REST API with Flask

**Request**

What your browser does >> when you go to a website it makes a request

i.e: ask for homepage, hello.html, or third user

**Web Server**

Piece of software designed to accept incoming web requests

* Sends a get request

**Get Request**

Commands breakout

* *Get* – Verb
* */* - Path
* *HTTP/1.1* – Protocol

**HTTP Verbs**Common Verbs



**REST API**

What is it

* Framework of thinking of how a webserver responds to a request or behaves in general.
* Responds with resources not just data
* Stateless
  + One request cannot depend on any other request, only knows about current request
  + I.e: Server does not know user is logged in, so must send enough data to identify user with each request
  + i.e: Create a chair, call the chair (we have to check if chair item exisit first)

What does it do

* Return JSON after doing some processing
* Useful for mobile app to represent a store

**JSON**

What is it

* Set of key value pairs
* Useful to send data from one application to another
* Can be thought of as a dictionary but it is not a dictionary
  + Converts a dictionary and sent as a string
  + CAN NOT be a list

Rules of JSON

* JSON always uses Double quotes and never sing quotes
* Always returns a dictionary

**Testing API**

How JavaScript and API works together

* JavaScript has to call the API to retrieve data to show on the webpage
* JavaScript used to make websites more dynamic

Postman

* API Testing tool that allows us to make request
  + Get, Post, Put, etc
* Since it is stateless, it doesn’t save any of the API calls >> Need to save into a database

**Virtual Environment**

Pip3.5 freeze >> gives you the version of your packages

Creating Virtual Environments in Python

* Python -m venv venv
* 1st venv calls the venv package, and the second names it venv

Activate Venv

* Source venv/bin/activate
  + Activates