**Google API’s**

**Google geocoding API:**

Geocoding is the process of converting addresses (like "1600 Amphitheatre Parkway, Mountain View, CA") into geographic coordinates (like latitude 37.423021 and longitude -122.083739), which you can use to place markers or position the map. Reverse geocoding is the process of converting geographic coordinates into a human-readable address. The Google Geocoding API provides a direct way to access a these services via an HTTP request.

URL: <https://developers.google.com/maps/documentation/geocoding/>

Limits: 2500 requests for 24 hours.

Business Limits: 100,000 requests per 24 hour period

Configuration Process:

None required – Direct access through URL.

**Google places API:**

The Google Places API is a service that returns information about Places — defined within this API as establishments, geographic locations, or prominent points of interest — using HTTP requests. Place requests specify locations as latitude/longitude coordinates.

URL: <https://developers.google.com/places/documentation/>

Limits: 1000 requests for 24 hours

**Place Search API**: https://developers.google.com/places/documentation/search

**Nearby Search**: A Nearby Search lets you search for Places within a specified area. You can refine your search request by supplying keywords or specifying the type of Place you are searching for.

Configuration Process:

* Set up a dummy webpage
* Set up API Key by following instructions on the following url: <https://developers.google.com/console/help/>
* To check the usage quota, visit the google api console

**Google Direction API**

You can calculate directions (using a variety of methods of transportation) by using the DirectionsService object. This object communicates with the Google Maps API Directions Service which receives direction requests and returns computed results. You may either handle these directions results yourself or use the DirectionsRenderer object to render these results.

Directions may specify origins and destinations either as text strings (e.g. "Chicago, IL" or "Darwin, NSW, Australia") or as LatLng values. The Directions service can return multi-part directions using a series of waypoints. Directions are displayed as a polyline drawing the route on a map, or additionally as a series of textual description within a <div> element (e.g. "Turn right onto the Williamsburg Bridge ramp").

URL: https://developers.google.com/maps/documentation/javascript/directions