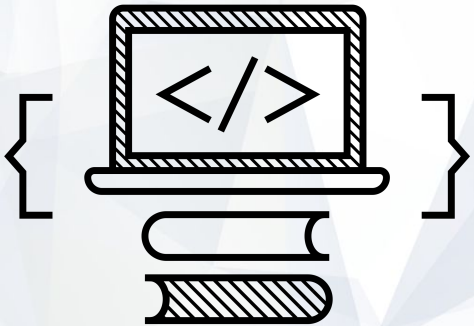
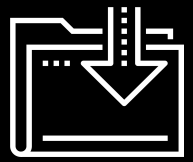


Web APIs

Coding Boot Camp

Module 04



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JavaScript Review

What is the difference?

= vs == vs ===

What is the difference?

= vs == vs ===

= Assigns a value to a variable.

```
var itemsInBag = 3;
```

== Compares values regardless of type.

```
if (“4” == 4) {
  // this code will run!!
}

If (“1” == true) {
  // this code will run!!
}
```

=== Compares value AND type

```
if (“4” === 4) {
  // this code will NOT
run!!
}

If (“1” === “1”) {
  // this code will run!!
}
```

== can be dangerous. Use === if possible

Imagine a block of code like this which enables a user to access an account:

```
if (isAuthorized == true) {
  // display account here
}
```

But what if the back end engineer configures the API like this?

```
If (usersPasswordMatchesHashInDB) {
      // allow user access
      isAuthorized = true;
   } else {
      // send error code
      isAuthorized = 1;
   }
```

OH. DEAR. GOD. NO!!!!

What are primitives?

What are primitives?

- Strings
- Booleans
- Numbers
- Null
- Undefined

What kind of data structure is this?

```
var StationContextInitialConfigs = {
    station: '',
    setStation: null,
    moniker: '',
    setMoniker: null,
    stationUrl: '',
    setStationUrl: null,
};
```

What kind of data structure is this?

```
var StationContextInitialConfigs = {
    station: '',
    setStation: null,
    moniker: '',
    setMoniker: null,
    stationUrl: '',
    setStationUrl: null,
};
```

Object

What kind of data structure is this?

What is this?

```
["hip", "hip"];
```

What kind of data structure is this?

What is this?

```
["hip", "hip"];
```

Hip Hip Array!!

Bdeets 7:56 PM

Image from iOS

🤣 8 😂 1

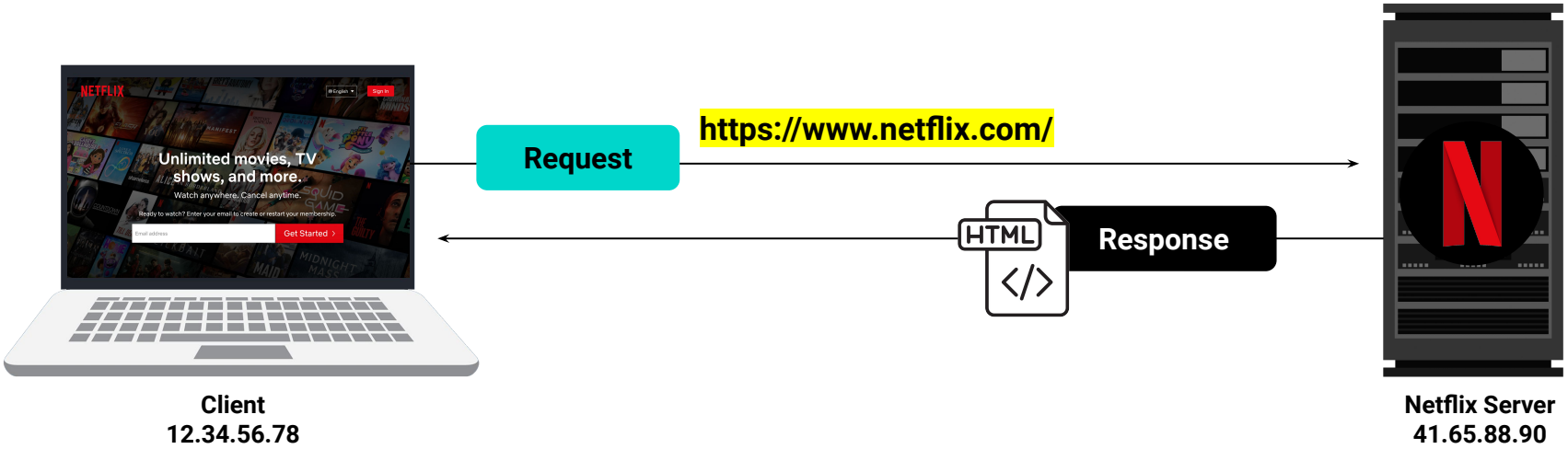
5 replies Last reply today at 4:46 PM

What is the web browser?

A **web browser**, or browser, is a program used to access information on the World Wide Web.

Browsers Access Information on the Web

Every webpage, image, and video on the web can be accessed via a specific **Uniform Resource Locator (URL)**. Browsers use the URL to retrieve resources from a web server and display them on a user's device.

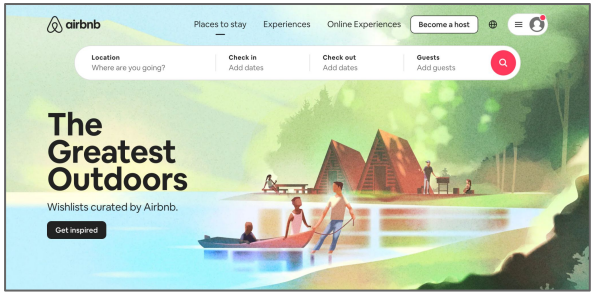


What is an API?

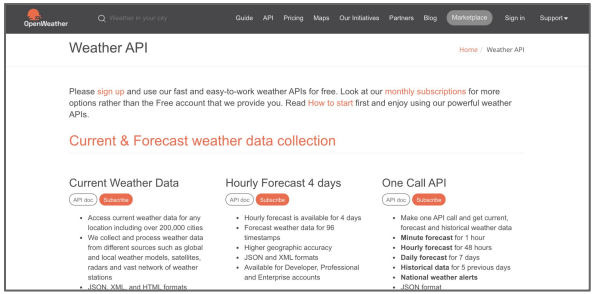
An **API** (Application Programming Interface) is a set of methods, properties, events, and URLs that developers use to interact with components of a user's web browser.

Application Programming Interface

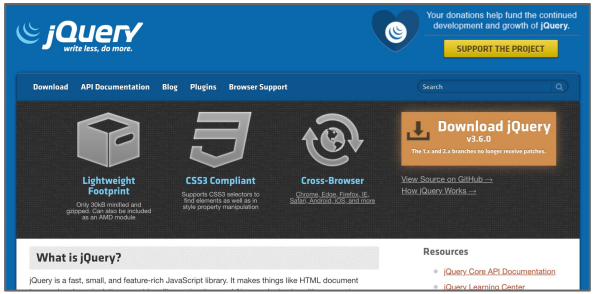
APIs can also interact with data sets, hardware or software on a user's computer, and third-party software and services.



[AirBNB](#) uses Google's API for maps



Google Searches for weather uses the [Weather API](#)

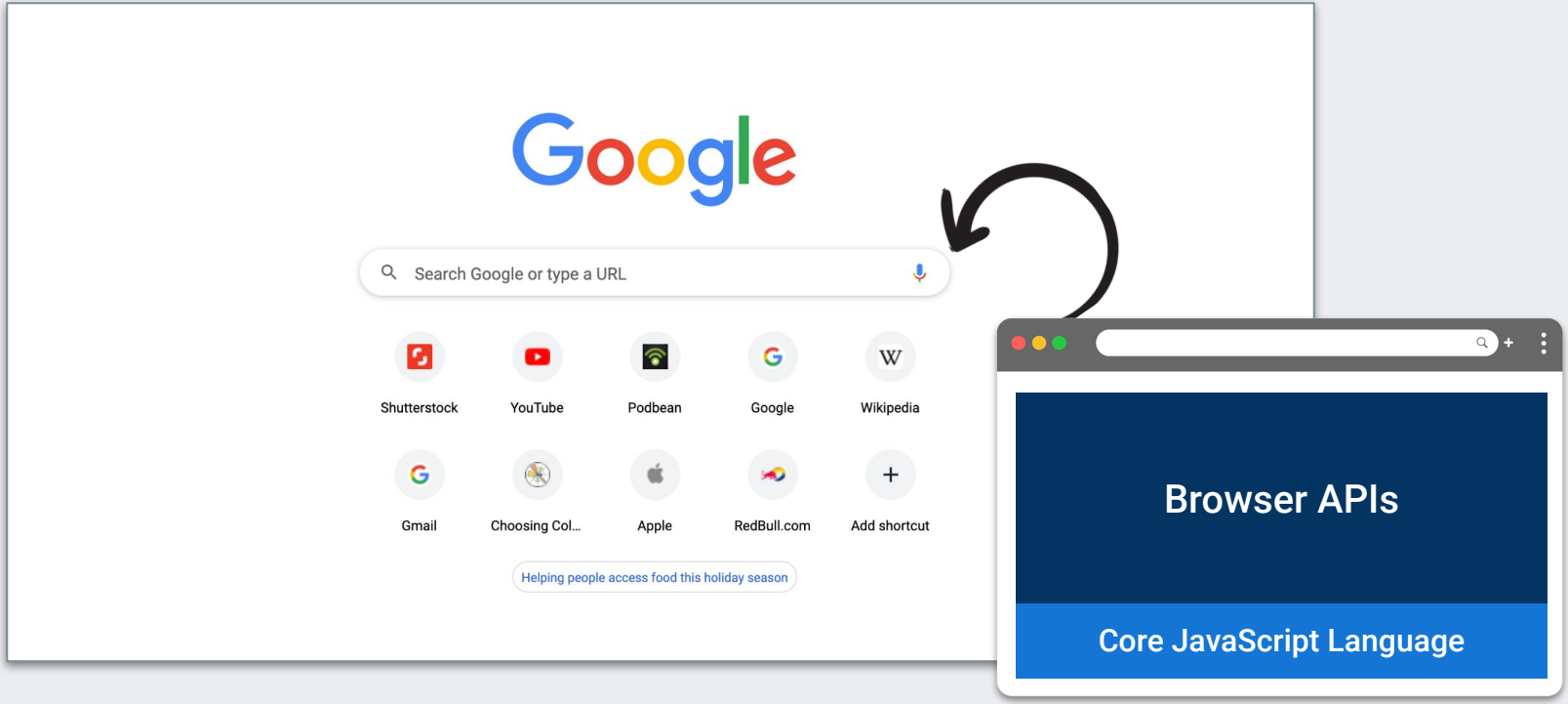


Even [jQuery](#) is an API

What is a Web API?

Web APIs Use JavaScript to Manipulate Webpages

Web APIs are built into the web browser and contain methods that allow us to manipulate a webpage using JavaScript.

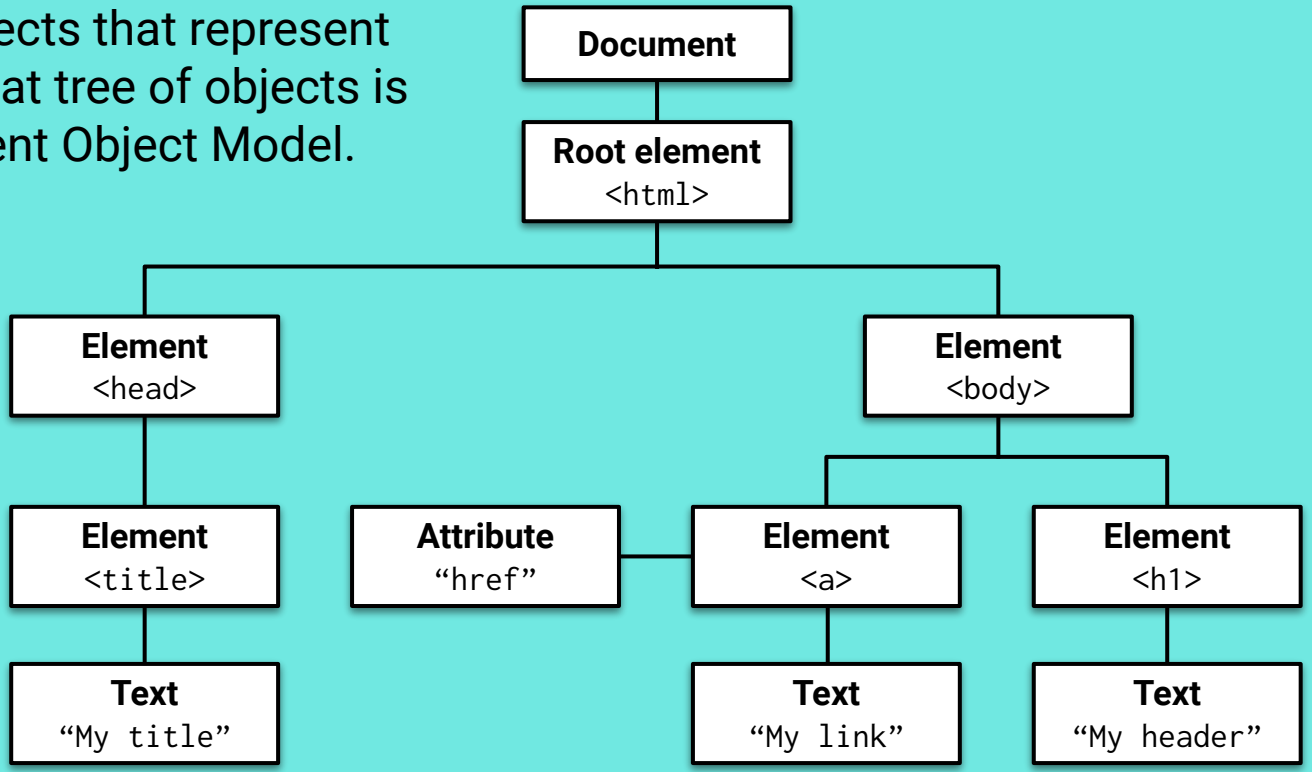


We use Web APIs to create elements and add them to the browser or to add and remove styles and attributes—all via JavaScript.

What is the DOM?

The Document Object Model

When we open a webpage, the browser creates a tree of objects that represent the opened page. That tree of objects is the DOM, or Document Object Model.



Using the DOM, we can manipulate the HTML elements on the page via JavaScript.

Instructor Demonstration

Mini Project