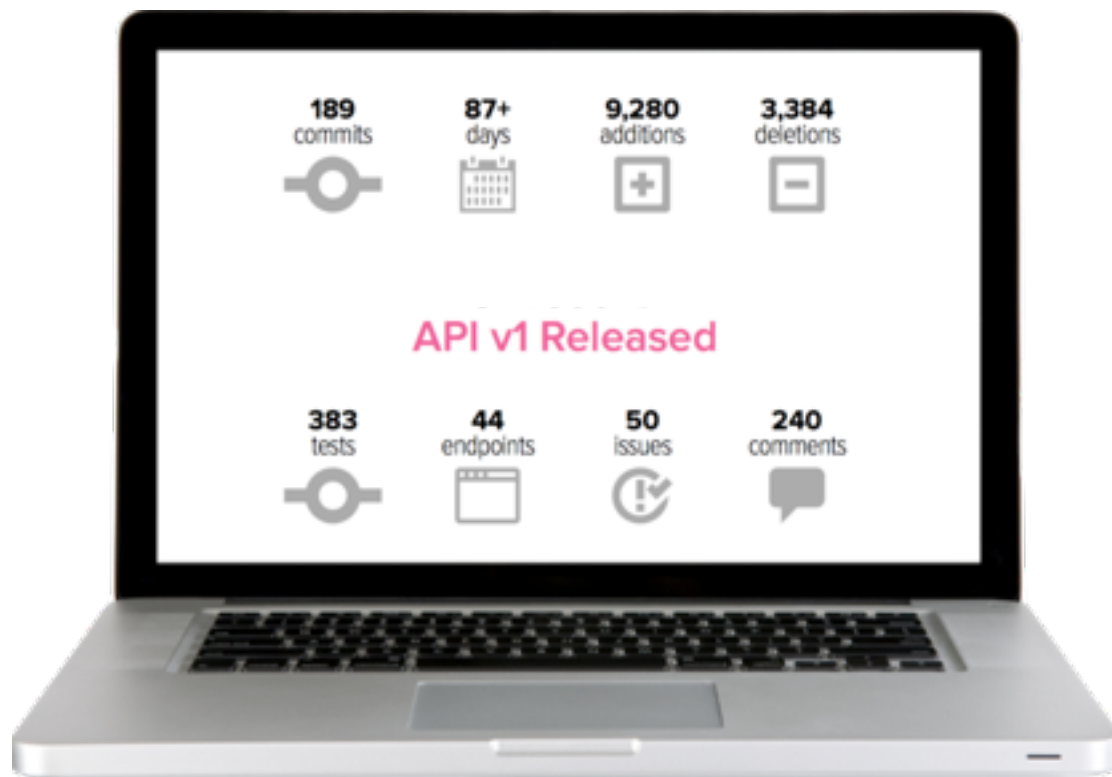

ALL ABOUT API(s)



FUNDAMENTALS

HOMEWORK!

FUNDAMENTALS

AGENDA

- Revision
- HTTP
 - Verbs
- APIs
- Homework

REVISION

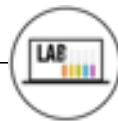
- Data Types
- Collections
 - Array - Ordered with a numerical label starting at 0
 - Hash - Ordered with a custom label
- Collection operations
 - .times, .each, .map, .reduce
- Modules
 - Methods, Modules, Classes, Libraries

FUNDAMENTALS



Data Types

- › Everything in Ruby has a type!



Exercise

- Pull the latest bewd4_exercises down
- Complete the code in class4/bewd_collections.rb
 - 10 min time limit
- Complete the code in class4/fizz_buzz.rb
 - 10 min time limit

FUNDAMENTALS

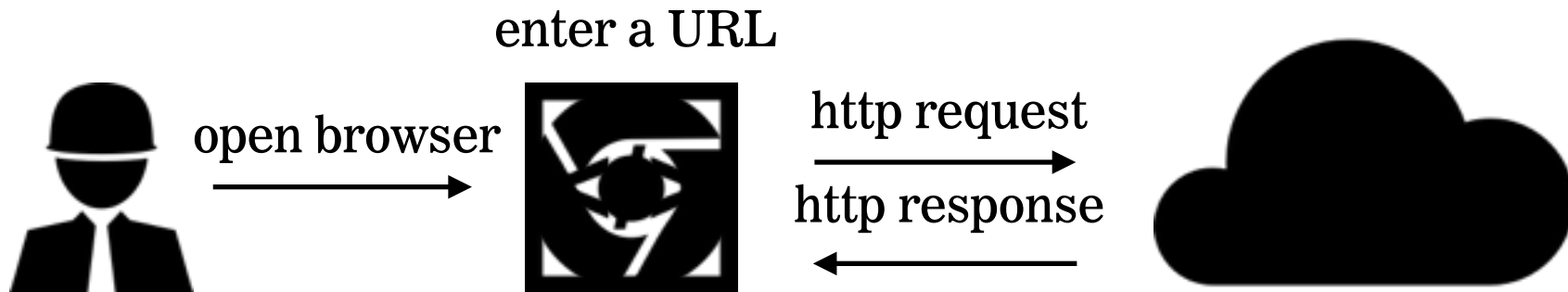
HTTP

Hypertext Transfer Protocol

- Protocol
 - Client requests a document
 - Server provides requested document
- Location
 - URL
- Verb
 - What do you want to do?
 - Request something (**GET**)
 - Send something (**POST**)

FUNDAMENTALS

HTTP



FUNDAMENTALS

API(s)



FUNDAMENTALS

API(s)

- Examples
 - Google maps
 - Twitter
 - Email (Gmail, Outlook etc)
- What are they?
- Why are they important?

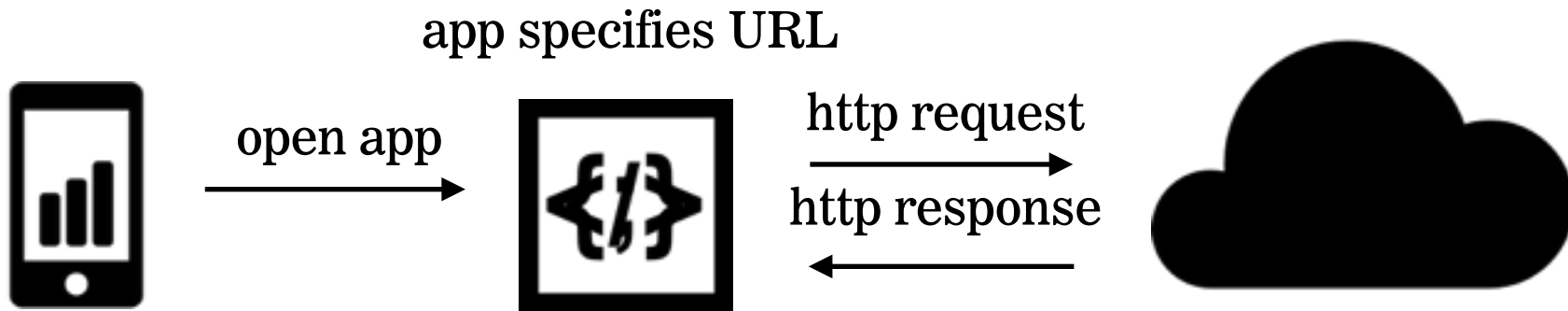


Winning in the API Economy

Using Software and APIs to Transform your
Business, Drive Revenues, Broaden Distribution
and Unleash Innovation

FUNDAMENTALS

API(s)



FUNDAMENTALS

JSON

API

JSON (ECMA - 404)

- Not a data type
- Data format
 - Structured
 - Text based
 - Programming language friendly
 - Javascript
 - Ruby



JSON

```
{ "alter_ego": "alfred", "name": "Alfred Pennyworth", "gender": "male" }
```

JSON

```
{  
  "characters": [  
    { "name": "Alfred Pennyworth", "gender": "male" },  
    { "name": "Selina Kyle", "gender": "female" },  
    { "name": "Harper Row", "gender": "male" },  
    { "name": "Tim Drake", "gender": "male" },  
    { "name": "Kate Kane", "gender": "female" },  
    { "name": "Barbara Gordon", "gender": "female" }  
  ]  
}
```


JSON Format Rules

- Object definitions
 - Start with {
 - End with }
- Collections
 - Start with [
 - End with]
- Objects contain one to many key value pairs
 - key: value



FUNDAMENTALS

JSON.ORG

5-10 MIN BREAK



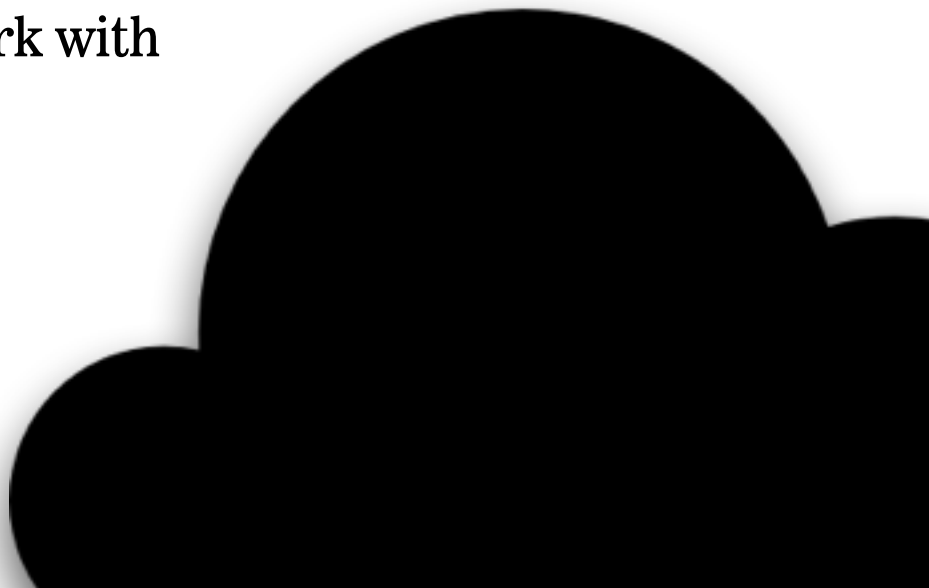
TREAT!

<https://vimeo.com/88343326>

API

How do we work with API(s)?

- Ask for some data
 - Either JSON or XML
- Convert it into a data type we can work with
- Do some cool stuff hopefully





Call API(s)

- Simple command to test API(s)
 - curl
 - `curl -X GET http://bewd4-rails-class4.herokuapp.com/api/characters`
 - Alternative - Chrome plugin (Postman)
- Ruby example



Exercise

- Teddit News
 - TIME : 20 min
 - Follow the instructions in the exercise



PRACTICE!