

Resource Write-Up

For my pin-restaurant project, it will mainly utilize Yelp Fusion and Google Maps API. These are two of the more popular location-based applications that incorporates location data and mapping features. The project will use Google Maps API s the interactive map while Yelp Fusion API will have the data for restaurants.

Yelp Fusion

Yelp Fusion API provides developers access to information about anything location listed in Yelp, not limited to restaurants. For this project, restaurant information will focus on ratings, reviews, address, etc. Accessing the API is free but requires an API key which users need to register on Yelp's developer website ([Fusion Authentication \(yelp.com\)](https://www.yelp.com/developers/fusion/authentication)). Data is formatted in JSON which is easily parsed and read with Python.

Google Maps

The Google Maps API features location search, routing, and geocoding in addition to various map data such as satellite imagery or street views. Similarly to Yelp Fusion, the API is free but requires registration on Google's developer website ([Use API Keys | Maps JavaScript API | Google Developers](https://developers.google.com/maps/documentation/javascript/using-api-keys)). Data from the API is available either in JSON or XML formatting.

Availability

As previously mentioned, both APIs are publicly available as long as developers obtain an API key. Yelp Fusion and Google Maps APIs are available because of API provisioning.

Provisioning allows developers access to documentation, tutorials, and support in using an API to build software and systems without having the go through the steps of manually developing

components and functions that exist with APIs. For security reason, provisioning uses authentication and access control in the form of API keys to limit the use to authorized users. Companies benefit from API provisioning as they make their services and data known to a larger audience as well as collect data on how users use certain services.

Example Applications

Flask Restaurant Finder – A web application that uses python's flask framework. Allows users to search for restaurants around a location.

Google Maps Direction – Python scripts that calculates travelling distance and time using Google Maps API. There is a googlemaps in the python library that communicates with the API.

Local Events – An application that displays events occurring locally based on date and time.

Google Maps API will manage the location aspect to filter out only local events while datetime from the library filters events by a date range

Crime Mapper – Displays crime data onto a map using Google Maps API and pulling from a crime database such as Seattle crime database. Pandas and matplotlib would be used from the python library in order to load and manipulate data from the selected crime database and to map out the data in different ways such as charts, respectively.

Links

[Google Maps Platform APIs by Platform | Google Developers](#)

[Getting Started with Yelp Fusion API](#)