Today we are going to take a very basic look at the Google Maps Application Programming Interface (API).

Let's say for example that I want to create a website that incorporates an interactive map of my immediate area where users can zoom in and see, say, my business and the immediate streets, parks, landmarks, etc surrounding it. I could, perhaps, upload just a picture or screenshot, but I want more than that. I could also, I guess, create that all from scratch. I am not going to do that however.

I live in Washington, D.C. so let's use that for our example.

Here we have Google Maps centered on the White House or  $38.9072^{\circ}N$   $77.0369^{\circ}W$ . I want this on my own website.

And voila! Here it is! Don't worry about the error. I will talk about that later. But, as you can see, if I keep refreshing the page we can get a glimpse of Washington, D.C.

So like all APIs, we are sending a request and receiving data in return. The Google Map API is facilitating that request for map information and returning it to my website.

Let's dive into the code:

Here the div element (id of googleMap) defines the height and width of the map element. Pretty standard html stuff.

Next we have a little bit of Javascript that first defines a function myMap() that sets the map properties. It sets the map properties that we will use with the API. Center specifies where to center the map (the White House latitude and longitude) and zoom specifies the starting zoom level.

Thee last line there creates a new map inside of the div (note the id) using the parameters we just defined in the myMap function.

Next up we see the script element that contains the call to the Google API. Here where it says key, Google is expecting to find my identify key for billing purposes. Google has to make money, you know. So that's why on my webpage it has errors and says for development purposes only.

Now this has a lot of potential! Through the use of Javascript (which I have to admit, I have *zero* experience with), I could do all sorts of things like add a marker, say to identify the White House, and animate it, change perspectives or have shapes load onto the map, etc. all by changing various parameters within my myMap() function.

That's it! Google did (would do) all of the hard work for me (for a price, of course). This is a super quick introduction to APIs and how you use one.

Thanks for watching and hat tip to w3schools.com for an <u>intro to Google Maps API</u> and to MuleSoft Videos for <u>this super cool video on YouTube</u> that easily demystified APIs for me.

Links can be found by viewing the transcript on the website or checking out the video description below.