GOOGLE MAPS API

APPLICATION PROGRAMMING INTERFACE

▸ API is a very generic term and can have many different meanings / concepts associated with it

▸ Simply put it is code and tools that allow your program to interact with another program (literally an Interface for you to Program someone else's Application)

RESTFUL APIS

▸ Last week we briefly looked at RESTful APIs, which respond to a request with data.

▸ URL is formatted by what we are asking for…if you want posts, it will be: <apiURL>/posts, if you wants users: /users, a specific user: /users/<userId>

▸ Example is the JSON placeholder API: https:// jsonplaceholder.typicode.com/

▸ REST is a full specification, but that is less important. If you hear REST, think "just data, usually JSON".

SOFTWARE DEVELOPMENT KIT

▸ SDKs are collections of pre-made JS functions you can use to interact with an API

▸ They allow you to easily use an external service in your application

▸ They allow you do more than just access data; think adding widgets or buttons to your site (Facebook, Google, Soundcloud)

▸ Usually have in-depth documentation

GOOGLE MAPS

▸ Sometimes a service will offer an SDK as well as a REST API…this is the case with Google Maps.

▸ Google Maps provides an SDK to easily add maps, markers, or directions to your application.

▸ They also have REST APIs we can query for geocoding or distance data

▸ Is free under a certain quota

ACCESSING THE API

▸ Most commercial APIs require you to register for an API key. This is a unique code which identifies your application as the one requesting data

▸ This is so the company offering the services knows when to start charging you money

▸ It is also to prevent abuse, for example making 1000's of requests a second to try and take down the service

▸ For the exercises I will share my key, for the assignments you will need your own