_lns'>\n";
505 # print "<span class='service_form input_form'>";
506 # print '';
507 # print "<input id='glat' value="" . $glat . "' class='
      input_form_custom' type='text' name='glat' placeholder="" .
      $glat . "' size=16 /></span>\n";
508 # print "<span class='service_form input_form'>";
509 # print '';
510 # print "<input id='glon' value="" . $glon . "' class='
      input_form_custom' type='text' name='glon' placeholder="" .
      $glon . "' size=16 /></span>\n";
511 # print "</span>\n";
512 # print "<input type='hidden' name='c' value='INSERT' />\n";
513 # print '<span class="send_form_item">';
514 # print "<script src='http://checkout.stripe.com/checkout.js' class
      ='stripe-button' data-key='pk_live_odDlc1NMTUjdPN4WC2VTLvvu'
      data-amount='500' data-name='Aamot Software' data-description
      =' . $service . " (5 USD)' data-image='/img/icon2.png'></
      script>";
515 # print '</span>';
516 # print '</form>';
517
518 }
519

```

```

520 sub is_valid {
521     my $location = shift;
522     my $ua = LWP::UserAgent->new;
523     my $result = $ua->request(GET $location);
524     print "is_valid.\n";
525     print_r($result);
526     return 0 if ($result==0);
527     return 1 if (($result==1)||($result==2));
528 }
529
530 sub is_paid {
531     my $c = CGI->new;
532     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
        piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx"
        , { 'RaiseError' => 1});
533     if ('GET' eq $c->request_method && $c->param('paid') eq "1" && $c->
        param('query') && $c->param('location')) {
534         $dbh->do ("UPDATE_piperpal_SET_paid_=_paid_+_1,_modified_=_NOW()_
            WHERE_name_=_'" . HTM::Entities::encode($c->param('query')) .
            "_and_location_=_'" . $c->param('location') . "'");
535     }
536     return;
537 }
538
539 sub delete_location {
540     my $c = CGI->new;
541     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
        piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx"
        , { 'RaiseError' => 1});
542     if ('GET' eq $c->request_method && $c->param('c') eq "DELETE" && $c
        ->param('query') && $c->param('location') && $c->param('service
        ')) {
543         $dbh->do ("DELETE_FROM_piperpal_WHERE_name_=_'" . $c->param('query'
            ) . "'_AND_location_=_'" . $c->param('location') . "'_AND_
            service_=_'" . $c->param('service') . "'");
544     }
545     return;
546 }
547
548 sub insert_location {
549     my $c = CGI->new;
550     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
        piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx"
        , { 'RaiseError' => 1});
551     if ('GET' eq $c->request_method && $c->param('c') eq "INSERT" && $c
        ->param('query') && $c->param('location') && $c->param('service
        ')) {
552         # $dbh->do ("INSERT IGNORE INTO piperpal (name, location, service,
            glat, glon, modified, created, paid, token, type, email) VALUES
            ('" . $c->param('query') . "', '" . $c->param('location') .
            "', '" . $c->param('service') . "', '" . $c->param('glat') .
            "', '" . $c->param('glon') . "', NOW(), NOW(), 1, '" . $c->param
            ('stripeToken') . "', '" . $c->param('stripeTokenType') . "', '"
            . $c->param('stripeEmail') . "'" ) ON DUPLICATE KEY UPDATE

```

```

        modified = NOW();");
553     }
554     return;
555 }
556
557 sub insert_publisher {
558     my $c = CGI->new;
559     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
        piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx"
        , { 'RaiseError' => 1});
560     my $q;
561     if ($c->request_method == $c->param('c') && $c->param('query') &&
        $c->param('location') && $c->param('service')) {
562         my @tags = ($c->param('query') =~ m/(&(\w+)/g);
563         my $name = $c->param('query');
564
565         foreach my $tag (@tags)
566         {
567             next unless $tag =~ m/[a-zA-záâãä å æ é í
                óöø õ úü ũ ]/i;
568             $name =~ s/{&$tag}{<a href="https://www.piperpal.com/register.
                cgi?name=$tag">&$tag</a>}g;
569         }
570         $q = "INSERT INTO piperpal_(name,_location,_service,_glat,_glon,_
            modified,_created,_paid,_token,_type,_email)_VALUES('" . $name
            . "'," . $c->param('location') . "," . $c->param('service')
            . "," . $c->param('glat') . "," . $c->param('glon') . "," .
            NOW() . "," . NOW() . "," . $c->param('stripeToken') . "," . $c->
            param('stripeTokenType') . "," . $c->param('stripeEmail') . "
            ')_ON_DUPLICATE_KEY_UPDATE_modified=_NOW()";
571         print $q;
572         $dbh->do($q);
573     } else {
574         # print "Error in inserting data.";
575     }
576     return;
577 }
578
579 sub update_location {
580     my $c = CGI->new();
581     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
        piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx"
        , { 'RaiseError' => 1});
582     # $dbh->{'mysql_enable_utf8'} = 1;
583     if ($c->param('query')) {
584         my $sth = $dbh->prepare ("SELECT name,location ,service FROM
            piperpal WHERE (name LIKE '%'" . HTML::Entities::encode($c->
            param('query')) . "%'_OR_service LIKE '%'" . HTML::Entities::
            encode($c->param('query')) . "%')_ORDER_by_modified_DESC");
585         $sth->execute();
586         while (my $ref = $sth->fetchrow_hashref()) {
587             my @tags = ($ref->{'name'} =~ m/(&(\w+)/g);
588             foreach my $tag (@tags) {
589                 next unless $tag =~ m/[a-zA-záâãä å æ é í

```

```

590         ööø ö      úü ü          ]/i;
591     print "<form_method='POST' _action='adverts.cgi'>";
592     print "<td>Word:</td><td><input_type='name' _name='" . $tag
593         . "' _value='" . $tag . "' _/></td>";
594     print "</form>\n";
595 }
596 }
597 $sth->finish();
598 }
599 $dbh->disconnect();
600 return;
601 }
602
603 sub insert_advertiser {
604     my $c = CGI->new;
605     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
        piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx"
        , { 'RaiseError' => 1});
606     # $dbh->{'mysql_enable_utf8'} = 1;
607     if ('GET' eq $c->request_method && $c->param('c') eq "INSERT" && $c
        ->param('query') && $c->param('location') && $c->param('service'
        )) {
608         my $sth = $dbh->prepare ("UPDATE_piperpal_SET_location_=" . $c->
        param('location') . "' , _name_=" . HTML::Entities::encode($c->
        param('query')) . "' , _service_=" . $c->param('service') . "' _
        =" . $c->param('location') . "' , _service_=" . $c->param('
        service') . "' _WHERE_name_=" . HTML::Entities::encode($c->
        param('query')) . "' ;");
609         $sth->execute();
610         while (my $ref = $sth->fetchrow_hashref()) {
611             if (is_paid($ref->{'location'})) {
612                 print "<pre>UPDATE:The_location_of_ " . $ref->{'name'} . "_ " .
                    $ref->{'location'} . " _is_a_paid_piperpal_location.</pre>\n
                    ";
613                 $dbh->do ("UPDATE_piperpal_SET_location_=" . "https://www.piperpal
                    .com/index.cgi?name=" . $ref->{'name'} . "&service" . $ref
                    ->{'service'} . "&location=" . ($ref->{'location'}) . "&
                    paid=0, _paid_=_paid_+1, _modified_=_NOW() _WHERE_name_="
                    . $ref->{'name'} . "' ;");
614                 print "<pre>Paid_+1</pre>\n";
615             } else {
616                 print "<pre>UPDATE:The_location_of_ " . $ref->{'name'} . "_ " .
                    $ref->{'location'} . " _is_not_a_paid_piperpal_location.</
                    pre>\n";
617                 $dbh->do ("UPDATE_piperpal_SET_location_=" . "https://www.piperpal
                    .com/index.cgi?name=" . $ref->{'name'} . "&service" . $ref
                    ->{'service'} . "&location=" . ($ref->{'location'}) . "&
                    paid=-1, _paid_=_paid_-1, _modified_=_NOW() _WHERE_name_="
                    . $ref->{'name'} . "' ;");
618                 print "<pre>Paid_-1</pre>\n";
619             }
620             $sth->finish();

```

```

621     }
622     }
623     $dbh->disconnect();
624     return;
625 }
626
627 sub select_publisher {
628     my $c = CGI->new;
629     my $q;
630     my $r;
631     my $s;
632     my $latitude;
633     my $longitude;
634     my $fp;
635     my $fn = "/home/4/p/piperpal/pull.csv";
636     my $string = "pull:" . $ENV{'REMOTE_ADDR'} . ":" . $q . "\n";
637     if ($c->param('query')) {
638         $q = HTML::Entities::encode($c->param('query'));
639         # open(FH, '>', $fn) or die $!;
640         # print FH $string;
641         # print $fp;
642         # close($fp);
643     } else {
644         $q = "GoogleVisitorCenter";
645     }
646     if ($c->param('service')) {
647         $s = $c->param('service');
648     } else {
649         $s = 'Search';
650     }
651     if ($c->param('radius')) {
652         $r = $c->param('radius');
653     } else {
654         $r = 10;
655     }
656     if ($c->param('glat')) {
657         $latitude = $c->param('glat');
658     } else {
659         # FIXME: READ LATITUDE FROM JAVASCRIPT
660         $latitude = $ENV{'position.coords.latitude'};
661     } # 37.8790153;
662     }
663     if ($c->param('glon')) {
664         $longitude = $c->param('glon');
665     } else {
666         # FIXME: READ LONGITUDE FROM JAVASCRIPT
667         $longitude = $ENV{'position.coords.longitude'};
668     } # -122.26242529999999;
669     }
670     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
        piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx"
        , {'RaiseError' => 1});
671     # $dbh->{'mysql_enable_utf8'} = 1;
672     my $query = "SELECT_name,location ,glat ,glon ,modified ,created ,paid ,

```

```

        token, type, email_FROM_piperpal_WHERE_(name_LIKE_% " . HTML::
        Entities::encode($c->param('query')) . "%')_ORDER_by_modified_
        DESC";
673 $query = "SELECT_DISTINCT_id,name,location ,service ,modified ,created
        , glat , glon ,paid ,token ,type ,email ,3979*(ACOS(COS(RADIANS(
        latpoint))*COS(RADIANS( glat))*COS(RADIANS(longpoint)-RADIANS(
        glon))+SIN(RADIANS( latpoint))*SIN(RADIANS( glat))))_AS_
        distance_in_km_FROM_piperpal_JOIN_(SELECT_ " . $latitude . " _
        AS_latpoint ,_ " . $longitude . " _AS_longpoint)_AS_P_ON_1=1_WHERE
        _(name_LIKE_% " . HTML::Entities::encode($c->param('query')) .
        "%')_HAVING_distance_in_km_<_ " . $r . " _ORDER_BY_distance_in_km
        _ASC,_modified_DESC";
674 my $sth = $dbh->prepare ($query);
675 $sth->execute();
676 print "<a_name='results'><a_href=\"https://www.piperpal.com/\"><img
        _src='/piperpal.png'_alt='piperpal.com_Logo'_width=\"320\"_
        align=center/></a><br/><h3><a_href=\"https://www.piperpal.com
        /\">Location_Search_Results</a></h3></a>";
677 print "<ol>";
678 print "<table>";
679 while (my $ref = $sth->fetchrow_hashref()) {
680     print "<tr><td_width='60'>&nbsp;</td><td>";
681     print "<form_onsubmit='updateGeo()' _method='GET' _action='https://
        www.piperpal.com/cft/s/'_id='formID'>";
682     lns_market_item($ref->'name', $ref->'location', $ref->'service
        ', $ref->'glat', $ref->'glon', $ref->'modified', $ref->{
        'created', $ref->'distance_in_km'});
683     print "<input_type='submit'_value='Submit_Location_for_' " . $ref->'
        name' . "'/>";
684     print "</form>";
685     print "</td></tr>";
686 }
687 print "</table>";
688 print "</ol>";
689 $sth->finish();
690 $dbh->disconnect();
691 return;
692 }
693
694 sub select_location {
695     my $c = CGI->new;
696     my $q;
697     my $r;
698     my $latitude;
699     my $longitude;
700     my $fp;
701     # my $fn = "/home/4/p/piperpal/pull.csv";
702     # my $string = "pull:" . $ENV{'REMOTE_ADDR'} . ":" . $q . "\n";
703     if ($c->param('query')) {
704         $q = HTML::Entities::encode($c->param('query'));
705         open(FH, '>', $fn) or die $!;
706         print FH $string;
707         print $fp;
708         close($fp);

```

```

709     } else {
710     $q = "GoogleVisitorCenter";
711     }
712     if ($c->param('radius')) {
713     $r = $c->param('radius');
714     } else {
715     $r = 1;
716     }
717     if ($c->param('glat')) {
718     $latitude = $c->param('glat');
719     } else {
720     $latitude = 37.8790153;
721     }
722     if ($c->param('glon')) {
723     $longitude = $c->param('glon');
724     } else {
725     $longitude = -122.26242529999999;
726     }
727     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
        piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx"
        , { 'RaiseError' => 1});
728 #     $dbh->{'mysql_enable_utf8'} = 1;
729
730 #     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
        piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx", { '
        RaiseError' => 1});
731 #     $dbh->{'mysql_enable_utf8'} = 1;
732 #my $sth = $dbh->prepare ("SELECT DISTINCT id,name,service,location
        ,modified,created,glat,glon,paid,token,type,email,111.045*
        DEGREES(ACOS(COS(RADIANS(latpoint))*COS(RADIANS(glat))*COS(
        RADIANS(longpoint)-RADIANS(glon))+SIN(RADIANS(latpoint))*SIN(
        RADIANS(glat)))) AS distance_in_km FROM piperpal JOIN (SELECT
        " . $latitude . " AS latpoint, " . $longitude . " AS longpoint
        ) AS p ON 1=1 WHERE paid > '0' AND name LIKE '%" . $q . "%'
        HAVING distance_in_km < " . $r . " ORDER BY distance_in_km");
733 my $sth = $dbh->prepare ("SELECT DISTINCT name,location,service,
        glat,glon,modified,created,paid,token,type,email FROM piperpal_
        WHERE modified<_NOW()_and_created<_NOW()_ORDER_by_modified_
        DESC,_name_ASC;");
734 $sth->execute();
735 while (my $ref = $sth->fetchrow_hashref()) {
736 #print "<h3><a href='https://www.piperpal.com/' . $ref->{'name'} .
        '>' . $ref->{'name'} . "</a></h3>";
737 print "<form_onsubmit='updateGeo()'_method='GET'_action='https://
        www.piperpal.com/cft/s/'_id='formID'>";
738 lns_market_item($ref->{'name'}, $ref->{'location'}, $ref->{'service'
        }, $ref->{'glat'}, $ref->{'glon'}, $ref->{'modified'}, $ref->{'
        created'});
739 print "<input_type='submit'_value='Submit_Location_for_' . $ref->{'
        name'} . "'/>";
740 print "</form>\n";
741 }
742 $sth->finish();
743 $dbh->disconnect();

```

```

744     return;
745 }
746
747 sub select_market {
748     my $c = CGI->new;
749     my $q;
750     my $r;
751     my $latitude;
752     my $longitude;
753     if ($c->param('query')) {
754         $q = HTML::Entities::encode($c->param('query'));
755     } else {
756         $q = "GoogleVisitorCenter";
757     }
758     if ($c->param('radius')) {
759         $r = $c->param('radius');
760     } else {
761         $r = 25;
762     }
763     if ($c->param('glat')) {
764         $latitude = $c->param('glat');
765     } else {
766         $latitude = 37.8790153;
767     }
768     if ($c->param('glon')) {
769         $longitude = $c->param('glon');
770     } else {
771         $longitude = -122.26242529999999;
772     }
773     my $dbh = DBI->connect("DBI:mysql:database=piperpalcom02;host=
        piperpalcom02.mysql.domeneshop.no", "piperpalcom02", "xxxxxxx"
        , { 'RaiseError' => 1 });
774 #     $dbh->{'mysql_enable_utf8'} = 1;
775     my $query = "SELECT name, location , service , glat , glon , modified ,
        created , paid , token , type , email FROM piperpal WHERE (name LIKE '%
        " . $q . "%' OR service LIKE '%" . $q . "%') AND paid >= '0'
        ORDER BY modified";
776     $query = "SELECT DISTINCT id , name , location , modified , created , glat ,
        glon , paid , token , type , email , 3979 * (ACOS(COS(RADIANS(latpoint)) *
        COS(RADIANS(glat)) * COS(RADIANS(longpoint) - RADIANS(glon)) + SIN(
        RADIANS(latpoint)) * SIN(RADIANS(glat)))) AS distance_in_km FROM
        piperpal JOIN (SELECT " . $latitude . " AS latpoint , " .
        $longitude . " AS longpoint) AS p ON 1=1 WHERE (name LIKE '%" .
        $q . "%') HAVING distance_in_km <= " . $r . " ORDER BY
        distance_in_km , modified";
777     my $sth = $dbh->prepare ($query);
778     $sth->execute();
779 #     print "</td></tr></table><table><tr><td>";
780     while (my $ref = $sth->fetchrow_hashref()) {
781         print "<form onsubmit='updateGeo()' 'id='lnsForm 'name='lnsForm '
            action='https://api.piperpal.com/location/push.php 'method='
            POST'>";
782 #     print "<table><tr><td width='60'>&nbsp;  </td><td>";
783     lns_market_item($ref->{'name'}, $ref->{'location'}, $ref->{'service

```

```
        }, $ref->{'glat'}, $ref->{'glon'}, $ref->{'modified'}, $ref->{'created'}, $ref->{'distance_in_km'}));  
784     print "<input_type='submit'_value='Submit_Location_for_' . $ref->{'  
        name'} . "'/>";  
785 #     print "</td></tr></table>";  
786     print "</form>";  
787     }  
788     print "</td></tr></table>";  
789     $sth->finish();  
790     $dbh->disconnect();  
791     return;  
792 }
```

Chapter 12

Query Interface on World Wide Web – www.piperpal.com

Our working implementation of “Location Search on World Wide Web” is on <http://www.piperpal.com/>.

12.1 Source: <https://www.piperpal.com/index.cgi>

Listing 12.1: Insert code directly in your document

```
1  #!/usr/bin/perl
2
3  # Copyright (C) 2015, 2019 Aamot Software
4  #
5  # Author: ole@aamotsoftware.com
6  #
7  # Date: 2015-09-03T11:15:00+01
8  #
9  # Field: Incremental, location, sql, perl
10 #
11 # URL: https://www.piperpal.com/index.cgi
12
13 use strict;
14 use warnings;
15 use DBI;
16 use CGI qw/:standard/;
17 use CGI::Cookie;
18 use lib '..';
19 use Piperpal;
20
```

```

21 my $c = CGI->new;
22 print "Content-Type: _text/html\n\n";
23 print <<EOF;
24 <!DOCTYPE html>
25 <html lang="en">
26     <head>
27     <style>
28     #name_label{
29         display: inline-block;
30         width: 100px;
31         text-align: right;
32     }
33     #name_submit{
34         padding-left: 100px;
35     }
36     #name_div{
37         margin-top: 1em;
38     }
39     textarea{
40         vertical-align: top;
41         height: 5em;
42     }
43
44     .error{
45         display: none;
46         margin-left: 10px;
47     }
48
49     .error_show{
50         color: red;
51         margin-left: 10px;
52     }
53
54     input.invalid , textarea.invalid{
55         border: 2px solid red;
56     }
57
58     input.valid , textarea.valid{
59         border: 2px solid green;
60     }
61 </style>
62 <meta property="al:android:app_name" content="Piperpal" />
63 <meta property="al:android:package" content="com.piperpal.api.
    android" />
64 <meta property="al:android:url" content="https://www.piperpal.com/
    Android" />
65 <!--[if IE]><![endif]-->
66 <meta charset="iso-8859-1">
67
68 <!--[if IE 8]>
69     <link href="/css/common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49
        .css" media="all" rel="stylesheet" type="text/css" />
70 <![endif]-->
71 <!--[if !(IE 8)]><!-->

```

```

72     <link href="/css/common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css
73         " media="all" rel="stylesheet" type="text/css" />
74 <!--<![endif]-->
75 <!--[if lt IE 9]>
76     <link href="/css/airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c.
77         css" media="all" rel="stylesheet" type="text/css" />
78 <![endif]-->
79     <link href="/css/main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
80         screen" rel="stylesheet" type="text/css" />
81 <!--[if IE 7]>
82     <link href="/css/p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css"
83         media="screen" rel="stylesheet" type="text/css" />
84 <![endif]-->
85 <!--[if IE 6]>
86     <link href="/css/p1_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css"
87         media="screen" rel="stylesheet" type="text/css" />
88 <![endif]-->
89 <!-- FIXME-->
90 <script type="text/javascript" src="https://www.piperpal.com/
91     piperpal-autocomplete-tours.php"></script>
92 <!--FIXME -->
93 <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
94     smoothness/jquery-ui.css">
95 <script src="//code.jquery.com/jquery-1.10.2.js"></script>
96 <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
97 <meta name="viewport" content="user-scalable=yes, _initial-scale
98     =1.0, _maximum-scale=3, _minimum-scale=0.5, _width=device-width">
99 <!--
100 <link rel="dns-prefetch" href="//maps.googleapis.com">
101 <!--
102 <link rel="dns-prefetch" href="//maps.gstatic.com">
103 <link rel="dns-prefetch" href="//mts0.googleapis.com">
104 <link rel="dns-prefetch" href="//fonts.googleapis.com">
105 <link rel="dns-prefetch" href="//www.piperpal.com">
106 <title>piperpal.com – Location-based Search Engine</title>
107 <link href="my_style_form.css" type="text/css" rel="stylesheet" />
108 <link href='https://fonts.googleapis.com/css?family=Titillium+Web
109     :700' rel='stylesheet' type='text/css'>
110 <link href='https://fonts.googleapis.com/css?family=Titillium+Web'
111     rel='stylesheet' type='text/css'>
112 <meta charset="iso-8859-1" />
113 <script>
114     function price_changed() {
115         var priceWidget = document.getElementById('price');
116         var price = priceWidget.options[priceWidget.selectedIndex].
117             value;
118         var stripeSubmit = document.getElementsByClassName('stripe-
119             button-el')[0];
120         var regularSubmit = document.getElementById('regular-submit');
121         if (price > 0) {
122             stripeSubmit.style.display = 'inline-block';
123             regularSubmit.style.display = 'none';
124         }
125     }
126 </script>

```

```

114         } else {
115             stripeSubmit.style.display = 'none';
116             regularSubmit.style.display = 'inline-block';
117         }
118     }
119
120     function updateGeo() {
121         var glat = document.getElementById("glat");
122         var glon = document.getElementById("glon");
123
124         glat.value = position.coords.latitude;
125         glon.value = position.coords.longitude;
126
127         alert(glat+","+glon);
128     }
129
130     function getWikipedia() {
131         jQuery(function($) {
132             $.getJSON('https://api.geonames.org/findNearbyWikipediaJSON?
                formatted=true&lat='+ position.coords.latitude + '&lng='+
                position.coords.longitude + '&username=username&style=full&lang=
                en&wikipediaUrl&thumbnailImg', function(json){
133
134                 for(var i = 0; i < json.geonames.length; i++)
135                 {
136                     $("#wikipedia").prepend('<span style="font-family:_geneva, _
                        arial, _helvetica, _sans-serif;"><br><br><br>' + json.geonames[i].summary + '<br><a href="https
                        ://'+ json.geonames[i].wikipediaUrl + '" _target="_blank">' +
                        json.geonames[i].wikipediaUrl + '</a><br></span>');
137                 }
138             }); });
139     }
140
141     function submit() {
142         // Strip hijacks the form submit, so we need to un-hijack it.
143         var form = document.getElementById('form');
144         form.submit();
145     }
146
147     </script>
148     <meta http-equiv="Content-Type" content="text/html;_charset=iso
        -8859-1" >
149     <meta http-equiv="X-UA-Compatible" content="IE=edge" >
150     <link href="//fonts.googleapis.com/css?family=Titillium+Web:300
        italic,400,700,400italic,600italic" rel="stylesheet" type="text
        /css">
151     <link href="//fonts.googleapis.com/css?family=Titillium+Web:300
        italic,400,700,400italic,600italic" rel="stylesheet" type="text
        /css">
152     <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
        smoothness/jquery-ui.css">
153     <script src="//code.jquery.com/jquery-1.10.2.js"></script>
154     <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>

```

```

155
156 <script type="text/javascript" src="https://www.piperpal.com/jquery
    -1.9.1.min.js"></script>
157 <script type="text/javascript" src="https://www.piperpal.com/jquery
    .autocomplete.min.js"></script>
158 <!-- FIXME -->
159 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete.php"></script>
160 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-names.php"></script>
161 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-services.php"></script>
162 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-locations.php"></script>
163 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-queries.php"></script>
164 <!-- FIXME -->
165 <meta name="viewport" content="user-scalable=yes, _initial-scale
    =1.0, _maximum-scale=3, _minimum-scale=0.5, _width=device-width">
166 <script>
167   \$(function() {
168     \$( "#datepicker" )\$.datepicker\(\)\;
169     \$( "#simple-search-tourout" )\$.datepicker\(\)\;
170     \}\)\;
171   </script>
172   <meta name="viewport" content="user-scalable=yes, _initial-scale
    =1.0, _maximum-scale=3, _minimum-scale=0.5, _width=device-width">

173 </head>
174 <body style="background: _#ffffff; " onload="document.getElementById
    ('query').focus();">

175
176 <!--
177 <script type="text/javascript" src="https://maps.google.com/maps/
    api/js?sensor=true"></script>-->
178 <!--script type="text/javascript" src="https://maps.google.com/maps
    /api/js?sensor=false"--><!--/script-->
179 <script>
180 function success(position) {
181   var s = document.querySelector('#status');
182
183   if (s.className == 'success') {
184     // not sure why we're_hitting_this_twice_in_FF, _I_think_it's to
        do with a cached result coming back
185     return;
186   }
187
188   s.innerHTML = '<input_type=hidden_class="input_form_custom" _
    name=glat_value=' + position.coords.latitude + ' _/><input _
    type=hidden_class="input_form_custom" _name=glon_value=' +
    position.coords.longitude + ' _/>';
189   s.className = 'success';
190
191   var q = document.querySelector('#status_publisher');

```

```

192
193     if (q.className === 'success') {
194         // not sure why we're_hitting_this_twice_in_FF, I_think_it's to
195             do with a cached result coming back
196         return;
197     }
198
199     q.innerHTML = '<img_src="img/Latitude_Icon.png"_title="Latitude
200         _of_Location-aware_Content_Tag"_class="icon_form"_height
201         ="36"_width="36"><input_type=text_class="input_form_custom"
202         _name=glat_size=16_value=' + position.coords.latitude + '_
203         /><br/><img_src="img/Longitude_Icon.png"_title="Longitude
204         _of_Location-aware_Content_Tag"_class="icon_form"_height
205         ="36"_width="36"><input_type=text_class="input_form_custom"
206         _name=glon_size=16_value=' + position.coords.longitude + '_
207         />';
208
209     // '<input_type=text_name=glat_size=16_value=' + position.
210         coords.latitude + '_><input_type=text_name=glon_size=16_
211         value=' + position.coords.longitude + '_/>';
212     q.className = 'success';
213
214     var r = document.querySelector('#status_lns');
215
216     if (r.className === 'success') {
217         // not sure why we're_hitting_this_twice_in_FF, I_think_it's to
218             do with a cached result coming back
219         return;
220     }
221
222     r.innerHTML = '<img_src="img/Latitude_Icon.png"_title="
223         Latitude_of_Location-aware_Content_Tag"_class="icon_form"_
224         height="36"_width="36"><input_type=text_class="
225         input_form_custom"_name=glat_size=16_value=' + position.
226         coords.latitude + '_/><br/><img_src="img/Longitude_Icon.
227         png"_title="Longitude_of_Location-aware_Content_Tag"_class
228         ="icon_form"_height="36"_width="36"><input_type=text_class
229         ="input_form_custom"_name=glon_size=16_value=' + position.
230         coords.longitude + '_/>';
231
232     // '<input_type=hidden_class="input_form_custom"_name=glat_value=' +
233         position.coords.latitude + '_/><input_type=hidden_class="
234         input_form_custom"_name=glon_value=' + position.coords.longitude +
235         '_/>';
236     r.className = 'success';
237
238     var mapcanvas = document.createElement('div');
239     mapcanvas.id = 'mapcanvas';
240     mapcanvas.style.height = '400px';
241     mapcanvas.style.width = '640px';
242
243     document.querySelector('article').appendChild(mapcanvas);
244
245     var latlng = new google.maps.LatLng(position.coords.latitude ,
246         position.coords.longitude);

```

```

222     var myOptions = {
223       zoom: 15,
224       center: latlng ,
225       mapTypeControl: false ,
226       navigationControlOptions: {style: google.maps.
          NavigationControlStyle.SMALL},
227       mapTypeId: google.maps.MapTypeId.ROADMAP
228     };
229     var map = new google.maps.Map(document.getElementById("mapcanvas"),
        myOptions);

230
231     var marker = new google.maps.Marker({
232       position: latlng ,
233       map: map,
234       title: "You_are_here!(at_least_within_a_"+position.
          coords.accuracy+"_meter_radius)"
235     });
236
237     var locations = [
238       [ 'Banja_Luka', 44.766666699999990000, 17.183333299999960000,
239         4],
240       [ 'Tuzla', 44.53284100000000000000, 18.670499999999947000, 5],
241       [ 'Zenica', 44.20343920000000000000, 17.907743200000027000, 3],
242       [ 'Sarajevo', 43.85000000000000000000, 18.250000000000000000, 2],
243       [ 'Mostar', 43.33333330000000000000, 17.799999999999954000, 1]
244     ];
245     var infowindow = new google.maps.InfoWindow();
246
247     var marker, i;
248     for (i = 0; i < locations.length; i++) {
249       marker = new google.maps.Marker({
250         position: new google.maps.LatLng(locations[i][1], locations[i]
251           ][2]),
252         map: map
253       });
254       google.maps.event.addListener(marker, 'click', (function (marker, i) {
255         return function () {
256           infowindow.setContent(locations[i][0]);
257           infowindow.open(map, marker);
258         }
259       })(marker, i));
260     }
261   }
262
263   function error(msg) {
264     // var s = document.querySelector('#status');
265     // s.innerHTML = typeof msg == 'string' ? msg : "failed";
266     // s.className = 'fail';
267
268     // console.log(arguments);
269   }
270

```

```

271 if (navigator.geolocation) {
272     navigator.geolocation.getCurrentPosition(success, error);
273 } else {
274     error('not_supported');
275 }
276
277 </script>
278
279 <center><table border='0'><tr><td valign='top' width='100%' align='
    center'><a href="https://www.piperpal.com/"><img src='/piperpal
    .png' alt='piperpal.com_Logo' width="320" align=center/></a></
    td></tr>
280
281 <div class="background_form">
282 EOF
283
284 print "<tr><td valign='top' _width='100%' _align='center'>";
285 #print "<h3>Discover the world around you in <span id='countdowntimer
    '></span> seconds</h3>";
286 print "<script _type='text/javascript'>";
287 print "function _increase() {";
288 print "    _counterElement._document.getElementById(\"
    countdowntimer\");";
289 print "    _var_counter=_counterElement.textContent;";
290 print "    _counter++;";
291 print "    _counterElement.innerHTML=_counter;";
292 print "    _counterElement.innerHTML=_counter;";
293 print "    _window.onload=_increase;";
294 print "</script>";
295 #print "<h4>12 Million Locations at Your Fingertips</h4>";
296 #print "<label for=\"countdowntimer\">Location Search progress</label
    >";
297 #print "<progress id=\"countdowntimer\" max=\"50\">10%</progress>";
298 #print "<script type=\"text/javascript\" src=\"https://api.piperpal.com
    /location/json.php?service=Restaurant&glat=' + position.coords.
    longitude + '&glon=' + position.coords.longitude + '\"></script>\n
    ";
299 #print "<script language=\"JavaScript\">\n";
300 #print "var obj = JSON.parse(locations);\n";
301 #print "for (i=0; i < obj.locations.length; i++) {\n";
302 #print "document.write(\"<h1>\n" + obj.locations[i].name + "\"</h1><h2><a
    href='\" + obj.locations[i].location + \"'>\n" + obj.locations[i].
    location + "\"</a> (\n" + obj.locations[i].distance + "\"</h2><h3>\n"
    + "\" \n" + obj.locations[i].service + "\" \n" + "\"</h3>\n");\n";
303 #print "<!--document.write(\"<p>\n" + obj.locations[i].distance + "\"</p>
    ><form method='GET' action='/search.php#results'><input type='text'
    name='name' placeholder='\" + obj.locations[i].name +
    \"'/><input type='hidden' name='glat' value='\" + obj.locations[i].
    glat + \"' /><input type='hidden' name='glon' value='\" + obj.
    locations[i].glon + \"' /><span id='geopher'></span><select name='
    service'><option value='Food'>Food</option><option selected value='
    Search'>Search</option></select><input type='submit' value='Search'
    /><br />\"); -->\n";
304 #print "}\n";

```

```

305 #print "</script>\n";
306 #print "<h3>It\'s not where you\'re from, it\'s where you\'re at</h3>";
307 #print "<p><a href=\'https://www.piperpal.com/tutorial/\''>Piperpal 4.0
    Tutorial</a></p>";
308 # print "<p>The Piperpal implementation of Location Search for World
    Wide Web<br />is described in <a href=\'https://www.piperpal.com/thesis.pdf\'>https://www.piperpal.com/thesis.pdf</a> ready for
    2026.</p>";
309 &Piperpal::input_searchers($c);
310 # print "<a name=\'results\'><a href=\'https://www.piperpal.com/\''><img
    src=\'/piperpal.png\' alt=\'piperpal.com Logo\' width=\'320\' align=
    center/></a><br />
311 #<h3><a href=\'https://www.piperpal.com/\''>Location Search Results</a>
    </h3></a>";
312 &Piperpal::select_publisher();
313 print "<br/>";
314 print "<br/>";
315 print "<br/>";
316 print "<br/>";
317 print "<br/>";
318 print "<p>You could markup with <location> tag in <a href=\'https
    ://www.w3.org/wiki/HTML/next#3Clocation.3E_element_.28like_.29
    _for_expressing_geo_information.2C_eg_with_attributes_lat.2C_long.2
    C_altitude\'>HTML</a><br/>";
319 print "<a href=\'https://www.aamotsoftware.com/location.html\'>https://
    www.aamotsoftware.com/location.html</a></p>";
320 print "<p><a href=\'https://www.stripe.com/\''><img alt=\'Powered by
    stripe\'_src=\'/powered_by_stripe.png\'></a>&nbsp;<a href=\'https
    ://play.google.com/store/apps/details?id=com.piperpal.api.android&
    pcampaignid=MKT-Other-global-all-co-prtnr-py-PartBadge-Mar2515-1\'><
    img alt=\'Get it on Google Play\'_src=\'/google-piperpal.png\'></a>
    </p>";
321 print "<p>Copyright &copy; 2015–2023 <location_name=\'Aamot Software\'_
    href=\'https://www.aamotsoftware.com/'_lat=\'37.4219999'_lon
    =\'-122.0862462'_service=\'Electronics\'>Aamot Software</location><br
    /><location_name=\'Piperpal\'_href=\'https://www.piperpal.com/'_lat
    =\'59.94215220'_lon=\'10.71697530'_service=\'Crawler\'>Oslo, Norway</
    location><location_name=\'Piperpal\'_href=\'https://www.piperpal.
    com/'_lat=\'37.879015'_lon=\'-122.262425'_service=\'Crawler\'>Berkeley,
    California, USA</location></p>";
322 #print "<h2>Wikipedia Location-aware Content</h2>";
323 &Piperpal::insert_wikipedia();
324 #print "</td></tr><tr><td valign=\'top\' width=512>";
325 #print "<h3>Be discovered by the world around you</h3>";
326 #print "<p>Submit entries in Piperpal\'s Location-aware Search Engine</
    p>";
327 &Piperpal::input_publisher();
328 &Piperpal::insert_publisher();
329 print "<h3>News</h3>";
330 print "<p><b>2023</b></p>";
331 print "<p><a href=\'https://piperpal.com/'>Piperpal</a>\'s Where do you
    think?_feature_is_now_active. You need a VISA/MasterCard to add
    new locations at $0.01 USD at <a href=\'https://www.piperpal.com/
    google.html\'>https://www.piperpal.com/google.html</a></p>";

```

```

332 print '<a_href="https://www.piperpal.com/"><img_src="/piperpal.png" alt
      ="piperpal.com Logo" _width="320" _align="center/"></a><form_id="form"
      _method="GET" _action="https://www.piperpal.com/cft/s/"><table><tr
      ><td>Text:<input_id="name" _type="text" _name="name" _placeholder="
      Example:<_&HappyJuly4th" _size="24" _/><span_class="error">This_field_
      is_required</span></td></tr><tr><td>Email:<input_id="email" _type="
      text" _name="email" _placeholder="your.name@gmail.com" _/><span_class
      ="error">This_field_is_required</span></td></tr><tr><td>Service:<
      select_id="service" _name="service"><option_value="Restaurant">
      Restaurant</option><option_value="Bar">Bar</option><option_value="
      Concert">Concert</option><option_value="Film">Film</option><option_
      value="Books">Books</option><option_value="Health">Health</option><
      option_value="Clothes">Clothes</option><option_value="Food">Food</
      option><option_value="Music">Music</option><option_value="
      Electronics">Electronics</option><option_value="Transport">
      Transport</option><option_value="Rental">Rental</option></select></
      td></tr><tr><td>Location:<input_type="text" _name="location" _
      placeholder="https://yourwebsite.com/" _/></td></tr><tr><td>
      Latitude:<input_type="text" _name="glat" _value="37.4375596"></td></
      tr><tr><td>Longitude:<input_type="text" _name="glon" _value
      ="-122.11922789999998"></td></tr><tr><td>Payment_( ):<input_
      type="currency" _name="paid" _value="1" _placeholder="Type_a_price"></
      td></tr><tr><td><input_type="submit" _name="Submit" _value="Submit" _
      /></td></tr></table></form>';
333 print '<p><b>2022</b></p>';
334 print '<p><a_href="https://www.aamotsoftware.com/">Aamot_Software</a>\`
      s_Location_Entries_can_be_ordered_for_$0.42_USD_per_location_at<a_
      href="https://www.piperpal.com/cft/s/">https://www.piperpal.com/cft
      /s/</a>';
335 print '<p><b>2021</b></p>';
336 print '<p><a_href="https://www.aamotsoftware.com/">Aamot_Software</a>\`
      s_second_functional_example_of_HTML_with_location_tagging_and_
      fetching_was_stored_on<a_href="https://piperpal.com/google.html">
      https://piperpal.com/cft/s/</a></p>';
337 print '<p><b>2020</b></p>';
338 print '<p><a_href="https://www.aamotsoftware.com/">Aamot_Software</a>\`
      s_Indexer_for_Piperpal_written_in_the_programming_language_Python_
      can_now_recursively_index_location_tags_as_specified_on<a_href="
      https://www.aamotsoftware.com/location.html">https://www.
      aamotsoftware.com/location.html</a>_from_web_pages_that_are_listed_
      for_such_indexing_on<a_href="https://www.aamotsoftware.com/
      location-source.html">https://www.aamotsoftware.com/location-source
      .html</a></p>';
339 print '<p><b>2015</b></p>';
340 print '<p><a_href="https://www.aamotsoftware.com/">Aamot_Software</a>\`
      s_first_practical_example_of_location_tagging_with_Piperpal_was_
      stored_on<a_href="https://piperpal.com/Googleplex">https://
      piperpal.com/Googleplex</a>_at_a_lunch_table_with<a_href="https://
      www.norvig.com/">Peter_Norvig</a>_in_the_Googleplex_in_Mountain_
      View,_California_in_2015_where_he_mentioned_crowd_sourcing_of_
      location_tags_with_a_neural_network_filter_as_future_work.</p>';
341 print '<p><a_href="https://www.aamotsoftware.com/">Aamot_Software</a>\`
      s_presentation_for<a_href="https://research.google.com/">Google_
      Research</a>:<a_href="https://www.piperpal.com/doc/3.0/Piperpal-

```

```
        Location-aware-ContentTag.pdf">Location-aware_Content_Tag:_&lt;
        location&gt;;&location_markup</a></p>';
342 #<tr><td width=60>&nbsp;</td><td><p>Copyright &copy; 2015–2022 <a href
    ='https://www.aamotsoftware.com/'>Ole Aamot Software</a></p>";
343 print "</td></tr></table>\n";
344 #print "<p>Copyright &copy; 2018 <a href=\"https://www.aamotsoftware.
    com/\">Ole Aamot Software</a></p>";
345 print "</body>\n</html>\n";
```

Chapter 13

Query Interface API on World Wide Web – api.piperpal.com

13.1 Source: <https://api.piperpal.com/index.php>

Listing 13.1: Insert code directly in your document

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <script src="http://code.jquery.com/jquery-latest.min.js"></script>
5     <meta charset="utf-8">
6     <title>Piperpal</title>
7   </head>
8   <body>
9     <div id="log"></div>
10    <script>
11      $(document).ready(function(){
12
13        setInterval(function(){
14
15          if (navigator.geolocation) {
16            navigator.geolocation.getCurrentPosition(
17              ajaxCall);
18          } else{
19            $('#log').html("GPS_is_not_available");
20          }
21
22          function ajaxCall(position){
23
24            var latitude = position.coords.latitude;
25            var longitude = position.coords.longitude;
```

```

25         var location = window.location.pathname.substr
26             (1);
27         var queryString = window.location.search;
28         var urlParams = new URLSearchParams(
29             queryString);
30         // alert(queryString+"("+latitude+", "+
31             longitude+")");
32         $.ajax({
33             url: "https://api.piperpal.com/pull.php",
34             type: 'POST', //I want a type as
35                 POST
36             data: { 'glat' : latitude, 'glon' :
37                 longitude, 'location' : location,
38                 'name' : urlParams.get('name'), '
39                 service' : urlParams.get('service'
40                 ), 'radius' : urlParams.get('
41                 radius') },
42             success: function(response) {
43                 $('#log').html(response);
44                 // alert(response);
45             }
46         });
47     },15000);
48
49     });
50 </script>
51 <h2>Documentation</h2>
52 <h3>Location JavaScript API</h3>
53 <h4>Pull </h4>
54 <pre>
55     &lt;script type="text/javascript" src="https://api.piperpal.com
56         /location/json.php?service=Books&glat=37.4375596&glon
57         =-122.11922789999998">&lt;/script>
58
59 </pre>
60 <h4>Push</h4>
61 <pre>
62     <span style="color: #ff0000">Example</span>
63     https://api.piperpal.com/location/push.php?name=<span style="
64         color: #ff0000">Google</span>&location=<span style="color: #
65         ff0000">http://www.google.com/</span>&service=<span style="
66         color: #ff0000">Books</span>&glat=<span style="color: #
67         ff0000">37.4375596</span>&glon=<span style="color: #ff0000"
68         >-122.11922789999998</span>&paid=<span style="color: #
69         ff0000">50</span>
70 </pre>
71 <p>&copy; 2022 Aamot Software</p>
72 </body>
73 </html>

```

13.2 Source: <https://api.piperpal.com/pull.php>

Listing 13.2: Insert code directly in your document

```

1
2 <?php
3 $db = mysqli_connect("piperpal.mysql.domeneshop.no","piperpal","
   xxxxxxxx","piperpal");
4 $query = "SELECT DISTINCT id,name,service,location,modified,created,
   glat,glon,paid,token,type,email,111.045*DEGREES(ACOS(COS(RADIANS(
   latpoint))*COS(RADIANS(glat))*COS(RADIANS(longpoint)-RADIANS(glon))
   +SIN(RADIANS(latpoint))*SIN(RADIANS(glat)))) AS distance_in_km FROM
   _piperpal JOIN _ (SELECT _ . $_POST['glat'] . " AS latpoint, _ .
   $_POST['glon'] . " AS longpoint) AS p ON 1=1 WHERE name=_%" .
   $_POST['name'] . "%' OR service LIKE '%" . $_POST['service'] . "%'
   HAVING distance_in_km < _ . $_POST['radius'] . " ORDER BY
   distance_in_km ASC, _modified DESC";
5 $result = $db->query($query);
6 $num_coords = mysqli_num_rows($result);
7 if ($num_coords == 0) {
8     print "<form onsubmit='updateGeo()' _id='lnsForm' _name='lnsForm' _
   action='https://www.piperpal.com/checkout.php' _method='POST'>";
9     print "<input type='hidden' _name='c' _value='INSERT' _/>\n";
10    print "<table cellpadding=5><tr>";
11    print "<td><a href='http://piperpal.com/' . $_POST['name'] . "><
   img border=0 width=16 height=16 src='/js-icon.png' _/></td>";
12    print "<td><input size=16 type=text name=name _class=biginput _id=
   name _placeholder='Name' _value='" . $_POST['name'] . "' _/></td>\n";
13    print "<td><input size=20 type=text name=location _class=biginput _id=
   location _placeholder='http://' _value='" . $_SERVER['
   HTTP_REFERER'] . "' _/></td>\n";
14    print "<td><input size=16 type=text name=service _class=biginput _id=
   service _placeholder='Service' _value='" . $_POST['service'] . "'
   _/></td>\n";
15    print "<div _id='status'><input type='hidden' _name='glat' _
   placeholder='Latitude' _size=16 _value='" . $_POST['glat'] . "' _
   /><input type='hidden' _name='glon' _placeholder='Longitude' _size=
   16 _value='" . $_POST['glon'] . "' _/></div>\n";
16    print "<td><form action='' _method='POST'><script src='https://
   checkout.stripe.com/checkout.js' _class='stripe-button' _data-key=
   ='pk_live_9UbKhDJJWaAFnMjYQTBA8I9i00H8Z5eMmL' _data-amount='43' _
   data-name='Aamot Software' _data-description='Piperpal_&' .
   $_POST['name'] . '%" . $_POST['service'] . " (USD_0.43)' _data-
   image='/128x128.png'></script></td>";
17    print "</tr>\n";
18    print "</form>\n";
19 } else {

```

```

20     print "var_locations_=" '{\ "locations\ ":_['_+_';
21     while($object = mysqli_fetch_object($result)) {
22         print "===={_id:_' " . $object->id . " ',_name:_' " . $object->name .
            " ',_service:_' " . $object->service . " ',_location:_' " . $object
            ->location . " ',_modified:_' " . $object->modified . " ',_created
            :_' " . $object->created . " ',_glat:_' " . $object->glat . " ',_
            glon:_' " . $object->glon . " ',_distance:_' " . $object->
            distance_in_km . " ',_paid:_' " . $object->paid . " ',_token:_' " .
            $object->token . " ',_type:_' " . $object->type . " ',_email:_' "
            . $object->email . " '}_\n";
23     }
24     print " ]}";
25 }
26 ?>

```

Chapter 14

Location Search on World Wide Web – www.piperpal.com/location

14.1 Source: <https://www.piperpal.com/location/index.html>

14.2 Source: <https://www.piperpal.com/location/location.html>

Listing 14.1: Insert code directly in your document

```
1 <script type="text/javascript" src="https://api.piperpal.com/location/
  json.php?service=Books&glat='_+_position.coords.longitude_+_&glon
  ='_+_position.coords.longitude_+_'></script>
2 <script language="JavaScript">
3 var obj = JSON.parse(locations);
4 for (i=0; i < obj.locations.length; i++) {
5   document.write("<h1>" + obj.locations[i].name + "</h1><h2><a href='"
    + obj.locations[i].location + ">" + obj.locations[i].location
    + "</a>_" + obj.locations[i].distance + ")</h2><h3>" + "_" +
    obj.locations[i].service + "_" + "</h3>\n");
6   <!--document.write("<p>" + obj.locations[i].distance + "</p><form_
    method='GET' _action='/search.php'><input_type='text' _name='name'
    _placeholder=''_value='" + obj.locations[i].name + "'/><input_
    type='hidden' _name='glat' _value='" + obj.locations[i].glat + "'_
    /><input_type='hidden' _name='glon' _value='" + obj.locations[i].
    glon + "'/><span_id='geopher'></span><select_name='service'><
    option_value='Food'>Food</option><option_selected_value='Search
```

```

        '>Search</option></select><input_type='submit' _value='Search' _
        /><br_>"); -->
7  }
8  </script>
9  <location name="Berkeley" location="http://berkeley.edu/" service="
    Books" glat="59.9340451" glon="10.7481188" notbefore="2020-03-30_
    12:00:00" notafter="2020-03-31_12:00:00" paid="50" />
10 <location name="Palo_Alto" lat="37.4375596" lon="-122.11922789999998"
    href="http://berkeley.edu/">
11 <p>Check out <a href="https://www.geopher.com/paloalto.html">Palo Alto
    </a> and <a href="http://piperpal.com/">Piperpal</a>.</p>
12 </location>
13
14 <!DOCTYPE html>
15 <html lang="en">
16   <head>
17     <meta property="al:android:app_name" content="Piperpal" />
18     <meta property="al:android:package" content="com.piperpal.api.
        android" />
19     <meta property="al:android:url" content="https://www.piperpal.com/
        Android" />
20     <!--[if IE]><![endif]-->
21     <meta charset="utf-8">
22
23     <!--[if IE 8]>
24       <link href="/css/common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49
        .css" media="all" rel="stylesheet" type="text/css" />
25     <![endif]-->
26     <!--[if !(IE 8)]><!-->
27       <link href="/css/common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css
        " media="all" rel="stylesheet" type="text/css" />
28     <!--<![endif]-->
29
30     <!--[if lt IE 9]>
31       <link href="/css/airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c.
        css" media="all" rel="stylesheet" type="text/css" />
32     <![endif]-->
33
34     <link href="/css/main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
        screen" rel="stylesheet" type="text/css" />
35     <!--[if IE 7]>
36       <link href="/css/p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css"
        media="screen" rel="stylesheet" type="text/css" />
37     <![endif]-->
38     <!--[if IE 6]>
39       <link href="/css/p1_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css"
        media="screen" rel="stylesheet" type="text/css" />
40     <![endif]-->
41     <script type="text/javascript" src="https://www.piperpal.com/
        piperpal-autocomplete-tours.php"></script>
42     <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
        smoothness/jquery-ui.css">
43     <script src="//code.jquery.com/jquery-1.10.2.js"></script>
44     <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>

```

```

45     <meta name="viewport" content="user-scalable=no, _initial-scale=1.0,
46         _maximum-scale=1.0, _width=device-width">
47     <link rel="dns-prefetch" href="//maps.googleapis.com">
48     <link rel="dns-prefetch" href="//maps.gstatic.com">
49     <link rel="dns-prefetch" href="//mts0.googleapis.com">
50     <link rel="dns-prefetch" href="//fonts.googleapis.com">
51     <link rel="dns-prefetch" href="//www.piperpal.com">
52     <title>piperpal.com – Location-based Search Engine</title>
53     <link href="my_style_form.css" type="text/css" rel="stylesheet" />
54     <link href='http://fonts.googleapis.com/css?family=Titillium+Web
55         :700' rel='stylesheet' type='text/css'>
56     <meta charset="utf-8" />
57     <script>
58     function price_changed() {
59         var priceWidget = document.getElementById('price');
60         var price = priceWidget.options[priceWidget.selectedIndex].
61             value;
62         var stripeSubmit = document.getElementsByClassName('stripe-
63             button-el')[0];
64         var regularSubmit = document.getElementById('regular-submit');
65         if (price > 0) {
66             stripeSubmit.style.display = 'inline-block';
67             regularSubmit.style.display = 'none';
68         } else {
69             stripeSubmit.style.display = 'none';
70             regularSubmit.style.display = 'inline-block';
71         }
72     }
73     function updateGeo() {
74         var glat = document.getElementById("glat");
75         var glon = document.getElementById("glon");
76
77         glat.value = position.coords.latitude;
78         glon.value = position.coords.longitude;
79
80         alert(glat+", "+glon);
81     }
82     function getWikipedia() {
83         jQuery(function(127416 127416 {
84             0getJSON('http://api.geonames.org/findNearbyWikipediaJSON?formatted
85                 =true&lat='+ position.coords.latitude + '&lng='+ position.coords
86                 .longitude + '&username=username&style=full&lang=en&wikipediaUrl
87                 &thumbnailImg', function(json){
88
89                 for(var i = 0; i < json.geonames.length; i++)
90                 {
91                     127416 127416"#wikipedia").prepend( '<span _style="font-family:_
92                         geneva,_arial,_helvetica,_sans-serif;"><br><br><br>' + json.geonames[i].summary + '<br><a _
94                         href="http://' + json.geonames[i].wikipediaUrl + '" _target="

```

```

        blank">' + json.geonames[i].wikipediaUrl + '</a><br></span>'
    );
88     }
89     }); });
90 }
91
92 function submit() {
93     // Strip hijacks the form submit, so we need to un-hijack it.
94     var form = document.getElementById( 'form' );
95     form.submit();
96 }
97
98 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8"
99     >
100 <meta http-equiv="X-UA-Compatible" content="IE=edge" >
101 <link href="//fonts.googleapis.com/css?family=Titillium+Web:300
    italic,400,700,400italic,600italic" rel="stylesheet" type="text
    /css">
102 <link href="//fonts.googleapis.com/css?family=Titillium+Web:300
    italic,400,700,400italic,600italic" rel="stylesheet" type="text
    /css">
103
104 <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
    smoothness/jquery-ui.css">
105 <script src="//code.jquery.com/jquery-1.10.2.js"></script>
106 <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
107
108 <script type="text/javascript" src="https://www.piperpal.com/jquery
    -1.9.1.min.js"></script>
109 <script type="text/javascript" src="https://www.piperpal.com/jquery
    .autocomplete.min.js"></script>
110 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete.php"></script>
111 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-names.php"></script>
112 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-services.php"></script>
113 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-locations.php"></script>
114 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-queries.php"></script>
115 <meta name="viewport" content="width=100%" />
116 <script>
117     $(function() {
118         $( "#datepicker" ).datepicker();
119         $( "#simple-search-tourout" ).datepicker();
120     });
121 </script>
122 <meta name="viewport" content="width=100%, initial-scale=1.0">
123 </head>
124 <body style="background: #ffffff;" onload="document.getElementById
    ( 'query' ).focus();">
    <script type="text/javascript" src="http://maps.google.com/maps/api
    /js?sensor=true"></script>

```

```

125 <!-- script type="text/javascript" src="http://maps.google.com/maps/
    api/js?sensor=false" --></script -->
126 <script>
127 function success(position) {
128     var s = document.querySelector('#status');
129
130     if (s.className === 'success') {
131         // not sure why we're_hitting_this_twice_in_FF, I think it's to
            do with a cached result coming back
132         return;
133     }
134
135     s.innerHTML = '<input_type=hidden_class="input_form_custom" _
        name=glat_value=' + position.coords.latitude + ' _/><input _
        type=hidden_class="input_form_custom" _name=glon_value=' +
        position.coords.longitude + ' _/>';
136     s.className = 'success';
137
138     var q = document.querySelector('#status_publisher');
139
140     if (q.className === 'success') {
141         // not sure why we're_hitting_this_twice_in_FF, I think it's to
            do with a cached result coming back
142         return;
143     }
144
145     q.innerHTML = '<img_src="img/Latitude_Icon.png" _title="Latitude
        _of_Location-aware_Content_Tag" _class="icon_form" _height
        ="36" _width="36"><input_type=text_class="input_form_custom"
        _name=glat_size=16_value=' + position.coords.latitude + ' _
        /><br/><img_src="img/Longitude_Icon.png" _title="Longitude _
        of_Location-aware_Content_Tag" _class="icon_form" _height
        ="36" _width="36"><input_type=text_class="input_form_custom"
        _name=glon_size=16_value=' + position.coords.longitude + ' _
        />';
146
147     // '<input_type=text_name=glat_size=16_value=' + position.
        coords.latitude + ' _/><input_type=text_name=glon_size=16 _
        value=' + position.coords.longitude + ' _/>';
148     q.className = 'success';
149
150     var r = document.querySelector('#status_lns');
151
152     if (r.className === 'success') {
153         // not sure why we're_hitting_this_twice_in_FF, I think it's to
            do with a cached result coming back
154         return;
155     }
156
157     r.innerHTML = '<img_src="img/Latitude_Icon.png" _title="
        Latitude_of_Location-aware_Content_Tag" _class="icon_form" _
        height="36" _width="36"><input_type=text_class="
        input_form_custom" _name=glat_size=16_value=' + position.
        coords.latitude + ' _/><br/><img_src="img/Longitude_Icon.

```

```

        png" _title="Longitude_of_Location-aware_Content_Tag" _class
        ="icon_form" _height="36" _width="36"><input_type=text _class
        ="input_form_custom" _name=glon_size=16_value=' + position.
        coords.longitude + ' _/>';
158
159 // '<input_type=hidden _class="input_form_custom" _name=glat_value=' +
        position.coords.latitude + ' _/><input_type=hidden _class="
        input_form_custom" _name=glon_value=' + position.coords.longitude +
        ' _/>';
160 r.className = 'success';
161
162 var mapcanvas = document.createElement('div');
163 mapcanvas.id = 'mapcanvas';
164 mapcanvas.style.height = '400px';
165 mapcanvas.style.width = '640px';
166
167 document.querySelector('article').appendChild(mapcanvas);
168
169 var latlng = new google.maps.LatLng(position.coords.latitude,
        position.coords.longitude);
170 var myOptions = {
171   zoom: 15,
172   center: latlng,
173   mapTypeId: google.maps.MapTypeId.ROADMAP,
174   navigationControlOptions: {style: google.maps.
        NavigationControlStyle.SMALL},
175   mapTypeId: google.maps.MapTypeId.ROADMAP
176 };
177 var map = new google.maps.Map(document.getElementById("mapcanvas"),
        myOptions);
178
179 var marker = new google.maps.Marker({
180   position: latlng,
181   map: map,
182   title: "You_are_here!(at_least_within_a_"+position.
        coords.accuracy+"_meter_radius)"
183 });
184
185 var locations = [
186   ['Banja_Luka', 44.7666666999999990000, 17.1833332999999960000,
        4],
187   ['Tuzla', 44.5328410000000000000, 18.670499999999947000, 5],
188   ['Zenica', 44.2034392000000000000, 17.907743200000027000, 3],
189   ['Sarajevo', 43.8500000000000000000, 18.250000000000000000, 2],
190   ['Mostar', 43.3333333000000000000, 17.799999999999954000, 1]
191 ];
192
193 var infowindow = new google.maps.InfoWindow();
194
195 var marker, i;
196 for (i = 0; i < locations.length; i++) {
197   marker = new google.maps.Marker({
198     position: new google.maps.LatLng(locations[i][1], locations[i]
        ][2]),

```

```

199         map: map
200     });
201
202     google.maps.event.addListener(marker, 'click', (function (marker, i) {
203         return function () {
204             infowindow.setContent(locations[i][0]);
205             infowindow.open(map, marker);
206         }
207     })(marker, i));
208 }
209 }
210
211 function error(msg) {
212     // var s = document.querySelector('#status');
213     // s.innerHTML = typeof msg == 'string' ? msg : "failed";
214     // s.className = 'fail';
215
216     // console.log(arguments);
217 }
218
219 if (navigator.geolocation) {
220     navigator.geolocation.getCurrentPosition(success, error);
221 } else {
222     error('not_supported');
223 }
224
225 </script>
226
227 <center><table border='0'><tr><td valign='top' width='100%' align='
    center'><a href="https://www.piperpal.com/"><img src='/piperpal
    .png' alt='piperpal.com_Logo' width="320" align=center/></a></
    td></tr>
228
229 <div class="background_form">
230 <tr><td valign='top' width='100%' align='center'><h3>Discover the world
    around you</h3><form onsubmit='updateGeo()' method='GET' action='
    https://www.piperpal.com/' id='formID'><table><tr><td><center><
    input size="30" type="text" class="input_form_custom" id="query"
    name="query" placeholder="Enter_keyword" /></center></td></tr><tr><td><select size="12" id="service" name="service"><option value="
    Restaurant">Restaurant</option><option value="Bar">Bar</option><
    option value="Concert">Concert</option><option value="Film">Film</
    option><option value="Books">Books</option><option value="Health">
    Health</option><option value="Clothes">Clothes</option><option
    value="Food">Food</option><option value="Music">Music</option><
    option value="Electronics">Electronics</option><option value="
    Transport">Transport</option><option value="Rental">Rental</option
    ></select></td><td><select size="12" name="radius" id="radius"
    class="input_form_custom"><option value='40075' selected>40075 km</
    option><option value='30000'>30000 km</option><option value='20000'
    >20000 km</option><option value='10000'>10000 km</option><option
    value='9000'>9000 km</option><option value='8000'>8000 km</option><
    option value='7000'>7000 km</option><option value='6000'>6000 km</
    option><option value='5000'>5000 km</option><option value='4000'

```

```

>4000 km</option><option value='3000'>3000 km</option><option value
='2500'>2500 km</option><option value='2000'>2000 km</option><
option value='1500'>1500 km</option><option value='1250'>1250 km</
option><option value='1000'>1000 km</option><option value='750'>750
km</option><option value='500'>500 km</option><option value='250'
>250 km</option><option value='100'>100 km</option><option value='
50'>50 km</option><option value='25'>25 km</option><option value='
10'>10 km</option><option value='5'>5 km</option><option value='2'
>2 km</option><option value='1'>1 km</option></select></td><td>&
nbsp;</td><td><input type="submit" id="search" name="search" value=
"Go" /></td></tr></table><span id='status'><input type='hidden'
name='glat' /><input type='hidden' name='glon' /></span>
231 </form><br>
232 <script language="javascript" type="text/javascript">
233 var glat_var = position.coords.latitude;
234 </script>
235 <a href="location.html" onclick="location.href=this.href+'?glat='+
glat_var; retur
236 n=false;">Link</a>
237 <script type="text/javascript" src="https://api.piperpal.com/location/
json.php?s
238 ervice=Books&glat='+_+position.coords.longitude+_+'&glon='+_+position.
coords.lon
239 gitude+_+'"></script>
240 <script language="JavaScript">
241 var obj = JSON.parse(locations);
242 for (i=0; i < obj.locations.length; i++) {
243     document.write("<h1>" + obj.locations[i].name + "</h1><h2><a_
href='" + obj.lo
244 cations[i].location + ">" + obj.locations[i].location +
"</a>(" + obj.location
245 s[i].distance + ")</h2><h3>" + "_" + obj.locations[i].
service + "_" + "</h3><n")
246 ;
247 <!--document.write("<p>" + obj.locations[i].distance + "</p><
form_method='GET
248 _action='/search.php'><input_type='text' _name='name'
placeholder='_'value='" +
249 obj.locations[i].name + "'><input_type='hidden' _name
='glat' _value='" + obj.loca
250 tions[i].glat + "'><input_type='hidden' _name='glon'
_value='" + obj.locations[i
251 ].glon + "'><span_id='geopher'></span><select_name='
service'><option_value='Foo
252 _d'>Food</option><option_selected_value='Search'>
Search</option></select><input_t
253 _type='submit' _value='Search' _><br/>"); -->
254 }
255 </script>
256 <location name="Berkeley" location="http://berkeley.edu/" service="
Books" glat="
257 59.9340451" glon="10.7481188" notbefore="2020-03-30_12:00:00" notafter="
2020-03-
258 31_12:00:00" paid="50" />

```

```

259 <location name="Palo_Alto" lat="37.4375596" lon="-122.11922789999998"
    href="http
260 ://berkeley.edu/">
261 <cript type="text/javascript" src="https://api.piperpal.com/location/
    json.php?se
262 rvice=Books&glat='_+_position.coords.longitude+_+'&glon='_+_position.
    coords.long
263 itude+_'"></script>
264 <script language="JavaScript">
265 var obj = JSON.parse(locations);
266 for (i=0; i < obj.locations.length; i++) {
267     document.write("<h1>" + obj.locations[i].name + "</h1><h2><a_
        href='" + obj.lo
268 cations[i].location + ">" + obj.locations[i].location +
            "</a>_" + obj.location
269 s[i].distance + ")</h2><h3>" + "_" + obj.locations[i].
            service + "_" + "</h3>\n")
270 ;
271 <!--document.write("<p>" + obj.locations[i].distance + "</p><
        form_method='GET
272 _____'_action='/search.php'><input_type='text' _name='name'
        _placeholder='_'_value='" +
273 obj.locations[i].name + "'><input_type='hidden' _name
            ='glat' _value='" + obj.loca
274 tions[i].glat + "'><input_type='hidden' _name='glon'
            _value='" + obj.locations[i
275 ].glon + "'><span_id='geopher'></span><select_name='
            service'><option_value='Foo
276 _____d'>Food</option><option_selected_value='Search'>
            Search</option></select><input_t
277 _____ype='submit' _value='Search' _><br_>"); -->
278 }
279 </script>
280 <location name="Berkeley" location="http://berkeley.edu/" service="
    Books" glat="
281 59.9340451" glon="10.7481188" notbefore="2020-03-30_12:00:00" notafter="
    "2020-03-
282 31_12:00:00" paid="50" />
283 <location name="Palo_Alto" lat="37.4375596" lon="-122.11922789999998"
    href="http
284 ://berkeley.edu/">
285 <p>Check out <a href="https://www.geopher.com/">Geopher</a> and <a href
    ="http://piperpal.com/">Piperpal</a>.</p>
286 </location>
287 </body>
288 </html>

```

14.3 Source: <https://www.piperpal.com/location/berkeley/index.html>

Listing 14.2: Insert code directly in your document

```

1 <html>
2   <head>
3     <meta property="al:android:app_name" content="Piperpal" />
4     <meta property="al:android:package" content="com.piperpal.api.
      android" />
5     <meta property="al:android:url" content="https://www.piperpal.com/
      Android" />
6     <!--[if IE]><![endif]-->
7     <meta charset="utf-8">
8
9     <!--[if IE 8]>
10    <link href="/css/common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49.
      css" media="all" rel="stylesheet" type="text/css" />
11    <![endif]-->
12    <!--[if !(IE 8)]><!-->
13    <link href="/css/common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css"
      media="all" rel="stylesheet" type="text/css" />
14    <!--<![endif]-->
15
16    <!--[if lt IE 9]>
17    <link href="/css/airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c
      .css" media="all" rel="stylesheet" type="text/css" />
18    <![endif]-->
19
20    <link href="/css/main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
      screen" rel="stylesheet" type="text/css" />
21    <!--[if IE 7]>
22    <link href="/css/p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css"
      media="screen" rel="stylesheet" type="text/css" />
23    <![endif]-->
24    <!--[if IE 6]>
25    <link href="/css/p1_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css"
      media="screen" rel="stylesheet" type="text/css" />
26    <![endif]-->
27    <script type="text/javascript" src="https://www.piperpal.com/
      piperpal-autocomplete-tours.php"></script>
28    <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
      smoothness/jquery-ui.css">
29    <script src="//code.jquery.com/jquery-1.10.2.js"></script>
30    <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
31    <meta name="viewport" content="user-scalable=no, _initial-scale=1.0,
      _maximum-scale=1.0, _width=device-width">
32    <link rel="dns-prefetch" href="//maps.googleapis.com">
33    <link rel="dns-prefetch" href="//maps.gstatic.com">
34    <link rel="dns-prefetch" href="//mts0.googleapis.com">
35    <link rel="dns-prefetch" href="//fonts.googleapis.com">
36    <link rel="dns-prefetch" href="//www.piperpal.com">
37    <title>Location Tags in Berkeley, CA</title>
38    <link href="my_style_form.css" type="text/css" rel="stylesheet" />

```

```

39     <link href='http://fonts.googleapis.com/css?family=Titillium+Web
      :700' rel='stylesheet' type='text/css'>
40     <link href='http://fonts.googleapis.com/css?family=Titillium+Web'
      rel='stylesheet' type='text/css'>
41     </head>
42     <body>
43     <h1>Location Tags in Berkeley, CA</h1>
44     <script type="text/javascript" src="https://api.piperpal.com/location/
      json.php?service=Books&glat=37.4375596&glon=-122.11922789999998"></
      script>
45     <script language="JavaScript">
46     var obj = JSON.parse(locations);
47     for (i=0; i < obj.locations.length; i++) {
48         document.write("<h1>" + obj.locations[i].name + "</h1><h2><a href='"
          + obj.locations[i].location + "'>" + obj.locations[i].location
          + "</a>(" + obj.locations[i].distance + ")</h2><h3>" + "_" +
          obj.locations[i].service + "_" + "</h3>\n");
49         <!--document.write("<p>" + obj.locations[i].distance + "</p><form_
          method='GET' _action='/search.php'><input_type='text' _name='name'
          _placeholder='_' _value='" + obj.locations[i].name + "'/><input_
          type='hidden' _name='glat' _value='" + obj.locations[i].glat + "'_
          /><input_type='hidden' _name='glon' _value='" + obj.locations[i].
          glon + "'/><span_id='geopher'></span><select_name='service'><
          option_value='Food'>Food</option><option_selected_value='Search
          '>Search</option></select><input_type='submit' _value='Search' _
          /><br_>"); -->
50     }
51     </script>
52     <location name="Berkeley" location="http://berkeley.edu/" service="
      Books" glat="59.9340451" glon="10.7481188" notbefore="2020-03-30_
      12:00:00" notafter="2020-03-31_12:00:00" paid="50" />
53     <location name="PaloAlto" lat="37.4375596" lon="-122.11922789999998"
      href="http://berkeley.edu/">
54     <p>Check out <a href="https://www.geopher.com/">Geopher</a> and <a href
      ="http://piperpal.com/">Piperpal</a>.</p>
55     </location>
56     </body>
57     </html>

```

14.4 Source: <https://www.piperpal.com/location/copenhagen/index.html>

Listing 14.3: Insert code directly in your document

```

1 <html>
2   <head>
3     <meta property="al:android:app_name" content="Piperpal" />

```

```

4     <meta property="al:android:package" content="com.piperpal.api.
      android" />
5     <meta property="al:android:url" content="https://www.piperpal.com/
      Android" />
6     <!--[if IE]><![endif]-->
7     <meta charset="utf-8">
8
9     <!--[if IE 8]>
10    <link href="/css/common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49.
      css" media="all" rel="stylesheet" type="text/css" />
11    <![endif]-->
12    <!--[if !(IE 8)]><!-->
13    <link href="/css/common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css"
      media="all" rel="stylesheet" type="text/css" />
14    <!--<![endif]-->
15
16    <!--[if lt IE 9]>
17    <link href="/css/airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c
      .css" media="all" rel="stylesheet" type="text/css" />
18    <![endif]-->
19
20    <link href="/css/main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
      screen" rel="stylesheet" type="text/css" />
21    <!--[if IE 7]>
22    <link href="/css/p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css"
      media="screen" rel="stylesheet" type="text/css" />
23    <![endif]-->
24    <!--[if IE 6]>
25    <link href="/css/p1_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css"
      media="screen" rel="stylesheet" type="text/css" />
26    <![endif]-->
27    <script type="text/javascript" src="https://www.piperpal.com/
      piperpal-autocomplete-tours.php"></script>
28    <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
      smoothness/jquery-ui.css">
29    <script src="//code.jquery.com/jquery-1.10.2.js"></script>
30    <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
31    <meta name="viewport" content="user-scalable=no, _initial-scale=1.0,
      _maximum-scale=1.0, _width=device-width">
32    <link rel="dns-prefetch" href="//maps.googleapis.com">
33    <link rel="dns-prefetch" href="//maps.gstatic.com">
34    <link rel="dns-prefetch" href="//mts0.googleapis.com">
35    <link rel="dns-prefetch" href="//fonts.googleapis.com">
36    <link rel="dns-prefetch" href="//www.piperpal.com">
37    <title>Location Tags in Copenhagen, DK</title>
38    <link href="my_style_form.css" type="text/css" rel="stylesheet" />
39    <link href='http://fonts.googleapis.com/css?family=Titillium+Web
      :700' rel='stylesheet' type='text/css'>
40    <link href='http://fonts.googleapis.com/css?family=Titillium+Web'
      rel='stylesheet' type='text/css'>
41  </head>
42  <body>
43  <h1>Location Tags in Copenhagen, DK</h1>

```

```

44 <script type="text/javascript" src="https://api.piperpal.com/location/
    json.php?service=Books&glat=55.6828273&glon=12.6082921"></script>
45 <script language="JavaScript">
46 var obj = JSON.parse(locations);
47 for (i=0; i < obj.locations.length; i++) {
48     document.write("<h1>" + obj.locations[i].name + "</h1><h2><a href='"
        + obj.locations[i].location + "'>" + obj.locations[i].location
        + "</a>_" + obj.locations[i].distance + ")</h2><h3>" + "_" +
        obj.locations[i].service + "_" + "</h3><br>");
49 <!--document.write("<p>" + obj.locations[i].distance + "</p><form
    method='GET' _action='/search.php'><input type='text' _name='name'
    _placeholder='_' _value='" + obj.locations[i].name + "'><input
    type='hidden' _name='glat' _value='" + obj.locations[i].glat + "'>
    /><input type='hidden' _name='glon' _value='" + obj.locations[i].
    glon + "'><span id='geopher'></span><select _name='service'><
    option _value='Food'>Food</option><option _selected _value='Search'
    >Search</option></select><input type='submit' _value='Search' _
    /><br/>"); -->
50 }
51 </script>
52 <location name="Copenhagen" location="http://berkeley.edu/" service="
    Books" glat="59.9340451" glon="10.7481188" notbefore="2020-03-30_
    12:00:00" notafter="2020-03-31_12:00:00" paid="50" />
53 <location name="Palo_Alto" lat="37.4375596" lon="-122.11922789999998"
    href="http://berkeley.edu/">
54 <p>Check out <a href="https://www.geopher.com/">Geopher</a> and <a href
    ="http://piperpal.com/">Piperpal</a>.</p>
55 </location>
56 </body>
57 </html>

```

14.5 Source: <https://www.piperpal.com/location/london/index.html>

Listing 14.4: Insert code directly in your document

```

1 <html>
2   <head>
3     <meta property="al:android:app_name" content="Piperpal" />
4     <meta property="al:android:package" content="com.piperpal.api.
        android" />
5     <meta property="al:android:url" content="https://www.piperpal.com/
        Android" />
6     <!--[if IE]><![endif]-->
7     <meta charset="utf-8">
8
9     <!--[if IE 8]>

```

```

10 <link href="/css/common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49.
    css" media="all" rel="stylesheet" type="text/css" />
11 <![endif]-->
12 <!--[if !(IE 8)]><!-->
13 <link href="/css/common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css"
    media="all" rel="stylesheet" type="text/css" />
14 <!--<![endif]-->
15
16 <!--[if lt IE 9]>
17 <link href="/css/airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c
    .css" media="all" rel="stylesheet" type="text/css" />
18 <![endif]-->
19
20 <link href="/css/main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
    screen" rel="stylesheet" type="text/css" />
21 <!--[if IE 7]>
22 <link href="/css/p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css"
    media="screen" rel="stylesheet" type="text/css" />
23 <![endif]-->
24 <!--[if IE 6]>
25 <link href="/css/p1_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css"
    media="screen" rel="stylesheet" type="text/css" />
26 <![endif]-->
27 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-tours.php"></script>
28 <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
    smoothness/jquery-ui.css">
29 <script src="//code.jquery.com/jquery-1.10.2.js"></script>
30 <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
31 <meta name="viewport" content="user-scalable=no, _initial-scale=1.0,
    _maximum-scale=1.0, _width=device-width">
32 <link rel="dns-prefetch" href="//maps.googleapis.com">
33 <link rel="dns-prefetch" href="//maps.gstatic.com">
34 <link rel="dns-prefetch" href="//mts0.googleapis.com">
35 <link rel="dns-prefetch" href="//fonts.googleapis.com">
36 <link rel="dns-prefetch" href="//www.piperpal.com">
37 <title>Location Tags in London, United Kingdom</title>
38 <link href="my_style_form.css" type="text/css" rel="stylesheet" />
39 <link href='http://fonts.googleapis.com/css?family=Titillium+Web
    :700' rel='stylesheet' type='text/css'>
40 <link href='http://fonts.googleapis.com/css?family=Titillium+Web'
    rel='stylesheet' type='text/css'>
41 </head>
42 <body>
43 <h1>Location Tags in London, United Kingdom</h1>
44 <script type="text/javascript" src="https://api.piperpal.com/location/
    json.php?service=Books&glat=51.5073219&glon=-0.1276474"></script>
45 <script language="JavaScript">
46 var obj = JSON.parse(locations);
47 for (i=0; i < obj.locations.length; i++) {
48     document.write("<h1> + obj.locations[i].name + "</h1><h2><a href='"
        + obj.locations[i].location + "'> + obj.locations[i].location
        + "</a>(" + obj.locations[i].distance + ")</h2><h3>" + "_" +
        obj.locations[i].service + "_" + "</h3>\n");

```

```

49     <!--document.write("<p>" + obj.locations[i].distance + "</p><form_
        method='GET' _action='/search.php'><input_type='text' _name='name'
        _placeholder='' _value='" + obj.locations[i].name + "'/><input_
        type='hidden' _name='glat' _value='" + obj.locations[i].glat + "' _
        /><input_type='hidden' _name='glon' _value='" + obj.locations[i].
        glon + "'/><span_id='geopher'></span><select_name='service'><
        option_value='Food'>Food</option><option_selected_value='Search
        '>Search</option></select><input_type='submit' _value='Search' _
        /><br_>"); -->
50 }
51 </script>
52 <location name="Berkeley" location="http://berkeley.edu/" service="
    Books" glat="59.9340451" glon="10.7481188" notbefore="2020-03-30_
    12:00:00" notafter="2020-03-31_12:00:00" paid="50" />
53 <location name="Palo_Alto" lat="37.4375596" lon="-122.11922789999998"
    href="http://berkeley.edu/">
54 <p>Check out <a href="https://www.geopher.com/">Geopher</a> and <a href
    ="http://piperpal.com/">Piperpal</a>.</p>
55 </location>
56 </body>
57 </html>

```

14.6 Source: <https://www.piperpal.com/location/nyc/index.html>

Listing 14.5: Insert code directly in your document

```

1 <html>
2   <head>
3     <meta property="al:android:app_name" content="Piperpal" />
4     <meta property="al:android:package" content="com.piperpal.api.
        android" />
5     <meta property="al:android:url" content="https://www.piperpal.com/
        Android" />
6     <!--[if IE]><![endif]-->
7     <meta charset="utf-8">
8
9     <!--[if IE 8]>
10    <link href="/css/common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49.
        css" media="all" rel="stylesheet" type="text/css" />
11    <![endif]-->
12    <!--[if !(IE 8)]><!-->
13    <link href="/css/common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css"
        media="all" rel="stylesheet" type="text/css" />
14    <!--<![endif]-->
15
16    <!--[if lt IE 9]>

```

```

17     <link href="/css/airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c
18         .css" media="all" rel="stylesheet" type="text/css" />
19     <![endif]-->
20     <link href="/css/main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
21         screen" rel="stylesheet" type="text/css" />
22     <!--[if IE 7]>
23     <link href="/css/p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css"
24         media="screen" rel="stylesheet" type="text/css" />
25     <![endif]-->
26     <!--[if IE 6]>
27     <link href="/css/p1_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css"
28         media="screen" rel="stylesheet" type="text/css" />
29     <![endif]-->
30     <script type="text/javascript" src="https://www.piperpal.com/
31         piperpal-autocomplete-tours.php"></script>
32     <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
33         smoothness/jquery-ui.css">
34     <script src="//code.jquery.com/jquery-1.10.2.js"></script>
35     <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
36     <meta name="viewport" content="user-scalable=no,initial-scale=1.0,
37         maximum-scale=1.0,width=device-width">
38     <link rel="dns-prefetch" href="//maps.googleapis.com">
39     <link rel="dns-prefetch" href="//maps.gstatic.com">
40     <link rel="dns-prefetch" href="//mts0.googleapis.com">
41     <link rel="dns-prefetch" href="//fonts.googleapis.com">
42     <link rel="dns-prefetch" href="//www.piperpal.com">
43     <title>Location Tags in New York City, NY</title>
44     <link href="my_style_form.css" type="text/css" rel="stylesheet" />
45     <link href='http://fonts.googleapis.com/css?family=Titillium+Web
46         :700' rel='stylesheet' type='text/css'>
47     <link href='http://fonts.googleapis.com/css?family=Titillium+Web'
48         rel='stylesheet' type='text/css'>
49 </head>
50 <body>
51 <h1>Location Tags in New York City, NY</h1>
52 <script type="text/javascript" src="https://api.piperpal.com/location/
53     json.php?service=Books&glat=40.6399278&glon=-73.7786925"></script>
54 <script language="JavaScript">
55 var obj = JSON.parse(locations);
56 for (i=0; i < obj.locations.length; i++) {
57     document.write("<h1>" + obj.locations[i].name + "</h1><h2><a href='"
58         + obj.locations[i].location + "'>" + obj.locations[i].location
59         + "</a>(" + obj.locations[i].distance + ")</h2><h3>" + "_" +
60         obj.locations[i].service + "_" + "</h3>\n");
61 <!--document.write("<p>" + obj.locations[i].distance + "</p><form
62     method='GET' _action='/search.php'><input type='text' _name='name'
63     _placeholder='_' value='" + obj.locations[i].name + "'><input
64     type='hidden' _name='glat' _value='" + obj.locations[i].glat + "'
65     /><input type='hidden' _name='glon' _value='" + obj.locations[i].
66     glon + "'><span id='geopher'></span><select name='service'><
67     option value='Food'>Food</option><option selected value='Search'
68     >Search</option></select><input type='submit' _value='Search'
69     /><br_>"); -->

```

```

50 }
51 </script>
52 <location name="Berkeley" location="http://berkeley.edu/" service="
    Books" glat="59.9340451" glon="10.7481188" notbefore="2020-03-30_
    12:00:00" notafter="2020-03-31_12:00:00" paid="50" />
53 <location name="Palo_Alto" lat="37.4375596" lon="-122.11922789999998"
    href="http://berkeley.edu/">
54 <p>Check out <a href="https://www.geopher.com/">Geopher</a> and <a href
    ="http://piperpal.com/">Piperpal</a>.</p>
55 </location>
56 </body>
57 </html>

```

14.7 Source: <https://www.piperpal.com/location/oslo/index.html>

Listing 14.6: Insert code directly in your document

```

1 <html>
2   <head>
3     <meta property="al:android:app_name" content="Piperpal" />
4     <meta property="al:android:package" content="com.piperpal.api.
      android" />
5     <meta property="al:android:url" content="https://www.piperpal.com/
      Android" />
6     <!--[if IE]><![endif]-->
7     <meta charset="utf-8">
8
9     <!--[if IE 8]>
10    <link href="/css/common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49.
      css" media="all" rel="stylesheet" type="text/css" />
11    <![endif]-->
12    <!--[if !(IE 8)]><!-->
13    <link href="/css/common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css"
      media="all" rel="stylesheet" type="text/css" />
14    <!--<![endif]-->
15
16    <!--[if lt IE 9]>
17    <link href="/css/airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c
      .css" media="all" rel="stylesheet" type="text/css" />
18    <![endif]-->
19
20    <link href="/css/main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
      screen" rel="stylesheet" type="text/css" />
21    <!--[if IE 7]>
22    <link href="/css/p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css"
      media="screen" rel="stylesheet" type="text/css" />

```

```

23     <![endif]—>
24     <!--[if IE 6]>
25         <link href="/css/pl_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css"
26             media="screen" rel="stylesheet" type="text/css" />
27     <![endif]—>
28     <script type="text/javascript" src="https://www.piperpal.com/
29         piperpal-autocomplete-tours.php"></script>
30     <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
31         smoothness/jquery-ui.css">
32     <script src="//code.jquery.com/jquery-1.10.2.js"></script>
33     <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
34     <meta name="viewport" content="user-scalable=no, _initial-scale=1.0,
35         _maximum-scale=1.0, _width=device-width">
36     <link rel="dns-prefetch" href="//maps.googleapis.com">
37     <link rel="dns-prefetch" href="//maps.gstatic.com">
38     <link rel="dns-prefetch" href="//mts0.googleapis.com">
39     <link rel="dns-prefetch" href="//fonts.googleapis.com">
40     <link rel="dns-prefetch" href="//www.piperpal.com">
41     <title>Location Tags in Oslo, Norway</title>
42     <link href="my_style_form.css" type="text/css" rel="stylesheet" />
43     <link href='http://fonts.googleapis.com/css?family=Titillium+Web
44         :700' rel='stylesheet' type='text/css'>
45     <link href='http://fonts.googleapis.com/css?family=Titillium+Web'
46         rel='stylesheet' type='text/css'>
47 </head>
48 <body>
49 <h1>Location Tags in Oslo, Norway</h1>
50 <script type="text/javascript" src="https://api.piperpal.com/location/
51     json.php?service=Books&glat=60&glon=10"></script>
52 <script language="JavaScript">
53 var obj = JSON.parse(locations);
54 for (i=0; i < obj.locations.length; i++) {
55     document.write("<h1>" + obj.locations[i].name + "</h1><h2><a href='"
56         + obj.locations[i].location + "'>" + obj.locations[i].location
57         + "</a>_" + obj.locations[i].distance + ")</h2><h3>" + "_" +
58         obj.locations[i].service + "_" + "</h3><br>");
59     <!--document.write("<p>" + obj.locations[i].distance + "</p><form _
60         method='GET' _action='/search.php'><input _type='text' _name='name'
61         _placeholder='_' _value='" + obj.locations[i].name + "'/><input _
62         type='hidden' _name='glat' _value='" + obj.locations[i].glat + "' _
63         /><input _type='hidden' _name='glon' _value='" + obj.locations[i].
64         glon + "'/><span _id='geopher'></span><select _name='service'><
65         option _value='Food'>Food</option><option _selected _value='Search
66         '>Search</option></select><input _type='submit' _value='Search' _
67         /><br>"); -->
68 }
69 </script>
70 <location name="Berkeley" location="http://berkeley.edu/" service="
71     Books" glat="59.9340451" glon="10.7481188" notbefore="2020-03-30_
72     12:00:00" notafter="2020-03-31_12:00:00" paid="50" />
73 <location name="Palo_Alto" lat="37.4375596" lon="-122.11922789999998"
74     href="http://berkeley.edu/">
75 <p>Check out <a href="https://www.geopher.com/">Geopher</a> and <a href
76     ="http://piperpal.com/">Piperpal</a>.</p>

```

```

55 </location>
56 </body>
57 </html>

```

14.8 Source: <https://www.piperpal.com/location/paris/index.html>

Listing 14.7: Insert code directly in your document

```

1 <html>
2   <head>
3     <meta property="al:android:app_name" content="Piperpal" />
4     <meta property="al:android:package" content="com.piperpal.api.
      android" />
5     <meta property="al:android:url" content="https://www.piperpal.com/
      Android" />
6     <!--[if IE]><![endif]-->
7     <meta charset="utf-8">
8
9     <!--[if IE 8]>
10    <link href="/css/common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49.
      css" media="all" rel="stylesheet" type="text/css" />
11    <![endif]-->
12    <!--[if !(IE 8)]><!-->
13    <link href="/css/common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css"
      media="all" rel="stylesheet" type="text/css" />
14    <!--<![endif]-->
15
16    <!--[if lt IE 9]>
17    <link href="/css/airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c
      .css" media="all" rel="stylesheet" type="text/css" />
18    <![endif]-->
19
20    <link href="/css/main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
      screen" rel="stylesheet" type="text/css" />
21    <!--[if IE 7]>
22    <link href="/css/p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css"
      media="screen" rel="stylesheet" type="text/css" />
23    <![endif]-->
24    <!--[if IE 6]>
25    <link href="/css/p1_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css"
      media="screen" rel="stylesheet" type="text/css" />
26    <![endif]-->
27    <script type="text/javascript" src="https://www.piperpal.com/
      piperpal-autocomplete-tours.php"></script>
28    <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
      smoothness/jquery-ui.css">

```

```

29 <script src="//code.jquery.com/jquery-1.10.2.js"></script>
30 <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
31 <meta name="viewport" content="user-scalable=no,initial-scale=1.0,
    _maximum-scale=1.0,_width=device-width">
32 <link rel="dns-prefetch" href="//maps.googleapis.com">
33 <link rel="dns-prefetch" href="//maps.gstatic.com">
34 <link rel="dns-prefetch" href="//mts0.googleapis.com">
35 <link rel="dns-prefetch" href="//fonts.googleapis.com">
36 <link rel="dns-prefetch" href="//www.piperpal.com">
37 <title>Location Tags in Paris , France</title>
38 <link href="my_style_form.css" type="text/css" rel="stylesheet" />
39 <link href='http://fonts.googleapis.com/css?family=Titillium+Web
    :700' rel='stylesheet' type='text/css'>
40 <link href='http://fonts.googleapis.com/css?family=Titillium+Web'
    rel='stylesheet' type='text/css'>
41 </head>
42 <body>
43 <h1>Location Tags in Paris , France</h1>
44 <script type="text/javascript" src="https://api.piperpal.com/location/
    json.php?service=Books&glat=48.8566969&glon=2.3514616"></script>
45 <script language="JavaScript">
46 var obj = JSON.parse(locations);
47 for (i=0; i < obj.locations.length; i++) {
48     document.write("<h1>" + obj.locations[i].name + "</h1><h2><a href='"
        + obj.locations[i].location + "'>" + obj.locations[i].location
        + "</a>_" + obj.locations[i].distance + ")</h2><h3>" + "_" +
        obj.locations[i].service + "_" + "</h3>\n");
49 <!--document.write("<p>" + obj.locations[i].distance + "</p><form_
    method='GET'_action='/search.php><input_type='text'_name='name'_
    _placeholder=''_value='" + obj.locations[i].name + "'><input_
    type='hidden'_name='glat'_value='" + obj.locations[i].glat + "'_
    /><input_type='hidden'_name='glon'_value='" + obj.locations[i].
    glon + "'><span_id='geopher></span><select_name='service><
    option_value='Food>Food</option><option_selected_value='Search
    '>Search</option></select><input_type='submit'_value='Search'_
    /><br_>"); -->
50 }
51 </script>
52 <location name="Berkeley" location="http://berkeley.edu/" service="
    Books" glat="59.9340451" glon="10.7481188" notbefore="2020-03-30_
    12:00:00" notafter="2020-03-31_12:00:00" paid="50" />
53 <location name="Palo_Alto" lat="37.4375596" lon="-122.11922789999998"
    href="http://berkeley.edu/">
54 <p>Check out <a href="https://www.geopher.com/">Geopher</a> and <a href
    ="http://piperpal.com/">Piperpal</a>.</p>
55 </location>
56 </body>
57 </html>

```

Chapter 15

Location API on World Wide Web – api.piperpal.com/location

15.1 Source: <https://api.piperpal.com/location/json.php>

Listing 15.1: Insert code directly in your document

```
1 <?php
2 $db = mysqli_connect("piperpal.mysql.domeneshop.no","piperpal","
    xxxxxxxx","piperpal");
3 // mysqli_set_charset($db,"utf8");
4 if (isset($_GET['name'])) {
5     $query = "SELECT DISTINCT id,name,service,location,modified,created,
        glat,glon,paid,token,type,email,111.045*DEGREES(ACOS(COS(RADIANS(
        latpoint))*COS(RADIANS(glat))*COS(RADIANS(longpoint)-RADIANS(glon
        ))+SIN(RADIANS(latpoint))*SIN(RADIANS(glat)))) AS distance_in_km
        FROM piperpal JOIN (SELECT " . $_GET['glat'] . " AS latpoint,"
        . $_GET['glon'] . " AS longpoint) AS p ON 1=1 WHERE service="
        . $_GET['service'] . " AND name=" . $_GET['name'] . " ORDER
        BY distance_in_km";
6 } else {
7     if (isset($_GET['service'])) {
8         $query = "SELECT DISTINCT id,name,service,location,modified,
            created,glat,glon,paid,token,type,email,111.045*DEGREES(
            ACOS(COS(RADIANS(latpoint))*COS(RADIANS(glat))*COS(RADIANS(
            longpoint)-RADIANS(glon))+SIN(RADIANS(latpoint))*SIN(
            RADIANS(glat)))) AS distance_in_km FROM piperpal JOIN (
            SELECT " . $_GET['glat'] . " AS latpoint," . $_GET['glon
            ']' . " AS longpoint) AS p ON 1=1 WHERE service=" . $_GET
            ['service'] . " ORDER BY distance_in_km";
9     } else {
```

```

10     $query = "SELECT DISTINCT id , name , service , location , modified ,
        created , glat , glon , paid , token , type , email , 111.045*DEGREES(
        ACOS(COS(RADIANS(latpoint))*COS(RADIANS(glat))*COS(RADIANS(
        longpoint)-RADIANS(glon))+SIN(RADIANS(latpoint))*SIN(
        RADIANS(glat)))) AS distance_in_km FROM piperpal JOIN (
        SELECT _ . $_GET['glat'] . " AS latpoint , _ . $_GET['glon'
        ' ] . " AS longpoint) AS p ON 1=1 ORDER BY distance_in_km";
11     }
12 }
13 $result = $db->query($query);
14 // print $query;
15 $num_coords = mysqli_num_rows($result);
16 if ($num_coords == 0) {
17     print '<h3>' . $_GET['service'] . '</h3><ul><li><a href="http://
        piperpal.com/cft/?location=' . $_GET['service'] . '&service=' .
        basename($_SERVER['HTTP_REFERER']) . '">New</a></li><li>Upvote</
        li><li>Comment</li><li>Stamp</li></ul></ul>';
18 // header("Location: http:// piperpal.com/");
19 } else {
20     // print "$(function() {\n var locations = [\n";
21     print "var locations = { \"locations\" : [ ' + _ '";
22     $count = 0;
23     // print "<h1>" . $_GET['service'] . "</h1>";
24     while($object = mysqli_fetch_object($result)) {
25         $count++;
26         if ($count == $num_coords) {
27             print '{"id":_ ' . $object->id . ' , "_name":_ ' . $object->name .
                ' , "_service":_ ' . $object->service . ' , "_location":_ ' .
                $object->location . ' , "_modified":_ ' . $object->modified .
                ' , "_created":_ ' . $object->created . ' , "_glat":_ ' .
                $object->glat . ' , "_glon":_ ' . $object->glon . ' , "_paid":_
                ' . $object->paid . ' , "_token":_ ' . $object->token . ' , "_
                type":_ ' . $object->type . ' , "_distance":_ ' . $object->
                distance_in_km . ' , "_email":_ ' . $object->email . ' } , ' ;
28         } else {
29             print '{"id":_ ' . $object->id . ' , "_name":_ ' . $object->name .
                ' , "_service":_ ' . $object->service . ' , "_location":_ ' .
                $object->location . ' , "_modified":_ ' . $object->modified .
                ' , "_created":_ ' . $object->created . ' , "_glat":_ ' .
                $object->glat . ' , "_glon":_ ' . $object->glon . ' , "_paid":_
                ' . $object->paid . ' , "_token":_ ' . $object->token . ' , "_
                type":_ ' . $object->type . ' , "_distance":_ ' . $object->
                distance_in_km . ' , "_email":_ ' . $object->email . ' } , ' ;
30         }
31     }
32     print " ] }';\n";
33 }
34 ?>

```

15.2 Source: <https://api.piperpal.com/location/pull.php>

Listing 15.2: Insert code directly in your document

```

1 <?php
2
3 $fp = fopen("/home/4/p/piperpal/data.csv", "a+");
4 fwrite($fp, "pull" . ";" . $_SERVER['REMOTE_ADDR'] . ";" . $_GET['name']
5     ] . "\n");
6 fclose($fp);
7
8 header("Location: https://piperpal.com/cft/s/?name=" . $_GET['name'] .
9     "&glat=" . $_GET['glat'] . "&location=" . $_GET['location'] . "&
10     glon=" . $_GET['glon'] . "&service=" . $_GET['service'] . "&paid="
11     . $_GET['paid']);
12
13 exit(0);
14
15 /* $db = mysqli_connect("piperpal.mysql.domeneshop.no", "piperpal", "
16     FiFLHHPxyR7PXUg", "piperpal"); */
17
18 /* $query = "INSERT INTO piperpal_(name, location, service, glat, glon)_
19     VALUES_(' " . $_GET['name'] . "', ' " . $_GET['location'] . "', ' " .
20     $_GET['service'] . "', ' " . $_GET['glat'] . "', ' " . $_GET['glon'] . "')
21     ;"; */
22
23 /* $result = $db->query($query); */
24 ?>

```

15.3 Source: <https://api.piperpal.com/location/robot.php>

Listing 15.3: Insert code directly in your document

```

1 <?php
2
3 $fp = fopen("/home/4/p/piperpal/data.csv", "a+");
4 fwrite($fp, "push;" . $_SERVER['REMOTE_ADDR'] . ";" . $_GET['name'] . "
5     \n");
6 fclose($fp);
7
8 header("Location: https://piperpal.com/cft/s/?name=" . $_GET['name'] .
9     "&glat=" . $_GET['glat'] . "&location=" . $_GET['location'] . "&
10     glon=" . $_GET['glon'] . "&service=" . $_GET['service'] . "&paid="
11     . $_GET['paid']);
12
13

```

```

8 #exit(0);
9
10 # echo $_SERVER['REMOTE_ADDR'];
11
12 # if ($_SERVER['REMOTE_ADDR']=="178.255.144.178" || $_SERVER['
    REMOTE_ADDR']=="51.175.144.124") {
13 if ($_SERVER['REMOTE_ADDR']=="178.255.144.178") {
14     $db = mysqli_connect("piperpal.mysql.domeneshop.no","piperpal","
        xxxxxxxx","piperpal");
15     $query = "INSERT INTO piperpal_(name,location ,service ,glat ,glon ,
        paid)_VALUES(' " . $_GET['name'] . " ','_ ' . $_GET['location'] .
        " ','_ ' . $_GET['service'] . " ','_ ' . $_GET['glat'] . " ','_ ' .
        $_GET['glon'] . " ','_ ' . $_GET['paid'] . " ')_WHERE NOT EXISTS(
        SELECT _name FROM _piperpal_ WHERE _name=_ ' . $_GET['name'] . " ' )
        ";
16     // print $query . "\n";
17     $result = $db->query($query);
18 }
19 ?>

```

15.4 Source: <https://api.piperpal.com/location/push.php>

Listing 15.4: Insert code directly in your document

```

1 <?php
2
3 // require_once('/home/4/p/piperpal/stripe-php/init.php');
4 // require_once('/home/4/p/piperpal/YayLocation.php');
5
6 // $yay = new YayLocation($_POST);
7
8 $token = $_POST['stripeToken'];
9
10 // print "INSERT IGNORE INTO piperpal_(name,_location ,_service ,_glat ,_
    glon ,_modified ,_created ,_paid ,_token ,_type ,_email)_VALUES(' " .
    $_POST['name'] . " ','_ ' . $_POST['location'] . " ','_ ' . $_POST['
    service'] . " ','_ ' . $_POST['glat'] . " ','_ ' . $_POST['glon'] . " ','_ '
    . date("Y-m-d_h:i:s",strtotime($_POST['notBefore'])) . " ','_ ' .
    date("Y-m-d_h:i:s",strtotime($_POST['notAfter'])) . " ','_ ' . $_POST
    ['paid'] . " ','_ ' . $_POST['stripeToken'] . " ','_ ' . $_POST['
    stripeTokenType'] . " ','_ ' . $_POST['stripeEmail'] . " ')_ON_
    DUPLICATE_KEY_UPDATE_modified=_NOW();"
11
12 // try {
13

```

```

14 //      if ($yay->get_freedeate($_POST['notBefore'], $_POST['notAfter']))
15 //      == TRUE) {
16 //          $yay->get_checkout("INSERT_IGNORE INTO piperpal_(name,
17 //              location, _service, _glat, _glon, _modified, _created, _paid, _token, _type
18 //              , _email) VALUES ('" . $_POST['name'] . "','" . $_POST['location'] .
19 //              "','" . $_POST['service'] . "','" . $_POST['glat'] . "','" .
20 //              $_POST['glon'] . "','" . date("Y-m-d_h:i:s", strtotime($_POST['
21 //              notBefore']))) . "','" . date("Y-m-d_h:i:s", strtotime($_POST['
22 //              notAfter']))) . "','" . $_POST['paid'] . "','" . $_POST['stripeToken
23 //              ']' . "','" . $_POST['stripeTokenType'] . "','" . $_POST['
24 //              stripeEmail'] . "') ON DUPLICATE KEY UPDATE _modified = NOW());";
25 //          print_r($yay->result);
26 //      }
27 //      $stripe = array(
28 //          "secret_key" => "
29 //          sk_live_51MsrtFagJ7jHvJPRhemuILSINCR\
30 //          M9BNoTPwV9GCNbq8oWmq7xm5SWsGecQUL2xCaC\
31 //          mhjnorBfIbyuSIaDU1hjrP300YpX28hR2",
32 //          "publishable_key" => "
33 //          pk_live_51MsrtFagJ7jHvJPRzksQbNY4573\
34 //          e98c9MPwsnOXymtKYWFUVgh6BbmZV9tPhhTwpp\
35 //          FLDabbfm7Lkj9dEYaJBD9em00xNBVHJzf"
36 //      );
37 //      \Stripe\Stripe::setApiKey($stripe['secret_key']);
38 //      if ($_POST['paid'] > 0) {
39 //          $charge = \Stripe\Charge::create(array("amount" =>
40 //              $_POST['paid'],
41 //              "currency" => "
42 //              usd",
43 //              "source" =>
44 //              $token,
45 //              "description" => $_POST['name']));
46 //      }
47 //  }
48 // }
49 // catch(\Stripe\Error\Card $e) {
50 //     print "The card has been declined. Please try another card.";
51 // }
52 // }
53 // if ($_POST['paid'] > 0) {
54 //     $fp = fopen("/home/4/p/piperpal/data.csv", "a+");
55 //     fwrite($fp, "push;" . time() . ";" . $_SERVER['REMOTE_ADDR'] . ";" .
56 //         $_POST['name'] . ";" . $token . "\n");
57 //     fclose($fp);
58 //     $db = mysqli_connect("piperpal.mysql.domeneshop.no", "piperpal", "
59 //         xxxxxxxx", "piperpal");
60 //     $query = "INSERT_IGNORE INTO piperpal_(name, _location, _service, _
61 //         glat, _glon, _modified, _created, _paid, _token, _type, _email) VALUES
62 //         ('" . $_POST['name'] . "','" . $_POST['location'] . "','" .

```

```

$_POST[ 'service' ] . "','" . $_POST[ 'glat' ] . "','" . $_POST[ 'glon' ] . "','" . date("Y-m-d_h:i:s", strtotime($_POST[ 'notBefore' ])) . "','" . date("Y-m-d_h:i:s", strtotime($_POST[ 'notAfter' ])) . "','" . $_POST[ 'paid' ] . "','" . $_POST[ 'stripeToken' ] . "','" . $_POST[ 'stripeTokenType' ] . "','" . $_POST[ 'stripeEmail' ] . "')_ON_DUPLICATE_KEY_UPDATE_modified=_NOW()";
49 $result = $db->query($query);
50 header("Location: https://www.piperpal.com/?name=" . $_POST[ 'name' ]
    . "&glat=" . $_POST[ 'glat' ] . "&location=" . $_POST[ 'location' ]
    . "&glon=" . $_POST[ 'glon' ] . "&service=" . $_POST[ 'service' ]
    . "&paid=" . $_POST[ 'paid' ]);
51
52 print "<!DOCTYPE_html><html_lang='en'><head><meta_charset='utf-8'
    />";
53 print "<meta_http-equiv='refresh' _content='120;_url=https://www.
    piperpal.com/?query=" . $_POST[ 'name' ] . "&radius=10000&search=
    Go&glat=" . $_POST[ 'glat' ] . "&glon=" . $_POST[ 'glon' ] . ">";
54
55 print "</head>\n";
56 print "<body>\n";
57 print "<h1>piperpal.com</h1>\n";
58 print "&lt;location_name=\"" . $_POST[ 'name' ] . "\"_location=\"" .
    $_POST[ 'location' ] . "\"_service=\"" . $_POST[ 'service' ] . "\"_
    glat=\"" . $_POST[ 'glat' ] . "\"_glon=\"" . $_POST[ 'glon' ] . "\"_
    _notbefore=\"" . date("Y-m-d_h:i:s", strtotime($_POST[ 'notBefore' ])) . "\"_
    _notafter=\"" . date("Y-m-d_h:i:s", strtotime($_POST[ 'notAfter' ])) . "\"_
    _paid=\"" . $_POST[ 'paid' ] . "\"_&gt;";
59 // print "<p>We_will_process_the_payment... </p>\n";
60 print "<p>Redirecting_to_the_Location_search_engine.</p>\n";
61 }
62
63 exit(0);
64
65 ?>

```

Chapter 16

Resolver Interface on World Wide Web – [api.piperpal.com/resolver/](https://api.piperpal.com/resolver/index.php)

16.1 Source: <https://api.piperpal.com/resolver/index.php>

Listing 16.1: Insert code directly in your document

```
1 <?php
2
3 $fp = fopen("/home/4/p/piperpal/rank.csv", "a+");
4 fwrite($fp, "rank:" . $_SERVER['REMOTE_ADDR'] . ";" . $_GET['name'] . "
    ;" . $_GET['location'] . ";" . $_GET['service'] . ";" . $_GET['paid
    ' ] . "\n");
5 fclose($fp);
6 #header("Location: https://piperpal.com/cft/s/?name=" . $_GET['name'] .
    "&glat=" . $_GET['glat'] . "&location=" . $_GET['location'] . "&
    glon=" . $_GET['glon'] . "&service=" . $_GET['service'] . "&paid="
    . $_GET['paid']);
7 #https://api.piperpal.com/resolver/?name=Wikipedia+%28Encyclop%C3%A6dia
    %29&service=Books&location=http://www.wikipedia.org&glat
    =59.93405070&glon=10.74806250&paid=1
8 #exit(0);
9
10 # echo $_SERVER['REMOTE_ADDR'];
11
12 # if ($_SERVER['REMOTE_ADDR']=="178.255.144.178" || $_SERVER['
    REMOTE_ADDR']=="51.175.144.124") {
13 if ($_SERVER['REMOTE_ADDR']=="178.255.144.178") {
```

```

14     $db = mysqli_connect("piperpal.mysql.domeneshop.no","piperpal","
        xxxxxxxx","piperpal");
15     $query = "INSERT INTO piperpal_(name,location ,service ,glat ,glon ,
        paid)_VALUES_(' " . $_GET['name'] . " ','_ " . $_GET['location'] .
        " ','_ " . $_GET['service'] . " ','_ " . $_GET['glat'] . " ','_ " .
        $_GET['glon'] . " ','_ " . $_GET['paid'] . " )_WHERE_NOT_EXISTS_(
        SELECT_name_FROM_piperpal_WHERE_name_=_ " . $_GET['name'] . " ' )
        ;";
16     // print $query . "\n";
17     $result = $db->query($query);
18 }
19 ?>

```

Chapter 17

Market Interface – www.piperpal.com/market/

17.1 Source: <https://www.piperpal.com/market/index.cgi>

Listing 17.1: Insert code directly in your document

```
1  #!/usr/bin/perl
2
3  # Copyright (C) 2018 Ole Aamot Software
4  #
5  # Author: ole@aamotsoftware.com
6  #
7  # Date: 2018-04-06T06:40:00+01
8  #
9  # Field: Incremental, location, sql, perl
10 #
11 # URL: https://www.piperpal.com/market/index.cgi
12
13 use strict;
14 use warnings;
15 use DBI;
16 use CGI qw/:standard/;
17 use CGI::Cookie;
18 use lib '../..';
19 use Piperpal;
20
21 my $c = CGI->new;
22 print "Content-Type: _text/html\n\n";
23 print <<EOF;
24 <!DOCTYPE html>
25 <html lang="en">
```

```

26     <head>
27
28     <!--[if IE]><![endif]-->
29     <meta charset="utf-8">
30
31     <!--[if IE 8]>
32         <link href="/css/common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49
33             .css" media="all" rel="stylesheet" type="text/css" />
34     <![endif]-->
35     <!--[if !(IE 8)]><!-->
36         <link href="/css/common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css
37             " media="all" rel="stylesheet" type="text/css" />
38     <!--<![endif]-->
39
40     <!--[if lt IE 9]>
41         <link href="/css/airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c.
42             css" media="all" rel="stylesheet" type="text/css" />
43     <![endif]-->
44
45     <link href="/css/main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
46         screen" rel="stylesheet" type="text/css" />
47 <!--[if IE 7]>
48     <link href="/css/p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css"
49         media="screen" rel="stylesheet" type="text/css" />
50 <![endif]-->
51 <!--[if IE 6]>
52     <link href="/css/p1_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css"
53         media="screen" rel="stylesheet" type="text/css" />
54 <![endif]-->
55     <script type="text/javascript" src="https://www.piperpal.com/
56         piperpal-autocomplete-tours.php"></script>
57 <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
58     smoothness/jquery-ui.css">
59 <script src="//code.jquery.com/jquery-1.10.2.js"></script>
60 <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
61
62     <link rel="dns-prefetch" href="//maps.googleapis.com">
63     <link rel="dns-prefetch" href="//maps.gstatic.com">
64     <link rel="dns-prefetch" href="//mts0.googleapis.com">
65     <link rel="dns-prefetch" href="//fonts.googleapis.com">
66     <link rel="dns-prefetch" href="//www.piperpal.com">
67     <title>piperpal.com – Location-based Search Engine</title>
68     <link href="my_style_form.css" type="text/css" rel="stylesheet" />
69     <link href='http://fonts.googleapis.com/css?family=Titillium+Web
70         :700' rel='stylesheet' type='text/css'>
71     <link href='http://fonts.googleapis.com/css?family=Titillium+Web'
72         rel='stylesheet' type='text/css'>
73     <meta charset="utf-8" />
74     <script>
75     function price_changed() {
76         var priceWidget = document.getElementById('price');
77         var price = priceWidget.options[priceWidget.selectedIndex].
78             value;

```

```

68     var stripeSubmit = document.getElementsByClassName('stripe-
        button-el')[0];
69     var regularSubmit = document.getElementById('regular-submit');
70     if (price > 0) {
71         stripeSubmit.style.display = 'inline-block';
72         regularSubmit.style.display = 'none';
73     } else {
74         stripeSubmit.style.display = 'none';
75         regularSubmit.style.display = 'inline-block';
76     }
77 }
78
79 function updateGeo() {
80     var glat = document.getElementById("glat");
81     var glon = document.getElementById("glon");
82
83     glat.value = position.coords.latitude;
84     glon.value = position.coords.longitude;
85
86     alert(glat+", "+glon);
87 }
88
89 function getWikipedia() {
90     jQuery(function($) {
91         $.getJSON('http://api.geonames.org/findNearbyWikipediaJSON?
            formatted=true&lat='+ position.coords.latitude + '&lng='+
            position.coords.longitude + '&username=username&style=full&lang=
            en&wikipediaUrl&thumbnailImg', function(json){
92
93             for(var i = 0; i < json.geonames.length; i++)
94             {
95                 $("#wikipedia").prepend('<span_style="font-family:_geneva, _
                    arial, _helvetica, _sans-serif;"><br><br><img_src="wikilogo.
                    gif"><br>' + json.geonames[i].summary + '<br><a_href="http
                    ://'+ json.geonames[i].wikipediaUrl + '"_target="_blank">' +
                    json.geonames[i].wikipediaUrl + '</a><br></span>');
96             }
97             }); });
98 }
99
100 function submit() {
101     // Strip hijacks the form submit, so we need to un-hijack it.
102     var form = document.getElementById('form');
103     form.submit();
104 }
105 </script>
106 <meta http-equiv="Content-Type" content="text/html;_charset=UTF-8"
    >
107 <meta http-equiv="X-UA-Compatible" content="IE=edge" >
108 <link href="//fonts.googleapis.com/css?family=Titillium+Web:300
    italic,400,700,400italic,600italic" rel="stylesheet" type="text
    /css">
109 <link href="//fonts.googleapis.com/css?family=Titillium+Web:300
    italic,400,700,400italic,600italic" rel="stylesheet" type="text

```

```

    /css '>
110
111 <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
    smoothness/jquery-ui.css">
112 <script src="//code.jquery.com/jquery-1.10.2.js"></script>
113 <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
114
115 <script type="text/javascript" src="https://www.piperpal.com/jquery
    -1.9.1.min.js"></script>
116 <script type="text/javascript" src="https://www.piperpal.com/jquery
    .autocomplete.min.js"></script>
117 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete.php"></script>
118 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-names.php"></script>
119 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-services.php"></script>
120 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-locations.php"></script>
121 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-queries.php"></script>
122 <meta name="viewport" content="width=620" />
123 <script>
124 \$(function() {
125 \$( "#datepicker" )\$.datepicker\(\)\;
126 \$( "#simple-search-tourout" )\$.datepicker\(\)\;
127 \}\)\;
128 </script>
129 </head>
130 <body style="background: #ffffff;" onload="document.getElementById
    ('query').focus();">
131 <script type="text/javascript" src="http://maps.google.com/maps/api
    /js?sensor=true"></script>
132 <!--script type="text/javascript" src="http://maps.google.com/maps/
    api/js?sensor=false"--></script-->
133 <script>
134 function success(position) {
135 var s = document.querySelector('#status');
136
137 if (s.className == 'success') {
138 // not sure why we're hitting this twice in FF, I think it's to
139 do with a cached result coming back
140 return;
141 }
142
143 s.innerHTML = '<input_type=hidden_class="input_form_custom" _
    name=glat_value=' + position.coords.latitude + ' _><input _
    type=hidden_class="input_form_custom" _name=glon_value=' +
    position.coords.longitude + ' _>';
144 s.className = 'success';
145
146 var q = document.querySelector('#status_publisher');
147 if (q.className == 'success') {

```

```

148         // not sure why we're_hitting_this_twice_in_FF, I think it's to
149         do with a cached result coming back
150     return;
151 }
152
153 q.innerHTML = '<img_src="img/Latitude_Icon.png" _title="Latitude
154   of_Location-aware_Content_Tag" _class="icon_form" _height
155   ="36" _width="36"><input_type=text_class="input_form_custom"
156   _name=glat_size=16_value=' + position.coords.latitude + '
157   /><br/><img_src="img/Longitude_Icon.png" _title="Longitude
158   of_Location-aware_Content_Tag" _class="icon_form" _height
159   ="36" _width="36"><input_type=text_class="input_form_custom"
160   _name=glon_size=16_value=' + position.coords.longitude + '
161   />';
162
163 // '<input_type=text_name=glat_size=16_value=' + position.
164   coords.latitude + ' /><input_type=text_name=glon_size=16_
165   value=' + position.coords.longitude + ' />';
166 q.className = 'success';
167
168 var r = document.querySelector('#status_lns');
169
170 if (r.className === 'success') {
171     // not sure why we're_hitting_this_twice_in_FF, I think it's to
172     do with a cached result coming back
173     return;
174 }
175
176 r.innerHTML = '<img_src="img/Latitude_Icon.png" _title="
177   Latitude_of_Location-aware_Content_Tag" _class="icon_form"
178   _height="36" _width="36"><input_type=text_class="
179   input_form_custom" _name=glat_size=16_value=' + position.
180   coords.latitude + ' /><br/><img_src="img/Longitude_Icon.
181   png" _title="Longitude_of_Location-aware_Content_Tag" _class
182   ="icon_form" _height="36" _width="36"><input_type=text_class
183   ="input_form_custom" _name=glon_size=16_value=' + position.
184   coords.longitude + ' />';
185
186 // '<input_type=hidden_class="input_form_custom" _name=glat_value=' +
187   position.coords.latitude + ' /><input_type=hidden_class="
188   input_form_custom" _name=glon_value=' + position.coords.longitude +
189   ' />';
190 r.className = 'success';
191
192 var mapcanvas = document.createElement('div');
193 mapcanvas.id = 'mapcanvas';
194 mapcanvas.style.height = '400px';
195 mapcanvas.style.width = '640px';
196
197 document.querySelector('article').appendChild(mapcanvas);
198
199 var latlng = new google.maps.LatLng(position.coords.latitude ,
200   position.coords.longitude);
201 var myOptions = {

```

```

178     zoom: 15,
179     center: latlng,
180     mapTypeControl: false,
181     navigationControlOptions: { style: google.maps.
        NavigationControlStyle.SMALL},
182     mapTypeId: google.maps.MapTypeId.ROADMAP
183     };
184     var map = new google.maps.Map(document.getElementById("mapcanvas"),
        myOptions);
185
186     var marker = new google.maps.Marker({
187         position: latlng,
188         map: map,
189         title: "You_are_here!_(at_least_within_a_+position.
            coords.accuracy+"_meter_radius)"
190     });
191
192     var locations = [
193         ['Banja_Luka', 44.7666666999999990000, 17.183333299999960000,
            4],
194         ['Tuzla', 44.5328410000000000000, 18.670499999999947000, 5],
195         ['Zenica', 44.2034392000000000000, 17.907743200000027000, 3],
196         ['Sarajevo', 43.8500000000000000000, 18.250000000000000000, 2],
197         ['Mostar', 43.3333333000000000000, 17.799999999999954000, 1]
198     ];
199
200     var infowindow = new google.maps.InfoWindow();
201
202     var marker, i;
203     for (i = 0; i < locations.length; i++) {
204         marker = new google.maps.Marker({
205             position: new google.maps.LatLng(locations[i][1], locations[i]
                ][2]),
206             map: map
207         });
208
209         google.maps.event.addListener(marker, 'click', (function (marker, i) {
210             return function () {
211                 infowindow.setContent(locations[i][0]);
212                 infowindow.open(map, marker);
213             }
214         })(marker, i));
215     }
216 }
217
218 function error(msg) {
219     // var s = document.querySelector('#status');
220     // s.innerHTML = typeof msg == 'string' ? msg : "failed";
221     // s.className = 'fail';
222
223     // console.log(arguments);
224 }
225
226 if (navigator.geolocation) {

```

```

227     navigator.geolocation.getCurrentPosition(success, error);
228 } else {
229     error('not_supported');
230 }
231
232 </script>
233
234     <center><table><tr><td valign='top' width=600><a href="https://www.
        piperpal.com/"></a></td></tr></table>
235
236     <div class="background_form">
237 EOF
238
239 print "<table>";
240 print "<tr><td valign='top' width=600>";
241 print "<center><h3>Discover_the_world_around_you</h3></center>";
242 print "</td></tr></table>";
243 &Piperpal::select_location();
244 print "<br/>";
245 print "<p>Hint:_You_could_markup_with_&lt;location>_tag_in_<a href='
    https://www.w3.org/wiki/HTML/next#3Clocation.3E_element_.28like_.
    .29_for_expressing_geo_information.2C_eg_with_attributes_lat.2
    C_long.2C_altitude'>HTML.next</a><br/>";
246 print "Proposal:_<a href='\"https://www.aamotsoftware.com/location.html
    \">&lt;https://www.aamotsoftware.com/location.html</a><br/>";
247 print "JSON_in_HTML5:_<a href='\"https://www.piperpal.com/google.html\">
    https://www.piperpal.com/google.html</a></p>";
248 print "<p><a href='\"https://www.stripe.com/\"><img alt='Powered_by_
    stripe' _src='\"/powered_by_stripe.png'\"></a>&nbsp;<a href='\"https
    ://play.google.com/store/apps/details?id=com.piperpal.api.android&
    pcampaignid=MKT-Other-global-all-co-prtnr-py-PartBadge-Mar2515-1\"><
    img alt='Get_it_on_Google_Play' _src='\"/google-piperpal.png'\"></a
    ></p>";
249 print "<p>Copyright_&copy;_2015-2020_<location_name='Aamot_Software' _
    href='https://www.aamotsoftware.com/' _lat='37.4219999' _lon
    ='-122.0862462' _service='Electronics'>Aamot_Software</location><br_
    /><location_name='Piperpal' _href='https://www.piperpal.com/' _lat
    ='59.94215220' _lon='10.71697530' _service='Crawler'>Oslo,_Norway</
    location><_<location_name='Piperpal' _href='https://www.piperpal.
    com/' _lat='37.879015' _lon='-122.262425' _service='Crawler'>Berkeley,
    _California,_USA</location></p>";
250 print "</td></tr></table>\n";
251 print "</body>\n</html>\n";

```

Chapter 18

Buying Interface – www.piperpal.com/google.html

18.1 Source: <https://www.piperpal.com/google.html>

Listing 18.1: Insert code directly in your document

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <meta charset="utf-8">
5     <meta name="viewport" content="user-scalable=no, _initial-scale=1.0,
      _maximum-scale=1.0, _width=device-width">
6     <!--[if IE 8]>
7       <link href="/css/common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49.
        css" media="all" rel="stylesheet" type="text/css" />
8     <![endif]-->
9     <!--[if !(IE 8)]><!-->
10    <link href="/css/common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css"
      media="all" rel="stylesheet" type="text/css" />
11    <!--<![endif]-->
12
13    <!--[if lt IE 9]>
14      <link href="/css/airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c
        .css" media="all" rel="stylesheet" type="text/css" />
15      <![endif]-->
16
17    <link href="/css/main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
      screen" rel="stylesheet" type="text/css" />
18    <!--[if IE 7]>
19      <link href="/css/p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css"
        media="screen" rel="stylesheet" type="text/css" />
```

```

20     <![endif]—>
21 <!--[if IE 6]>
22     <link href="/css/p1_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css"
23         media="screen" rel="stylesheet" type="text/css" />
24     <![endif]—>
25 <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
26     smoothness/jquery-ui.css">
27 <link rel="dns-prefetch" href="//maps.googleapis.com">
28 <link rel="dns-prefetch" href="//maps.gstatic.com">
29 <link rel="dns-prefetch" href="//mts0.googleapis.com">
30 <link rel="dns-prefetch" href="//fonts.googleapis.com">
31 <link rel="dns-prefetch" href="//www.piperpal.com">
32 <title>piperpal.com – Location-based Search Engine</title>
33 <link href="my_style_form.css" type="text/css" rel="stylesheet" />
34 <link href='http://fonts.googleapis.com/css?family=Titillium+Web
35 :700' rel='stylesheet' type='text/css'>
36 <link href='http://fonts.googleapis.com/css?family=Titillium+Web'
37     rel='stylesheet' type='text/css'>
38 <script type='text/javascript' src='https://cdnjs.cloudflare.com/
39     ajax/libs/jquery/3.3.1/jquery.min.js'></script>
40 </head>
41 <!-- Styles -->
42 <style>
43     #name label{
44     display: inline-block;
45     width: 100px;
46     text-align: right;
47     }
48     #name_submit{
49     padding-left: 100px;
50     }
51     #name div{
52     margin-top: 1em;
53     }
54     textarea{
55     vertical-align: top;
56     height: 5em;
57     }
58
59     .error{
60     display: none;
61     margin-left: 10px;
62     }
63
64     .error_show{
65     color: red;
66     margin-left: 10px;
67     }
68
69     input.invalid, textarea.invalid{
70     border: 2px solid red;
71     }
72
73     input.valid, textarea.valid{

```

```

69     border: 2px solid green;
70   }
71   input {
72     padding: 10px;
73     font: 20px Arial;
74     width: 70%;
75   }
76 </style>
77 <body>
78   <!-- JavaScript Code -->
79   <script>
80     var currencyInput = document.querySelector('input[ type="currency
81       " ]')
82
83     var currency = 'USD' // https://www.currency-iso.org/dam/
84       downloads/lists/list_one.xml
85
86     // format initial value
87     onBlur({ target: currencyInput })
88
89     // bind event listeners
90     currencyInput.addEventListener('focus', onFocus)
91     currencyInput.addEventListener('blur', onBlur)
92
93     function localStringToNumber( s ){
94       return Number( String( s ).replace(/^[^0-9.-]+/g, ""))
95     }
96
97     function onFocus(e){
98       var value = e.target.value;
99       e.target.value = value ? localStringToNumber(value) : ''
100     }
101
102     function onBlur(e){
103       var value = e.target.value
104
105       var options = {
106         maximumFractionDigits : 2,
107         currency               : currency,
108         style                  : "currency",
109         currencyDisplay        : "symbol"
110       }
111
112       e.target.value = (value || value === 0)
113         ? localStringToNumber(value).toLocaleString(undefined,
114           options)
115         : ''
116     }
117
118     $(document).ready(function() {
119       <!-- Real-time Validation -->
120       <!-- Name can't be blank -->
121       $('#name').on('input', function() {
122         var input=$(this);

```

```

120     var is_name=input.val();
121     if (is_name){input.removeClass("invalid").addClass("valid");}
122     else{input.removeClass("valid").addClass("invalid");}
123     });
124
125     <!--Email must be an email -->
126     $('#email').on('input', function() {
127     var input=$(this);
128     var re = /^[a-zA-Z0-9.!#$%&'*/+=?^_{'|}~-]+@[a-zA-Z0-9-]+(?:\.[a-
129     zA-Z0-9-]+)*$/;
130     var is_email=re.test(input.val());
131     if (is_email){input.removeClass("invalid").addClass("valid");}
132     else{input.removeClass("valid").addClass("invalid");}
133     });
134
135     <!--Website must be a website -->
136     $('#location').on('input', function() {
137     var input=$(this);
138     if (input.val().substring(0,4)=='www.'){input.val('http://www.'+
139     input.val().substring(4));}
140     var re = /(http|ftp|https):\/\/[\w-]+(\.[\w-]+)+([\w.,@^=%%&
141     ;\/~+#!-]*[\w@?^=%%&;\/~+#!-])?/;
142     var is_url=re.test(input.val());
143     if (is_url){input.removeClass("invalid").addClass("valid");}
144     else{input.removeClass("valid").addClass("invalid");}
145     });
146
147     <!--Message can't be blank-->
148     $('#service').keyup(function(event) {
149     var input=$(this);
150     var message=$(this).val();
151     console.log(message);
152     if (message){input.removeClass("invalid").addClass("valid");}
153     else{input.removeClass("valid").addClass("invalid");}
154     });
155
156     <!-- After Form Submitted Validation-->
157     $('#submit_button').click(function(event){
158     var form_data=$('#name').serializeArray();
159     var error_free=true;
160     for (var input in form_data){
161     var element=$('#name_'+form_data[input]['name']);
162     var valid=element.hasClass("valid");
163     var error_element=$("span", element.parent());
164     if (!valid){error_element.removeClass("error").addClass("
165     error_show"); error_free=false;}
166     else{error_element.removeClass("error_show").addClass("error");}
167     }
168     if (!error_free){
169     event.preventDefault();
170     }
171     else{
172     alert('No_errors:_Form_will_be_submitted');
173     }

```

```

170     });
171     });
172 </script>
173 <h1><a href="https://www.piperpal.com/">Piperpal</a></h1>
174 <form id="form" method="GET" action="https://api.piperpal.com/
    location/push.php">
175     <table>
176     <tr>
177         <td>Text: <input id="name" type="text" name="name" placeholder="
            Example:_FriendliestCoffeeShop" size="24" /><span class="
            error">This field is required</span></td>
178     </tr>
179     <tr>
180         <td>Email: <input id="email" type="text" name="email" placeholder
            ="your.name@gmail.com" /><span class="error">This field is
            required </span></td>
181     </tr>
182     <tr>
183         <td>Service: <select id="service" name="service"><option value="
            Restaurant">Restaurant</option><option value="Bar">Bar</
            option><option value="Concert">Concert</option><option value=
            "Film">Film</option><option value="Books">Books</option><
            option value="Health">Health</option><option value="Clothes">
            Clothes</option><option value="Food">Food</option><option
            value="Music">Music</option><option value="Electronics">
            Electronics</option><option value="Transport">Transport</
            option><option value="Rental">Rental</option></select></td>
184     </tr>
185     <tr>
186         <td>Location: <input type="text" name="location" placeholder="
            https://yourwebsite.com/" /></td>
187     </tr>
188     <!--
189     <tr>
190         <td>Latitude: <input type="text" name="glat" value="37.4375596"
            ></td>
191     </tr>
192     <tr>
193         <td>Longitude: <input type="text" name="glon" value="
            -122.11922789999998"></td>
194     </tr>
195     <tr>
196         <td>Payment ( ): <input type="currency" name="paid" value="42"
            placeholder="Type_a_price"></td>
197     </tr>
198     <tr>
199         <td><input type="submit" name="Submit" value="Submit" /></td>
200     </tr>
201     </table>
202 </form>
203 <h2>Piperpal / Were / Here / After</h2>
204 <p>Peter Norvig came up with <a href="https://api.piperpal.com/
    location/push.php?name=FriendliestCoffeeShop&service=Search&

```

location=https://research.google.com/&glat=37.4375596&glon=-122.11922789999998&paid=43">&FriendliestCoffeeShop at
 &GoogleVisitorCenter:%Search in Palo Alto, California in 2015.</p>

205 <p>Ole thought that the &FriendliestCoffeeShop is at &Kaffebrenneriet:%Food in Oslo, Norway in 2019.</p>

206 <p>Moddi played a solo concert at the &CoziestVinylShop and signed his brand new record on our request at &PlatebutikkenBigDipper:%Music on September 11, 2019.

207 <p>We thought that the &ClassyItalianRestaurant is &Tekehtopa:%Restaurant in Oslo, Norway on September 11, 2019.</p>

208 <p>We ate at &TheBestLunchPlace on July 4th, 2020 which we thought was as good as &CafediRoma:%Restaurant in Sofienberggata 6, Oslo at 12:00.</p>

209 <p>We got similar &WarmNordicJackets from &StormbergOslo:%Clothes which we thought was better than <a href="https://api.piperpal.com/location/push.php?name=

```

HellyHansen&service=Clothes&location=http://www.hellyhansen.com
/&paid=42">&HellyHansen</a>:<a href="https://piperpal.com/
service/7/service.php">%Clothes</a> for shorter tours in <a
href="https://piperpal.com/Frognerparken">&Frognerparken</a>:<a
href="https://piperpal.com/service/4/service.php">%Film</a> at
20:00 on January, 4th 2022.</p>
210 <script type="text/javascript" src="https://api.piperpal.com/
location/?service=Search">
211 </script>
212 <script
213     src="https://code.jquery.com/jquery-3.3.1.js"
214     integrity="sha256-2Kok7MbOyxpgUVvAk/HJ2jigOSYS2auK4Pfbzm7uH60="
215     crossorigin="anonymous">
216     var newLink = "https://api.piperpal.com/location/?service=Search"
217     ;
218     $('script').each(function() {
219         var link = $(this).attr('src');
220     })
221 </script>
222 <script language="JavaScript">
223     var obj = JSON.parse(locations);
224     for (i=0; i < obj.locations.length; i++) {
225         document.write("<p><h2><a href='https://piperpal.com/' +
226             obj.locations[i].name + ">" + obj.locations[i].name +
227             "</a></h2><p>" + obj.locations[i].distance + " km away
228             </p><p><b><a href='" + obj.locations[i].location + ">"
229             + obj.locations[i].location + "</a></b></p><p><i>" +
230             obj.locations[i].service + "_" + "</i></p><n");
231     }
232 </script>
233 </td>
234 </tr>
235 </table>
236 </body>
237 </html>

```

18.2 Source: <https://www.piperpal.com/cft/index.php>

Listing 18.2: Insert code directly in your document

```

1 <html>
2   <head>
3     <title>Piperpal</title>
4     <!--[if IE]><![endif]-->
5     <meta charset="iso-8859-1">

```

```

6      <meta name="viewport" content="user-scalable=no, _initial-scale=1.0,
7          _maximum-scale=1.0, _width=device-width">
8      <!--[if IE 8]>
9          <link href="common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49.css"
10              media="all" rel="stylesheet" type="text/css" />
11      <![endif]-->
12      <!--[if !(IE 8)]><!-->
13          <link href="common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css"
14              media="all" rel="stylesheet" type="text/css" />
15      <!--<![endif]-->
16      <!--[if lt IE 9]>
17          <link href="airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c.css"
18              media="all" rel="stylesheet" type="text/css" />
19      <![endif]-->
20      <link href="main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
21          screen" rel="stylesheet" type="text/css" />
22      <!--[if IE 7]>
23          <link href="p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css" media="
24              screen" rel="stylesheet" type="text/css" />
25      <![endif]-->
26      <!--[if IE 6]>
27          <link href="p1_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css" media="
28              screen" rel="stylesheet" type="text/css" />
29      <![endif]-->
30      <!-- FIXME
31      <script type="text/javascript" src="http://www.piperpal.com/piperpal-
32          autocomplete-tours.php"></script>
33      -->
34      <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
35          smoothness/jquery-ui.css">
36      <script src="//code.jquery.com/jquery-1.10.2.js"></script>
37      <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
38      <link rel="stylesheet" href="/resources/demos/style.css">
39      <script>
40      $(function() {
41          $( "#simple-search-tourin" ).datepicker();
42          $( "#simple-search-tourout" ).datepicker();
43      });
44      </script>
45      </head>
46      <body>
47          
48          <form id="searchbar-form" action="s">
49          <label for="simple-search-location" class="screen-reader-only">
50              What do you describe?
51          </label>
52          <input type="text"
53              placeholder="Location_Tag?"
54              autocomplete="on"
55              name="location"
56              id="simple-search-location"
57              class="input-large_js-search-location"
58              value="<?php_echo_$_GET[ 'location ' ];_?>"
59          <label for="simple-search-location" class="screen-reader-only">

```

```

51     What do you provide?
52 </label>
53 <input type="text"
54     placeholder="Location_Service?"
55     autocomplete="on"
56     name="service"
57     id="simple-search-service"
58     class="input-largeajs-search-service"
59     value="<?php_echo$_GET['service'];_?>">
60 <div class="row_row-condensed_space-top-2_space-2">
61     <div class="col-sm-6">
62         <label for="simple-search-tourin" class="screen-reader-only">
63             Tour in
64         </label>
65         <input
66             id="simple-search-tourin"
67             type="text"
68             name="notBefore"
69             class="input-large_tourin_js-search-tourin"
70             placeholder="Not_Before">
71     </div>
72     <div class="col-sm-6">
73         <label for="simple-search-tourout" class="screen-reader-only">
74             Tour out
75         </label>
76         <input
77             id="simple-search-tourout"
78             type="text"
79             name="notAfter"
80             class="input-large_tourout_js-search-tourout"
81             placeholder="Not_After">
82     </div>
83 </div>
84
85 <div class="select_select-block_space-2">
86     <label for="simple-search-price" class="screen-reader-only">
87         Price
88     </label>
89     <select id="simple-search-price" name="paid" class="js-search-
90         price">
91         <option value="1">1</option>
92         <option value="2">2</option>
93         <option value="3">3</option>
94         <option value="4">4</option>
95         <option value="5">5</option>
96         <option value="6">6</option>
97         <option value="7">7</option>
98         <option value="8">8</option>
99         <option value="9">9</option>
100        <option value="10">10</option>
101    </select>
102 </div>
103 <button type="submit" class="btn_btn-primary_btn-large_btn-block">
    Search

```

```

104     </button>
105     </form>
106     </body>
107 </html>

```

18.3 Source: <https://www.piperpal.com/cft/s/index.php>

Listing 18.3: Insert code directly in your document

```

1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="utf-8">
5     <meta name="viewport" content="user-scalable=no,_initial-scale=1.0,
      _maximum-scale=1.0,_width=device-width">
6     <title>piperpal.com – Location-based Search Engine</title>
7     <!--[if IE]><![endif]-->
8     <!--[if IE 8]>
9       <link href="../common_o2.1_ie8-91981ea8f3932c01fab677a25d869e49.
        css" media="all" rel="stylesheet" type="text/css" />
10    <![endif]-->
11    <!--[if !(IE 8)]><!-->
12      <link href="../common_o2.1-858f47868a8d0e12dfa7eb60fa84fb17.css"
        media="all" rel="stylesheet" type="text/css" />
13    <!--<![endif]-->
14
15    <!--[if lt IE 9]>
16      <link href="../airglyphs-ie8-9f053f042e0a4f621cbc0cd75a0a520c.css
        " media="all" rel="stylesheet" type="text/css" />
17    <![endif]-->
18
19    <link href="../main-f3fcc4027aaa2c83f08a1d51ae189e3b.css" media="
      screen" rel="stylesheet" type="text/css" />
20  <!--[if IE 7]>
21    <link href="../p1_ie_7-0ab7be89d3999d751ac0e89c44a0ab50.css" media=
      "screen" rel="stylesheet" type="text/css" />
22  <![endif]-->
23  <!--[if IE 6]>
24    <link href="../p1_ie_6-7d6a1fd8fe9fdf1ce357f6b864c83979.css" media=
      "screen" rel="stylesheet" type="text/css" />
25  <![endif]-->
26  <meta http-equiv="Content-Type" content="text/html;_charset=utf-8"
    >
27  <meta http-equiv="X-UA-Compatible" content="IE=edge" >
28  <link href='//fonts.googleapis.com/css?family=Titillium+Web:300
      italic,400,700,400italic,600italic' rel='stylesheet' type='text

```

```

    /css '>
29 <link href="//fonts.googleapis.com/css?family=Titillium+Web:300
    italic,400,700,400italic,600italic" rel="stylesheet" type="text
    /css '>
30 <script type="text/javascript" src="https://www.piperpal.com/jquery
    -1.9.1.min.js"></script>
31 <script type="text/javascript" src="https://www.piperpal.com/jquery
    .autocomplete.min.js"></script>
32 <!-- FIXME
33 <script type="text/javascript" src="https://www.piperpal.com/
    yaylocation-autocomplete.php"></script>
34 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-names.php"></script>
35 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-services.php"></script>
36 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-locations.php"></script>
37 <script type="text/javascript" src="https://www.piperpal.com/
    piperpal-autocomplete-queries.php"></script>
38 —>
39 <meta name="viewport" content="width=620" />
40 <link rel="stylesheet" href="//code.jquery.com/ui/1.11.4/themes/
    smoothness/jquery-ui.css">
41 <script src="//code.jquery.com/jquery-1.10.2.js"></script>
42 <script src="//code.jquery.com/ui/1.11.4/jquery-ui.js"></script>
43 <link rel="stylesheet" href="/resources/demos/style.css">
44 <script>
45 $(function() {
46     $( "#simple-search-tourin" ).datepicker();
47     $( "#simple-search-tourout" ).datepicker();
48 });
49
50 function success(position) {
51     var s = document.querySelector( '#status' );
52
53     if (s.className === 'success') {
54         // not sure why we're hitting this twice in FF, I think it's to
55         // do with a cached result coming back
56         return;
57
58         s.innerHTML = '<input type=hidden class="input_form_custom" _
59             name=glat_value=' + position.coords.latitude + ' _><input _
60             type=hidden class="input_form_custom" _name=glon_value=' +
61             position.coords.longitude + ' _>';
62     }
63     s.className = 'success';
64
65     var q = document.querySelector( '#status_publisher' );
66
67     if (q.className === 'success') {
68         // not sure why we're hitting this twice in FF, I think it's to
69         // do with a cached result coming back
70         return;
71     }

```

```

67
68     q.innerHTML = '<img_src="img/Latitude_Icon.png"_title="Latitude
    _of_Location-aware_Content_Tag"_class="icon_form"_height
    ="36"_width="36"><input_type=text_class="input_form_custom"
    _name=glat_size=16_value=' + position.coords.latitude + '
    /><br/><img_src="img/Longitude_Icon.png"_title="Longitude_
    of_Location-aware_Content_Tag"_class="icon_form"_height
    ="36"_width="36"><input_type=text_class="input_form_custom"
    _name=glon_size=16_value=' + position.coords.longitude + '
    />';

69
70     // '<input_type=text_name=glat_size=16_value=' + position.
    coords.latitude + ' /><input_type=text_name=glon_size=16
    value=' + position.coords.longitude + ' />';
71     q.className = 'success';
72
73     var r = document.querySelector('#status_lns');
74
75     if (r.className == 'success') {
76         // not sure why we're_hitting_this_twice_in_FF, I think it's to
            do with a cached result coming back
77         return;
78     }
79
80     r.innerHTML = '<img_src="img/Latitude_Icon.png"_title="
    Latitude_of_Location-aware_Content_Tag"_class="icon_form"_
    height="36"_width="36"><input_type=text_class="
    input_form_custom"_name=glat_size=16_value=' + position.
    coords.latitude + ' /><br/><img_src="img/Longitude_Icon.
    png"_title="Longitude_of_Location-aware_Content_Tag"_class
    ="icon_form"_height="36"_width="36"><input_type=text_class
    ="input_form_custom"_name=glon_size=16_value=' + position.
    coords.longitude + ' />';

81
82     // '<input_type=hidden_class="input_form_custom"_name=glat_value=' +
    position.coords.latitude + ' /><input_type=hidden_class="
    input_form_custom"_name=glon_value=' + position.coords.longitude +
    ' />';
83     r.className = 'success';
84
85     var mapcanvas = document.createElement('div');
86     mapcanvas.id = 'mapcanvas';
87     mapcanvas.style.height = '400px';
88     mapcanvas.style.width = '640px';
89
90     document.querySelector('article').appendChild(mapcanvas);
91
92     var latLng = new google.maps.LatLng(position.coords.latitude ,
    position.coords.longitude);
93     var myOptions = {
94         zoom: 15,
95         center: latLng ,
96         mapTypeControl: false ,

```

```

97     navigationControlOptions: {style: google.maps.
          NavigationControlStyle.SMALL},
98     mapTypeId: google.maps.MapTypeId.ROADMAP
99   };
100   var map = new google.maps.Map(document.getElementById("mapcanvas"),
        myOptions);
101
102   var marker = new google.maps.Marker({
103     position: latlng,
104     map: map,
105     title: "You_are_here!_(at_least_within_a_" + position.
        coords.accuracy + "_meter_radius)"
106   });
107
108   var locations = [
109     ['Banja_Luka', 44.766666699999990000, 17.183333299999960000,
        4],
110     ['Tuzla', 44.532841000000000000, 18.670499999999947000, 5],
111     ['Zenica', 44.203439200000000000, 17.9077432000000027000, 3],
112     ['Sarajevo', 43.850000000000000000, 18.250000000000000000, 2],
113     ['Mostar', 43.333333300000000000, 17.799999999999954000, 1]
114   ];
115
116   var infowindow = new google.maps.InfoWindow();
117
118   var marker, i;
119   for (i = 0; i < locations.length; i++) {
120     marker = new google.maps.Marker({
121       position: new google.maps.LatLng(locations[i][1], locations[i]
        ][2]),
122       map: map
123     });
124
125     google.maps.event.addListener(marker, 'click', (function (marker, i) {
126       return function () {
127         infowindow.setContent(locations[i][0]);
128         infowindow.open(map, marker);
129       }
130     })(marker, i));
131   }
132 }
133
134 function error(msg) {
135   // var s = document.querySelector('#status');
136   // s.innerHTML = typeof msg == 'string' ? msg : "failed";
137   // s.className = 'fail';
138
139   // console.log(arguments);
140 }
141
142 if (navigator.geolocation) {
143   navigator.geolocation.getCurrentPosition(success, error);
144 } else {
145   error('not_supported');

```

```

146 }
147
148 function updateGeo() {
149     var glat = document.getElementById("glat");
150     var glon = document.getElementById("glon");
151
152     glat.value = position.coords.latitude;
153     glon.value = position.coords.longitude;
154
155     alert(glat+", "+glon);
156 }
157 </script>
158
159 </head>
160 <body style="background: #ffffff">
161 <center>
162 <a href="https://www.piperpal.com/"></a>
163 <script type="text/javascript" src="http://maps.google.com/maps/api
    /js?sensor=true"></script>
164 <script>
165 function success(position) {
166     var s = document.querySelector('#status');
167
168     if (s.className == 'success') {
169         // not sure why we're hitting this twice in FF, I think it's to
170         // do with a cached result coming back
171         return;
172     }
173
174     s.innerHTML = '<input type=hidden class="input_form_custom"
175         name=glat value=' + position.coords.latitude + ' /><input
176         type=hidden class="input_form_custom" name=glon value=' +
177         position.coords.longitude + ' />';
178     s.className = 'success';
179
180     var q = document.querySelector('#status_publisher');
181
182     if (q.className == 'success') {
183         // not sure why we're hitting this twice in FF, I think it's to
184         // do with a cached result coming back
185         return;
186     }
187
188     q.innerHTML = '<div class="service_form_input_form"><input type=text class="input_form_custom" name=
191         glat size=16 value=' + position.coords.latitude + ' /></div>
192     <div class="service_form_input_form"><
194         input type=text class="input_form_custom" name=glon size=16
195         value=' + position.coords.longitude + ' /></div>';

```

```

185         // '<input_type=text_name=glat_size=16_value=' + position.
            coords.latitude + ' /><input_type=text_name=glon_size=16_
            value=' + position.coords.longitude + ' />';
186     q.className = 'success';
187
188     var mapcanvas = document.createElement('div');
189     mapcanvas.id = 'mapcanvas';
190     mapcanvas.style.height = '400px';
191     mapcanvas.style.width = '640px';
192
193     document.querySelector('article').appendChild(mapcanvas);
194
195     var latlng = new google.maps.LatLng(position.coords.latitude,
        position.coords.longitude);
196     var myOptions = {
197         zoom: 15,
198         center: latlng,
199         mapTypeId: google.maps.MapTypeId.ROADMAP,
200         navigationControlOptions: {style: google.maps.
            NavigationControlStyle.SMALL},
201         mapTypeId: google.maps.MapTypeId.ROADMAP
202     };
203     var map = new google.maps.Map(document.getElementById("mapcanvas"),
        myOptions);
204
205     var marker = new google.maps.Marker({
206         position: latlng,
207         map: map,
208         title: "You_are_here!_(at_least_within_a_" + position.
            coords.accuracy + "_meter_radius)"
209     });
210
211     var locations = [
212         ['Banja_Luka', 44.766666699999990000, 17.183333299999960000,
            4],
213         ['Tuzla', 44.532841000000000000, 18.670499999999947000, 5],
214         ['Zenica', 44.203439200000000000, 17.907743200000027000, 3],
215         ['Sarajevo', 43.850000000000000000, 18.250000000000000000, 2],
216         ['Mostar', 43.333333300000000000, 17.799999999999954000, 1]
217     ];
218
219     var infowindow = new google.maps.InfoWindow();
220
221     var marker, i;
222     for (i = 0; i < locations.length; i++) {
223         marker = new google.maps.Marker({
224             position: new google.maps.LatLng(locations[i][1], locations[i]
                ][2]),
225             map: map
226         });
227
228         google.maps.event.addListener(marker, 'click', (function (marker, i) {
229             return function () {
230                 infowindow.setContent(locations[i][0]);

```

```

231     infowindow.open(map, marker);
232     }
233         })(marker, i));
234     }
235     }
236
237     function error(msg) {
238         var s = document.querySelector('#status');
239         s.innerHTML = typeof msg == 'string' ? msg : "failed";
240         s.className = 'fail';
241
242         // console.log(arguments);
243     }
244
245     if (navigator.geolocation) {
246         navigator.geolocation.getCurrentPosition(success, error);
247     } else {
248         error('not_supported');
249     }
250
251 </script>
252     <form onsubmit='updateGeo()' id="searchbar-form" method='POST'
253         action='https://api.piperpal.com/location/push.php'>
254     <input type='hidden' name='c' value='INSERT' />
255     <table cellpadding=5>
256     <tr><td>Text:<input id="simple-search-location" class="input-large_
257         js-search-location" size=24 type=text name=name class=biginput
258         id=name value='<?php_echo_$GET['name'];_?>' placeholder='
259         Example:_FriendliestCoffeeShop' /></td></tr>
260     <tr><td>Location:<input id="simple-search-location" class="input-
261         large_js-search-location" size=60 type=text name=location class
262         =biginput id=location value='<?php_if_(isset($_GET['location'
263         ]))_$_echo_$GET['location'];_}_else_$_echo_'https://www.
264         piperpal.com/';_echo_$GET['service'];_echo_/_';_echo_$GET['
265         name'];_}_?>' /></td></tr>
266     <tr><td>Service:<input id="simple-search-location" class="input-
267         large_js-search-location" size=24 type=text name=service class=
268         biginput id=service value='<?php_echo_$GET['service'];_?>'
269         placeholder='Service' /></td></tr>
270     <tr><td>Not Before:<input id="simple-search-tourin" class="input-
271         large_js-search-location" size=24 type=text name=notBefore class
272         =biginput id=notBefore value='<?php_echo_$GET['notBefore'];_?>'
273         placeholder='Not_Before' /></td></tr>
274     <tr><td>Not After:<input id="simple-search-tourout" class="input-
275         large_js-search-location" size=24 type=text name=notAfter class=
276         biginput id=notAfter value='<?php_echo_$GET['notAfter'];_?>'
277         placeholder='Not_After' /></td></tr>
278     <input id="simple-search-location" class="input-large_js-search-
279         location" size=24 type=hidden name=paid class=biginput id=paid
280         value='<?php_echo_$GET['paid'];_?>' placeholder='Price' />
281     <div id='status'>
282     <input id='glat' type='hidden' name='glat' placeholder='Latitude'
283         size=32 value='37.42242580' />

```

```

263     <input id='glon' type='hidden' name='glon' placeholder='Longitude'
264           size=32 value='-122.08755550' />
265   <tr><td><form onsubmit='updateGeo()' action='https://api.piperpal.
266         com/location/push.php' method='POST'>
267   <script src='https://checkout.stripe.com/checkout.js' class='stripe-
        button' data-key='
        pk_live_51MsrtFAGJ7jHvJPRzksQbNY4573e98c9MPwsnOXymtKYWFUVgh6Bbm\
267   ZV9tPhhTwppFLDabbfm7Lkj9dEYajBD9em00xNBVHJzf' data-amount='<?php_
        echo_
        $_GET['paid'];_?>' data-name='Aamot_Software' data-description='<?
        php_
        echo_
        $_GET['location'];_?>_/_<?php_
        echo_
        $_GET['service'];_?>_
        (<?php_
        echo_
        $_GET['paid'];_?>)' data-image='/img/Location_Icon.png'
        ></script></td></tr>
268   </table>
269   </form>
270 </body>
271 </html>

```

Chapter 19

Python Resolver Scripts

19.1 bin/gensource

Listing 19.1: Insert code directly in your document

```
1 #!/usr/bin/python
```

19.2 bin/indexer

Listing 19.2: Insert code directly in your document

```
1 # Written by Ole Aamot, 20211017
2
3 from cgi import parse_qs, escape
4 from urllib import quote_plus
5 import cgi
6 import urllib3
7
8 import hashlib
9 from math import radians, cos, sin, asin, sqrt
10 import textwrap
11 from cgi import parse_qs, escape
12 from bs4 import BeautifulSoup
13 import cgi
14 import time
15
16 def recursive_fetch(l, lat, lon):
```

```

17     p = http.request('GET', l)
18     o = p.data
19     y = BeautifulSoup(o, "lxml")
20     m = hashlib.sha256(p.data).hexdigest()
21     locationtags = y.find_all("location")
22     i = 0
23     print locationtags
24     while (i < len(locationtags)):
25         name = y.findAll("location")[i]["name"]
26         glat = y.findAll("location")[i]["lat"]
27         glon = y.findAll("location")[i]["lon"]
28         service = y.findAll("location")[i]["service"]
29         data = y.findAll("location")[i]
30         href = y.findAll("location")[i]["href"]
31         r = haversine(float(glat), float(glon), float(lat), float(lon))
32         print(gindex(r, name, m, href, data, glat, glon, lat, lon))
33         linker = 'https://api.piperpal.com/location/robot.php?name=' +
            quote_plus(name.encode('utf-8'), safe=':/') + '&service=' +
            quote_plus(service.encode('utf-8'), safe=':/') + '&location=' +
            quote_plus(href.encode('utf-8'), safe=':/') + '&glat=' + glat
            + '&glon=' + glon + '&paid=1'
34         insert = http.request('GET', linker)
35         print linker
36         print insert
37         object = insert.data
38         # tester = BeautifulSoup(object, "lxml")
39         # macron = hashlib.sha256(insert.data).hexdigest()
40         recursive_fetch(href, lat, lon)
41         i = i + 1
42
43     def haversine(lat1, lon1, lon2, lat2):
44         """
45         Calculate the great circle distance between two points
46         on the earth (specified in decimal degrees)
47         """
48         # convert decimal degrees to radians
49         lon1, lat1, lon2, lat2 = map(radians, [lon1, lat1, lon2, lat2])
50
51         # haversine formula
52         dlon = lon2 - lon1
53         dlat = lat2 - lat1
54         a = sin(dlat/2)**2 + cos(lat1) * cos(lat2) * sin(dlon/2)**2
55         c = 2 * asin(sqrt(a))
56         r = 6371 # Radius of earth in kilometers. Use 3956 for miles
57         return c * r
58
59     def gindex(radius, n, d, l, query, my_lat, my_lon, lat, lon):
60         return radius, n, d, l, query, my_lat, my_lon, lat, lon
61
62     http = urllib3.PoolManager()
63     q = 'Google'
64     l = 'http://aamot.software/piperpal.xml'
65     lat = '37.42242500'
66     lon = '-122.08755550'

```

```

67 service = 'Books'
68 recursive_fetch(l, lat, lon)

```

19.3 bin/piperpal

Listing 19.3: Insert code directly in your document

```

1  # Written by Ole Aamot, 20211017
2
3  from cgi import parse_qs, escape
4  from urllib import quote_plus
5  import cgi
6  import urllib3
7
8  import hashlib
9  from math import radians, cos, sin, asin, sqrt
10 import textwrap
11 from cgi import parse_qs, escape
12 from bs4 import BeautifulSoup
13 import cgi
14 import time
15
16 def recursive_fetch(l, lat, lon):
17     p = http.request('GET', l)
18     o = p.data
19     y = BeautifulSoup(o, "lxml")
20     m = hashlib.sha256(p.data).hexdigest()
21     locationtags = y.find_all("location")
22     i = 0
23     # print locationtags
24     while (i < len(locationtags)):
25         name = y.findAll("location")[i]["name"]
26         glat = y.findAll("location")[i]["lat"]
27         glon = y.findAll("location")[i]["lon"]
28         service = y.findAll("location")[i]["service"]
29         data = y.findAll("location")[i]
30         href = y.findAll("location")[i]["href"]
31         recursive_fetch(href, glat, glon)
32         r = haversine(float(glat), float(glon), float(lat), float(lon))
33         print(gindex(r, name, m, href, data, glat, glon, lat, lon))
34         linker = 'https://api.piperpal.com/location/robot.php?name=' +
35             quote_plus(name.encode('utf-8'), safe=':/') + '&service=' +
36             quote_plus(service.encode('utf-8'), safe=':/') + '&location=' +
37             quote_plus(href.encode('utf-8'), safe=':/') + '&glat=' + glat
38             + '&glon=' + glon + '&paid=1'
39         insert = http.request('GET', linker)
40         print linker
41         print insert

```

```

38     object = insert.data
39     # tester = BeautifulSoup(object, "lxml")
40     # macron = hashlib.sha256(insert.data).hexdigest()
41     i = i + 1
42     recursive_fetch(href, lat, lon)
43
44 def haversine(lat1, lon1, lon2, lat2):
45     """
46     Calculate the great circle distance between two points
47     on the earth (specified in decimal degrees)
48     """
49     # convert decimal degrees to radians
50     lon1, lat1, lon2, lat2 = map(radians, [lon1, lat1, lon2, lat2])
51
52     # haversine formula
53     dlon = lon2 - lon1
54     dlat = lat2 - lat1
55     a = sin(dlat/2)**2 + cos(lat1) * cos(lat2) * sin(dlon/2)**2
56     c = 2 * asin(sqrt(a))
57     r = 6371 # Radius of earth in kilometers. Use 3956 for miles
58     return c * r
59
60 def gindex(radius, n, d, l, query, my_lat, my_lon, lat, lon):
61     return radius, n, d, l, query, my_lat, my_lon, lat, lon
62
63 http = urllib3.PoolManager()
64 q = 'Google'
65 l = 'https://www.aamotsoftware.com/piperpal.xml'
66 lat = '37.42242500'
67 lon = '-122.08755550'
68 service = 'Books'
69 recursive_fetch(l, lat, lon)

```

19.4 bin/genpiperpalsource

Listing 19.4: Insert code directly in your document

```

1  #!/usr/bin/perl
2
3  use CGI;
4  use DBI;
5
6  sub get_locations {
7      my $c = CGI->new;
8      my $dbh = DBI->connect("DBI:mysql:database=piperpal;host=piperpal.
          mysql.domeneshop.no", "piperpal", "xxxxxxx", {'RaiseError' =>
          1});
9      print "<?xml_version='1.0'?>\n";

```

```

10     print "<piperpal_version='2.0'>\n";
11     $dbh->do ("SELECT_DISTINCT_email,name,glat,glon,location,modified,
        created,service,paid_FROM_piperpal_WHERE_modified_<_NOW()_and_
        created_>_NOW()");
12     my $sth = $dbh->prepare ("SELECT_DISTINCT_email,name,glat,glon,
        location,modified,created,service,paid_FROM_piperpal_WHERE_
        modified_<_NOW()_and_created_>_NOW()_ORDER_by_name");
13     $sth->execute();
14     while (my $ref = $sth->fetchrow_hashref()) {
15         print "<location_src='http://api.piperpal.com/location'
            _service='" . $ref->{'service'} . ":" . $ref->{'
            email'} . "'_name='" . $ref->{'name'} . "'_lat='" .
            $ref->{'glat'} . "'_lon='" . $ref->{'glon'} . "'_
            href='" . $ref->{'location'} . "'_notbefore='" .
            $ref->{'modified'} . "'_notafter='" . $ref->{'
            created'} . "'_paid='" . $ref->{'paid'} . "'>" .
            $ref->{'name'} . "</location>\n";
16     }
17     $sth->finish();
18     $dbh->disconnect();
19     print "</piperpal>\n";
20     return;
21 }
22 &get_locations;

```

19.5 bin/resolver

Listing 19.5: Insert code directly in your document

```

1  # Written by Ole Aamot, 20200409
2
3  from cgi import parse_qs, escape
4  from urllib import quote_plus
5  import cgi
6  import urllib3
7  import mysql.connector
8  from mysql.connector import Error
9  import hashlib
10 from math import radians, cos, sin, asin, sqrt
11 import textwrap
12 from cgi import parse_qs, escape
13 from bs4 import BeautifulSoup
14 import cgi
15 import time
16
17 def piperpal_resolver(l,n,s,lat,lon):
18     p = http.request('GET', l)
19     o = p.data

```

```

20     y = BeautifulSoup(o, "lxml")
21     m = hashlib.sha256(p.data).hexdigest()
22     locationtags = y.find_all("location")
23     i = 0
24     print locationtags
25     while (i < len(locationtags)):
26         name = y.findAll("location")[i]["name"]
27         glat = y.findAll("location")[i]["lat"]
28         glon = y.findAll("location")[i]["lon"]
29         service = y.findAll("location")[i]["service"]
30         data = y.findAll("location")[i]
31         href = y.findAll("location")[i]["href"]
32         r = haversine(float(glat), float(glon), float(lat), float(lon))
33     #     print map
34         print (gindex(r, name, m, href, data, glat, glon, lat, lon))
35     linker = 'https://api.piperpal.com/resolver/?name=' + quote_plus(
        name.encode('utf-8'), safe=':/') + '&service=' + quote_plus(
        service.encode('utf-8'), safe=':/') + '&location=' + quote_plus(
        href.encode('utf-8'), safe=':/') + '&glat=' + glat + '&glon='
        + glon + '&paid=1'
36     insert = http.request('GET', linker)
37     print linker
38     print insert
39     object = insert.data
40     #     tester = BeautifulSoup(object, "lxml")
41     #     macron = hashlib.sha256(insert.data).hexdigest()
42     i = i + 1
43     piperpal_resolver(href, s, n, lat, lon)
44     return (y, i)
45
46 def haversine(lat1, lon1, lon2, lat2):
47     """
48     Calculate the great circle distance between two points
49     on the earth (specified in decimal degrees)
50     """
51     # convert decimal degrees to radians
52     lon1, lat1, lon2, lat2 = map(radians, [lon1, lat1, lon2, lat2])
53
54     # haversine formula
55     dlon = lon2 - lon1
56     dlat = lat2 - lat1
57     a = sin(dlat/2)**2 + cos(lat1) * cos(lat2) * sin(dlon/2)**2
58     c = 2 * asin(sqrt(a))
59     r = 6371 # Radius of earth in kilometers. Use 3956 for miles
60     return c * r
61
62 def gindex(radius, n, d, l, query, my_lat, my_lon, lat, lon):
63     return radius, n, d, l, query, my_lat, my_lon, lat, lon
64     services = dict()
65     services = ('Restaurant', 'Bar', 'Concert', 'Film', 'Books', 'Health',
        'Clothes', 'Food', 'Music', 'Electronics', 'Transport', 'Rental')
66     http = urllib3.PoolManager()
67     q = 'Wikipedia'
68     p = 1

```

```
69 l = 'http://www.piperpal.com/piperpal.xml';
70 lat = '37.42242500'
71 lon = '-122.08755550'
72 service = 'Books'
73 for x in range(-90, 91):
74     for y in range(-180, 181):
75         print x,y,lat,lon,q,l,0
76         print x,y,lat,lon,q,l,1
77         for z in services:
78             # if (z=="Restaurant"):
79             print z,x,y,lat,lon,q,l,1
80             # print "Restaurant"
81         piperpal_resolver(l,1,z,lat,lon)
```

Chapter 20

Cron Jobs

20.1 0 * * * * /bin/piperpal

The “piperpal” cron job runs every hour and executes the Python script `bin/piperpal` which runs recursive fetch of the XML file `https://www.aamotsoftware.com/piperpal.xml` for processing into the database.

20.2 0 * * * * python /bin/indexer

The “indexer” cron job runs every hour and executes the Python script `indexer` which runs recursive fetch of the XML file `https://aamot.software/piperpal.xml` for processing into the index via `https://api.piperpal.com/location/robot.php?name=&service&location&glat&glon&paid=1`

20.3 0 * * * * /bin/genpiperpalsource > piperpal/piperpal.xml

The “genpiperpalsource” cron job runs every hour and write the file `https://www.aamotsoftware.com/piperpal.xml` from the SQL database from the Perl script “genpiperpalsource”.

Chapter 21

Mobile App

21.1 Android—<https://www.github.com/piperpal/android>

<https://www.piperpal.com/apk/piperpal.apk>

21.2 iOS—<https://www.github.com/piperpal/ios>

Chapter 22

Web App

22.1 World Wide Web – `https://www.geopher.com/`

`\url{https://www.geopher.com/}`

Chapter 23

Node/Express Module

23.1 Location Data Server – <https://www.npmjs.com/package/location-server>

Node/Express is a open source framework for building web sites in the NodeJS language.

“Location Data Server” is a module for accessing the Location API (<https://api.piperpal.com/location/json.php>) from Node/Express.

So far you can download the “Location Data Server” NodeJS source code from <https://gitlab.com/ole.aamot/location-server> and the NPMJS package from <https://www.npmjs.com/package/location-server>

You install it with Node Package Manager (NPM) in Terminal with

```
npm i location-server
```

You can view the implementation of location-server for the Piperpal Location API at https://gitlab.com/ole.aamot/location-server/-/blob/main/location-server.cjs?ref_type=heads:

Listing 23.1: Insert code directly in your document

```
1 const express = require('express');
2 const bodyParser = require('body-parser');
3 const axios = require('axios');
4
5 const app = express();
6 const port = 3000;
7
8 app.use(express.static('public'));
9 app.use(bodyParser.urlencoded({ extended: true }));
10 app.use(bodyParser.json());
```

```
11
12 app.get('/location-server-time', async (req, res) => {
13   const { timeOut, timeBegin, timeEnd } = req.query;
14   try {
15     const response = new Date().getTime();
16     res.json(response);
17   } catch (error) {
18     res.status(500).json({ error: 'Error_fetching_time' });
19   }
20 });
21
22 app.get('/location-server-data', async (req, res) => {
23   const { service, glat, glon, radius } = req.query;
24   try {
25     const response = await axios.get('https://api.piperpal.com/
      location/json.php?service=${service}&glat=${glat}&glon=${
      glon}&radius=${radius}');
26     res.json(response.data);
27     const locations = response.data.locations;
28   } catch (error) {
29     res.status(500).json({ error: 'Error_fetching_data' });
30   }
31 });
32
33 app.listen(port, () => {
34   console.log('Location Data Server listening on port ${port}');
35 });
```

Chapter 24

Location Mobile – <https://www.piperpal.com/mobile/>

<https://www.piperpal.com/mobile/>

SQL Queries

Listing 1: Insert code directly in your document

```
1 CREATE TABLE piperpal (  
2     id MEDIUMINT(8) UNSIGNED NOT NULL AUTO_INCREMENT,  
3     name VARCHAR(100) NOT NULL DEFAULT '',  
4     service VARCHAR(1024) NOT NULL,  
5     location VARCHAR(1024) NOT NULL,  
6     modified TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE  
7         CURRENT_TIMESTAMP,  
8     created TIMESTAMP NULL DEFAULT NULL,  
9     glat DECIMAL(10, 8) NOT NULL,  
10    glon DECIMAL(11, 8) NOT NULL,  
11    paid MEDIUMINT(16) UNSIGNED NOT NULL,  
12    token VARCHAR(32) NOT NULL,  
13    type VARCHAR(32) NOT NULL,  
14    email VARCHAR(256) NOT NULL,  
15    PRIMARY KEY (id)  
16 );
```

Appendix A

Haversine Computation of Piperpal Geolocations

```
SELECT DISTINCT
id,name,service,location,modified,created,glat,glon,pa
id,token,type,email,111.045*DEGREES(ACOS(COS(RADIANS(l
atpoint))*COS(RADIANS(glat))*COS(RADIANS(longpoint)-
RA
DIANS(glon))+SIN(RADIANS(latpoint))*SIN(RADIANS(glat
)))) AS distance_in_km FROM piperpal JOIN (SELECT " .
$_POST['latitude'] . " AS latpoint, " .
$_POST['longitude'] . " AS longpoint) AS p ON 1=1
WHERE name = '" . $_POST['location'] . "' ORDER BY
distance_in_km
```

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