

GOOGLE HACKS™

**3rd
Edition**
Covers Google
Maps

*Tips & Tools for Finding and
Using the World's Information*



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**HACKS
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Google Hacks™, Third Edition

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HACK
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Build Your Own Google Map

Add a Google Map to your web site in a few quick steps.

One look at the Google Maps API documentation (<http://www.google.com/apis/maps/>) can send otherwise sane web developers running in the other direction. The Maps API uses JavaScript, a language that can be confusing even for seasoned developers. The API also needs longitude and latitude coordinates for every marker you want to add to the map, but the API doesn't provide any type of geocoding service that turns addresses or place names into coordinates.

The Google Maps API was definitely built by engineers for engineers, and it requires a bit of study before you can start making your own maps. However, there are some ways to cheat the system and put together your own map in just a few minutes.

As an example, suppose you want to share your recent travel destinations with your site readers so they know where you've been. You have a list of cities, but no coordinates, and you're not a JavaScript expert. This hack shows how to assemble a custom Google Map, and you won't even have to touch a GPS.

Google Map Maker

You don't need to know anything about JavaScript or geocoding locations to assemble a map you can put on your web site in less than 10 minutes. UK developer Richard Stephenson built a tool called Google Map Maker that takes the pain out of building a Google Map.

To get started, browse to Google Map Maker (<http://donkeymagic.co.uk/googlemap/>), where you'll find a Google Map centered on the UK. Use the map controls to zoom in or out, or drag the map around until you find the section of the world you want to add points to.

Zoom in close to the first point you want to map, click the Activate checkbox in the controls next to the map, and click the map where you want the marker to be. The latitude and longitude automatically appear in the control box. Type in a marker name and any content you want to appear when your readers click that particular marker. Click "Add marker," and Google Map Maker remembers the point, listing it to the right of the map. Repeat the process for different locations, and you end up with a map such as the one shown in Figure 5-10.

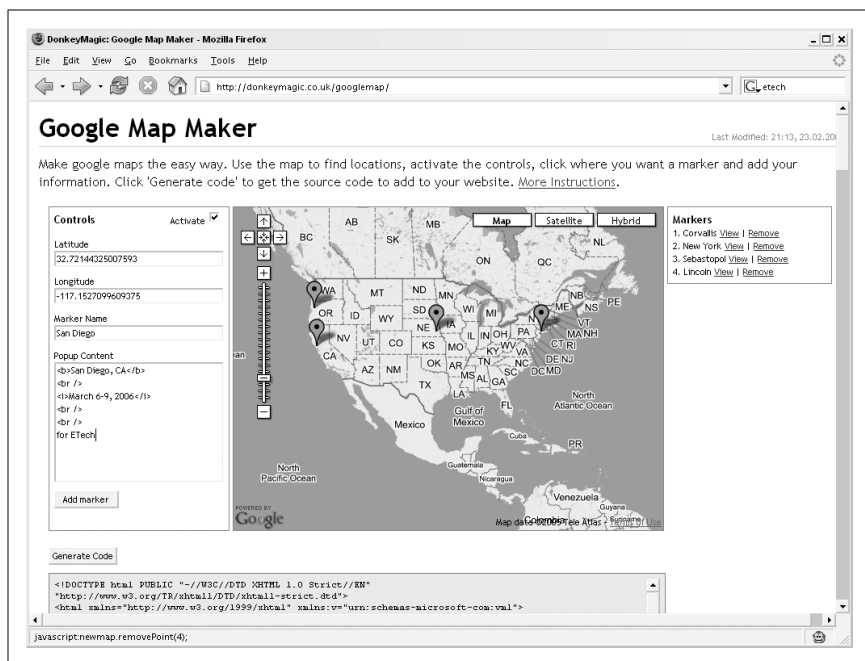


Figure 5-10. Adding points with Google Map Maker

Once you've added all your points to the map, click **Generate Code**, which gives you the source code for a web page that contains your map. Copy the code and add it to an HTML file, such as *recent-travels.html*.

Setting Your API Key

The final step is replacing the Google Maps API key in the generated code with your own Google Maps API key. At the top of the generated code is a bit of JavaScript that looks like this:

```
<script src="http://maps.google.com/maps?file=api&v=1&key=[long string of
characters]" type="text/javascript"></script>
```

You need to replace the existing long string of characters after `key=` with your own key. Browse to the Google Maps API signup page (<http://www.google.com/apis/maps/signup.html>) and request a key.

As you register your key, be sure to include the domain where you'll display the map. If you'll share your map at <http://www.example.com/recent-travels.html>, use <http://www.example.com> as the domain. If you'll display the map in a subdirectory, such as <http://www.example.com/travels/recent-travels.html>, be sure to include the subdirectory. To be associated with each API key, the Google Maps API requires the precise location where the map will be published.

Rolling Out Your Map

Once you have the key, edit the file to include your key, upload the file to your server, and open the page in a browser. You could even edit the HTML so it fits in with your site design. In this example, if you add the page heading *My Recent Travels*, you should see something like Figure 5-11.



Figure 5-11. Custom Google Map generated with Google Map Maker

As you click on points, you'll see the pop-up content you included with each point. From here, you can link to your new custom Google Map and share the map with the world.

Hacking the Hack

Google Map Maker gives you the code for an entire HTML page, but with some careful dissection, you can put the map on an existing page at your site. Open *recent-travels.html* and take a look at the source code. The page is made up of three distinct sections: some JavaScript at the top of the page inside of `<script>` tags, a single CSS `<style>` section, and a `<div>` tag in the body of the page that displays the map.

To show the map in another page, copy the `<script>` and `<style>` sections of *recent-travels.html* and paste them into your existing page somewhere between the `<head></head>` tags. Now copy the lone `<div>` tag and place it in your page where you want the map to appear. Keep in mind that you might have to adjust the width and height attributes of the tag to get the map to fit

into an existing space. Figure 5-12 shows the map once it's been added to an existing page.



Figure 5-12. Custom Google Map inside an existing page

Though this hack was supposed to keep you from getting your hands dirty with JavaScript, you might need to tweak the code just a bit as you fit the map into an existing page. In this example, the original map had code that added a large map control for navigating the map:

```
map.addControl(new GLargeMapControl());
```

Instead, I changed the code to add a small map control, like so:

```
map.addControl(new GSmallMapControl());
```

And I completely removed the code that adds the Map, Satellite, Hybrid control to the map. You might also need to play around with the initial zoom level of the map once the map has been resized. Look for the code that initializes the map, which should look like this:

```
map.centerAndZoom(new GPoint( -95.9765625, 37.43997405227057), 14);
```

The last number, 14, is the zoom level for the map when it loads. Change this to any number between 0 and 17, with larger numbers zooming out.