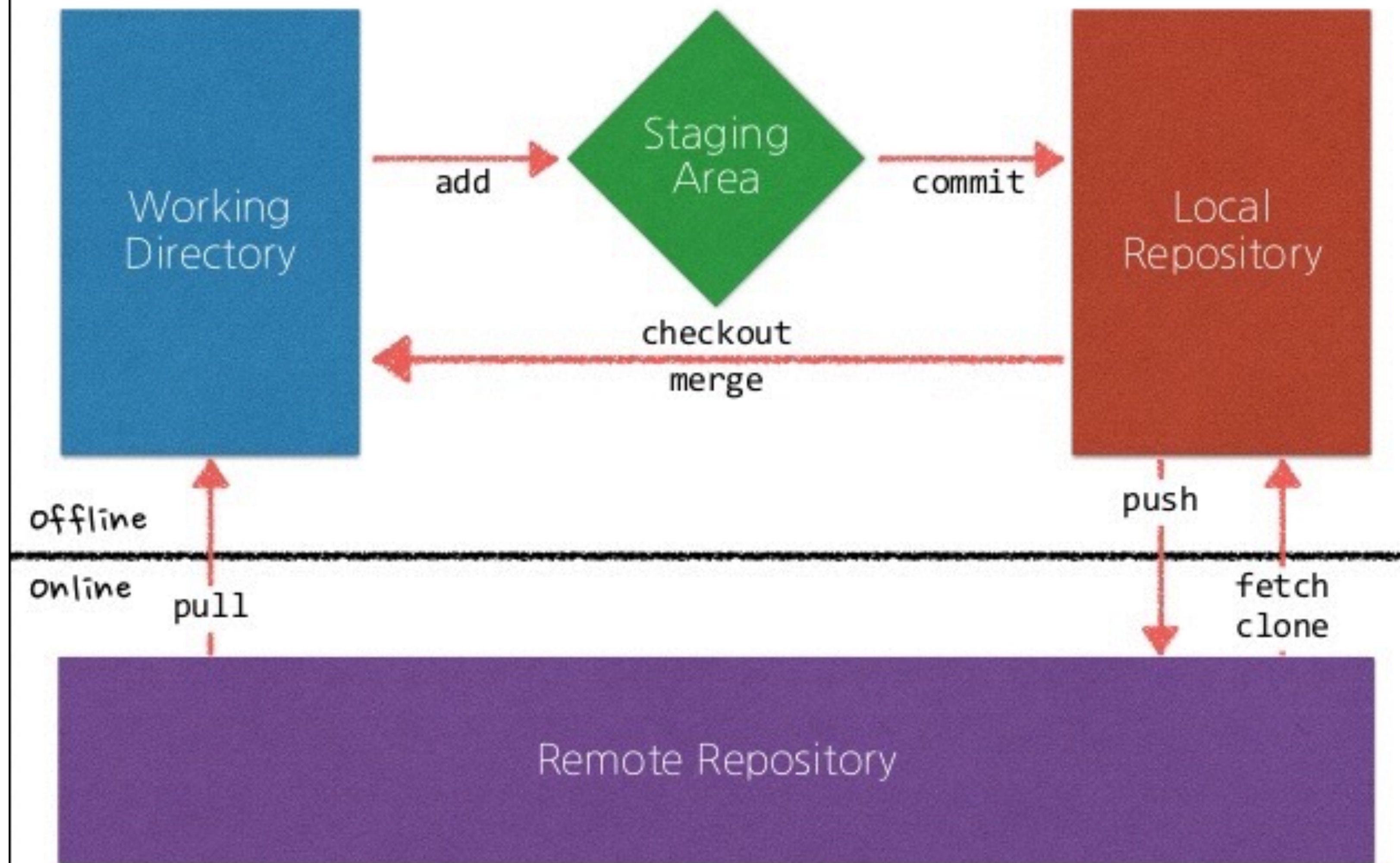# Javascript

CC Lab Week 3

PComp shopping done?!
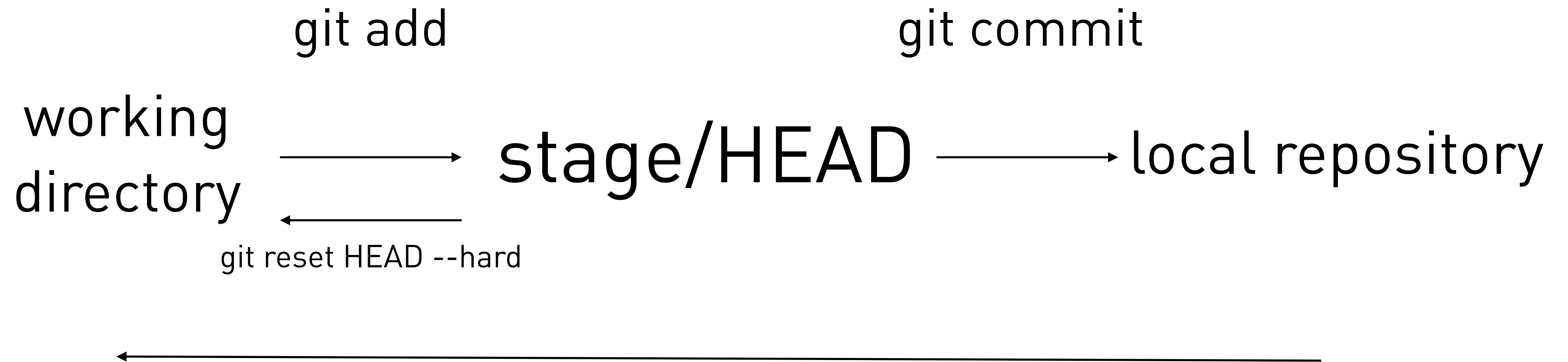
Let's talk about git and terminal
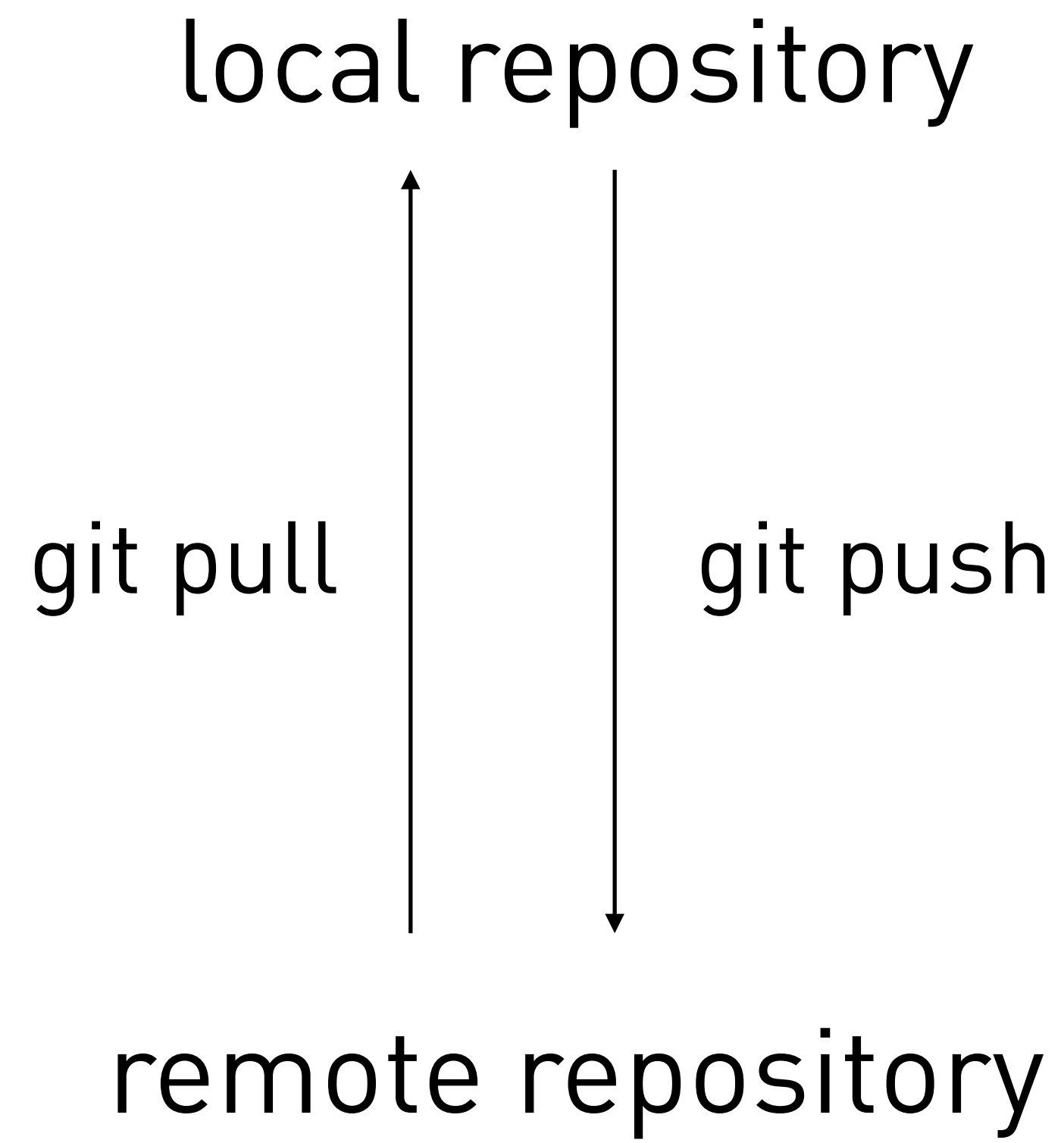
GIT Structure

git init

folder $\longrightarrow$ local repository

git add   git commit

working
directory ————————————▶ stage/HEAD ————————▶ local repository
          ◀————————
       git reset HEAD --hard

◀————————————————————————————————————

local repository

git pull   git push

remote repository

API

Application Program Interface

Is a set of routines, protocols, tools for building software application

In practice, most often an API is a library that includes specifications for routines, data structures, object classes,and variables.

API on the web

On the web, an API is a way for your code to get information from a third-party. The API returns JSON or XML files.

You send hypertext transfer protocol (HTTP) requests to get it.

JSON file?!

"JSON (canonically pronounced /ˈdʒeɪsən/ jay-sən;[1] sometimes JavaScript Object Notation) is an open-standard format that uses human-readable text to transmit data objects consisting of attribute–value pairs. " - wikipedia

You can use AJAX to parse through information (as JSON objects) found in APIS.

extend read: https://www.copterlabs.com/json-what-it-is-how-it-works-how-to-use-it/

How does it look like?

```
var teacher = {

    "firstName" : "Sven",

    "lastName" : "Travis",

    "job" : "Professor",

    "degree" : "MFA"

};
```

```
//java script literal notation

var student = {

        firstName: "Sven",

        lastName: "Travis",

        height: 900

};
```

XML file?!

Extensible Markup Language

Is file format used to create common information formats and share both the format and the data for web and elsewhere

How does it look like?

```
<teacher>

    <firstName> Sven </firstname>

    <lastName>Travis</lastname>

    <job>Professor</job>

    <degree>MFA</degree>

</teacher>
```

Let's try using JSON

But we need an API key first.

API key:

"An application programming interface key (API key) is a code passed in by computer programs calling an API (application programming interface) to identify the calling program, its developer, or its user to the Web site." - wikipedia

https://www.wunderground.com/

get your api key

see an example from WU

a handful chrome extension

https://chrome.google.com/webstore/detail/jsonview/chklaanhfefbnpoihckbnefhakgolnmc

clone our class repo on your computer

Homework

Create a repo on Github, then clone it.
In this repo, make an interactive page using jQuery and API (please don't use wunderground).
You need to commit it a lot (like more than 5 times), don't be afraid of using git reset.