

Google Maps in Rails

We may find a time where we need to display a map for Sharing Connections. The most likely use of this map would be to show the route the truck drivers need to take. Even though we are sending the address as a CSV so they can load it into MapQuest, we may still want to display the map showing their route on our website. To do this we will be using the Google Maps JavaScript API.

Google Maps API

The API allows us to display maps using a mixture of HTML and JavaScript. The HTML required is simply an empty `<div>` used to display the map, the rest of the work is done in JavaScript. This map can then be used to display directions, custom polygons, and place markers. Directions are can be input using the street address or Latitude/Longitude coordinates. We can also Geocode addresses, convert them to Latitude/Longitude coordinates, if needed. The API does have some limitations that can only be surpassed by buying a key for its use, these are:

1. When displaying directions only up to 8 waypoints can be used, this includes the origin and destination
 - a. This limitation can be raised to 23 waypoints by buying the Maps for Work API key
2. Geocoding (conversion of an address to a Latitude/Longitude coordinate) is limited to 2500 queries per day. I currently don't know if this includes using an address rather than coordinates for determining directions.

Why not the GMaps4Rails Gem?

The GMaps4Rails gem as I understand it is simply a wrapper for the Google's JavaScript API developed for rails. While this is not necessarily a problem, based on my understanding of the gem it still forces you to do everything in the HTML and JavaScript rather than Ruby code. It also has all the same limitations as the Google API because it is more or less just a wrapper for it. Because the gem won't change our ruby code anyway I believe it makes more sense to just directly use the Google Maps API.

My Conclusions

The API is pretty easy to use and you can get the hang of using it very quickly. Most of the code in their samples is easy to port into our own files. Because it is using JavaScript as the main workhorse we will likely need to pass our values with embedded Ruby in the pages, however that should only be a couple of Ruby functions that return the values we need.

Resources

The API can be found here: <https://developers.google.com/maps/documentation/javascript/>. Click on Samples for all the tutorials, there are a lot!!

A useful tutorial can be found here: <http://www.sitepoint.com/use-google-maps-rails/> . This tutorial mentions using GMaps4Rails, but only in passing, and actually shows how to do just about everything I believe we would possibly need without it.