

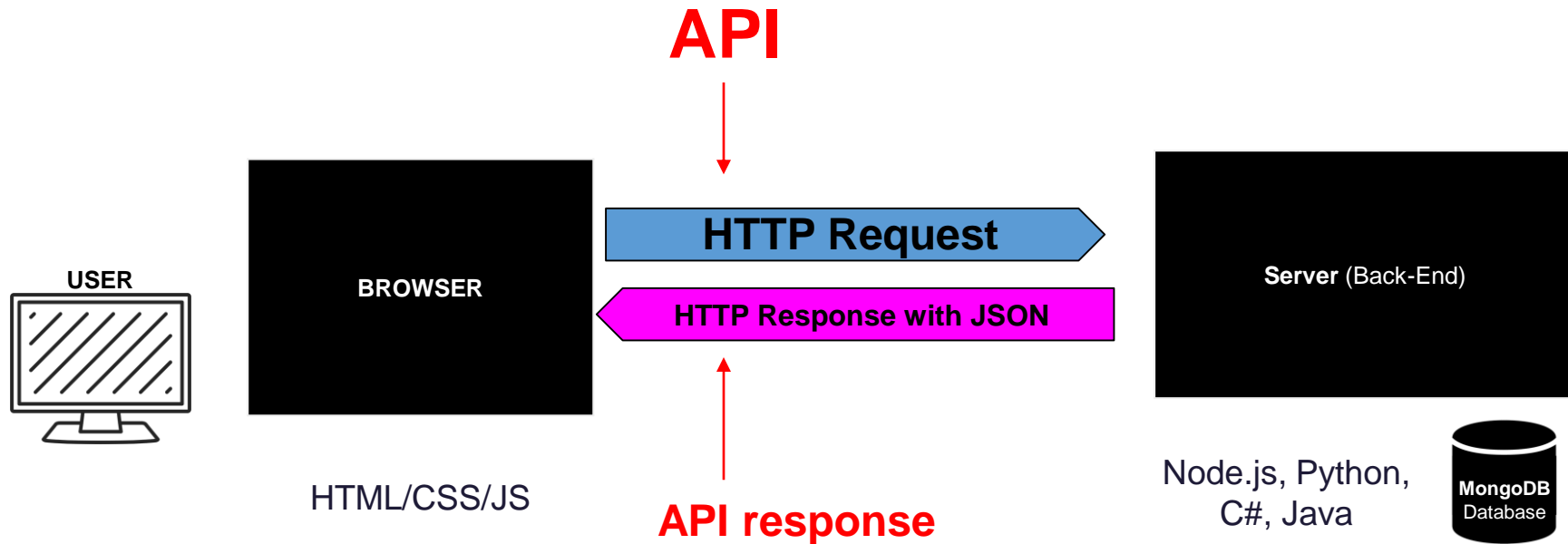
API Economy

(oh yea – and what's this JSON all about?)

June 20, 2019

Full stack environment

A couple of the components



WHAT IS AN API?



*An **application programming interface (API)** is a set of features and rules that exist inside a software program (the application) enabling interaction with it through software—as opposed to a human user interface.*

— MDN Web Docs, developer.mozilla.org

Common use case

Functions for data

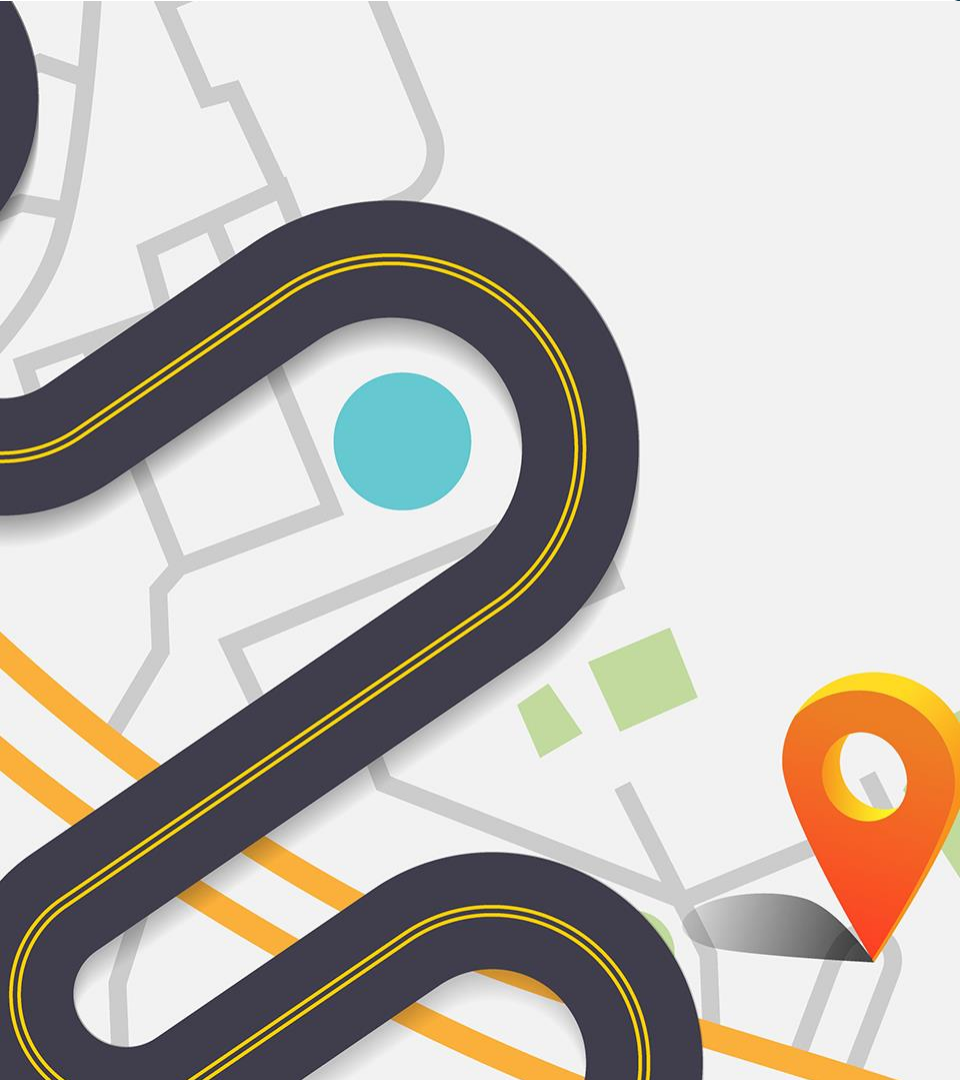
Weather data
Star wars data
Move data
Credit Card Authorization

Functions for other functions

Google maps
Spotify tools

Functions to control devices

Nest
Airplane engines
Self driving cars



Airbnb uses Google Maps API to help customers identify locations of properties they may want to rent

Airbnb website

—

WHAT IS JSON?

{JSON}

JSON is an acronym and means JavaScript Object Notation. JSON is an object and is used as a data interchange format.

JSON is a **lightweight** data interchange format used to correlate keys with values.

Array

Object

**Key or
Property**

```
1  "apiVersion":"2.0",
2  "data":{
3    "updated":"2010-01-07T19:58:42.949Z",
4    "totalItems":800,
5    "startIndex":1,
6    "items":[
7      {"id":"hYB0mn5zh2c",
8        "uploaded":"2007-06-05T22:07:03.000Z",
9        "updated":"2010-01-07T13:26:50.000Z",
10       "uploader":"GoogleDeveloperDay",
11       "category":"News",
12       "title":"Google Developers Day US - Maps API Introduction",
13       "description":"Google Maps API Introduction ...",
14       "tags":["GDD07","GDD07US","Maps"],
15       "duration":2840,
16       "rating":4.63,
17       "viewCount":220101,
18       "favoriteCount":201,
19       "commentCount":22
20     }
21   ]
22 }
```

Value

TIME FOR A POLL!!

<https://pollev.com/patrickhowar106>

We're software engineers! We can figure this out!!

Let's tap into APIs to help

01

Download postman on your laptop
<https://www.getpostman.com/>

02

Open up postman and follow my lead from the screen to enter and trigger an API

03

We'll discuss the results once everyone succeeds with this operation

Use Postman to trigger an API 'get'

<https://swapi.co/api/people/1>

Postman

File Edit View Help

+ New Import Runner +

My Workspace Invite

No Environment

Filter

History Collections APIs BETA

Save Responses Clear all

Today

GET http://swapi.co/api/people/

GET http://swapi.co/api/people/ Send Save

Pretty Raw Preview JSON

```
86 ],
87 "vehicles": [],
88 "starships": [],
89 "created": "2014-12-10T15:11:50.376000Z",
90 "edited": "2014-12-20T21:17:50.311000Z",
91 "url": "https://swapi.co/api/people/3/"
92 },
93 {
94   "name": "Darth Vader",
95   "height": "202",
96   "mass": "136",
97   "hair_color": "none",
98   "skin_color": "white",
99   "eye_color": "yellow",
100  "birth_year": "41.988Y",
101  "gender": "male",
102  "homeworld": "https://swapi.co/api/planets/1/",
103  "films": [
104    "https://swapi.co/api/films/2/",
105    "https://swapi.co/api/films/6/",
106    "https://swapi.co/api/films/3/",
107    "https://swapi.co/api/films/1/"
108  ],
109  "species": [
110    "https://swapi.co/api/species/1/"
111  ],
112  "vehicles": [],
113  "starships": [
114    "https://swapi.co/api/starships/13/"
115  ],
116  "created": "2014-12-10T15:18:20.704000Z",
117  "edited": "2014-12-20T21:17:50.313000Z",
118  "url": "https://swapi.co/api/people/4/"
119 },
120 ],
121 }
```

202 inches!
Or over 16 feet

Bootcamp

Instructions to learn
React
Apprentice engine
Self-driving car

Lets Live Code!!

And learn a little more about objects



www.roadtohire.org