

BACK END WEB DEVELOPMENT

CLASS 04 - HASHES, COLLECTIONS & APIS

AGENDA

QUIZ - CALL ME!

INTRO TO BASIC API'S & JSON

BUILD SOMETHING COOL!

GIT IT!

YOU SHOULD KNOW HOW TO DO THIS

:-)

REVIEW COLLECTIONS

ARRAY

```
shoes = ["high_heels", "flats", "sneakers"]
```

```
puts shoes[0]
```

array = collection of things in 'number' slots

HASHES

```
shoes = {}
```

```
shoes["mui_mui"] = {name: "Red Pumps", size: "6"}
```

```
puts shoes["mui_mui"]
```

hash = collection of things in 'named' slots

CALL ME!

QF_CALLME.RB

time: 20 minutes

TEDDIT - BASIC

HOMEWORK REVIEW BY PEER

TIME: 10 MINUTES

APIS

GUI is Graphical User Interface:
a way for users to interact with a website.

<http://mashable.com/>

API is Application Programming Interface:
a way for programs to interact with a website.

<http://mashable.com/stories.json>

MORE ABOUT APIS

Application Programming Interface

An API can also be a way for two *things* to interact with each other without knowing about all of the stuff inside.

- Cars have APIs.
- Web sites have APIs
- Objects have APIs.

WHY USE APIS?

You can read data from other web sites
Your web site can provide data to others

APIs are a basic skill for designing Objects!

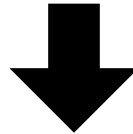
APIs are also very important in Rails!

WEB APIS USE 'JSON' TO SHARE DATA

"JavaScript Object Notation"

It was originally created for JavaScript, but pretty much everything uses it now, even some databases.

The syntax is very similar to Ruby hashes.



```
JSON: [ { "NY": "New York", "LA": "Los Angeles", "SYD": "Sydney", "LDN": "London" } ]  
ruby: [ { "NY" => "New York", "LA" => "Los Angeles", "SYD" => "Sydney", "LDN" => "London" } ]
```

HASHES DEMO

REDDIT API HACK

APIS WITH RUBY

1. Ask for some data
2. Convert it into a format we can work with
3. Do cool stuff

How to get started:

```
gem install rest-client
```

JSON tools come pre-installed with Ruby!

```
** use pry at your command line **  
  
require 'json'  
require 'rest-client'  
reddit_json = JSON.load(RestClient.get('http://www.reddit.com/.json'))
```

TEDDIT + API'S

TEDDIT_API.RB

time: 90 minutes