

Mashups with the Google Maps API Part I

Raymond Yee (yee@berkeley.edu)

April 20, 2009

Abstract

After studying some specific instances of map-based mashups, we will study the basics of the Google Maps API and the process of geocoding.

Many, many more map-based mashups

- <http://googlemapsmania.blogspot.com/>
- http://mapki.com/index.php?title=Main_Page

What You Learned Earlier in Course

- GeoRSS: <http://dret.net/lectures/web-spring09/georss>
- KML: <http://dret.net/lectures/web-spring09/kml>

What we will build this week

- What we want to learn this week (in the lectures and in the lab) is to create your own Google Map using the API that will bring in:
 - The map you made with Google My Maps
 - Some geotagged photos from Flickr

Google Maps API: Getting started

- Signing up for a Google maps API key and copy and paste to make a map

<http://code.google.com/apis/maps/>

Getting Your API Key

- Besides reading and agreeing to the ToS, you will need to know what directory you'll be hosting your map.
- For <http://people.ischool.berkeley.edu/~rdhyee/web-spring09/> the key is
ABQIAAAAdjIS7YH6Pzk2Nrli02b5xxS5KcFUklaUUbm4gGX5FAKX9-MkPxQU_X81udCu4ldS1lpugvFUzUm2OQ
- Remember your own key....

Create a "Hello World" example

- Copy, paste, and upload code from [http://code.google.com/apis/maps/documentation/introduction.html#The Hello World of Google Maps](http://code.google.com/apis/maps/documentation/introduction.html#The_Hello_World_of_Google_Maps) (<http://bit.ly/J82dh>) , remembering to substitute your own key
- See, e.g., <http://people.ischool.berkeley.edu/~rdhyee/web-spring09/helloworld.html> (<http://bit.ly/3lwGT>)

Change Center, Size, Zoom of Map

- Pick an address (in the USA, to make things easier) to place at the center of map
- Find the latitude and longitude of the address – e.g., 1600 Pennsylvania Ave:

<http://geocoder.us/demo.cgi?address=1600+Pennsylvania+Ave%2C+Washington%2C+DC>

Geocoder.us returns: (38.898748, -77.037684) – means N 38 ° 53' 55.5" and W 77 ° 2' 15.7"

See Whitehouse map

- <http://people.ischool.berkeley.edu/~rdhyee/web-spring09/whitehouse.html>

```
Source of: http://people.school.berkeley.edu/~rdhjee/web-spring09/whitehouse.html - Mozilla Firefox
File Edit View Help

<!DOCTYPE html "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <meta http-equiv="content-type" content="text/html; charset=utf-8"/>
    <title>Google Maps JavaScript API Example</title>
    <script src="http://maps.google.com/maps?file=api&v=2&key=ABQIAAAAdjIS7YH6Pzk2Nrl102b5xxS5KcFU"
      type="text/javascript"></script>
    <script type="text/javascript">

function initialize() {
  if (GBrowserIsCompatible()) {
    var map = new GMap2(document.getElementById("map_canvas"));
    map.setCenter(new GLatLng(38.898748, -77.037684), 14);
    map.setUIToDefault();
  }
}

</script>
</head>
<body onload="initialize()" onunload="GUnload()">
  <div id="map_canvas" style="width: 800px; height: 600px"></div>
</body>
</html>

|
Line 26, Col 1
```