



Web APIs

Coding Boot Camp

Module 04





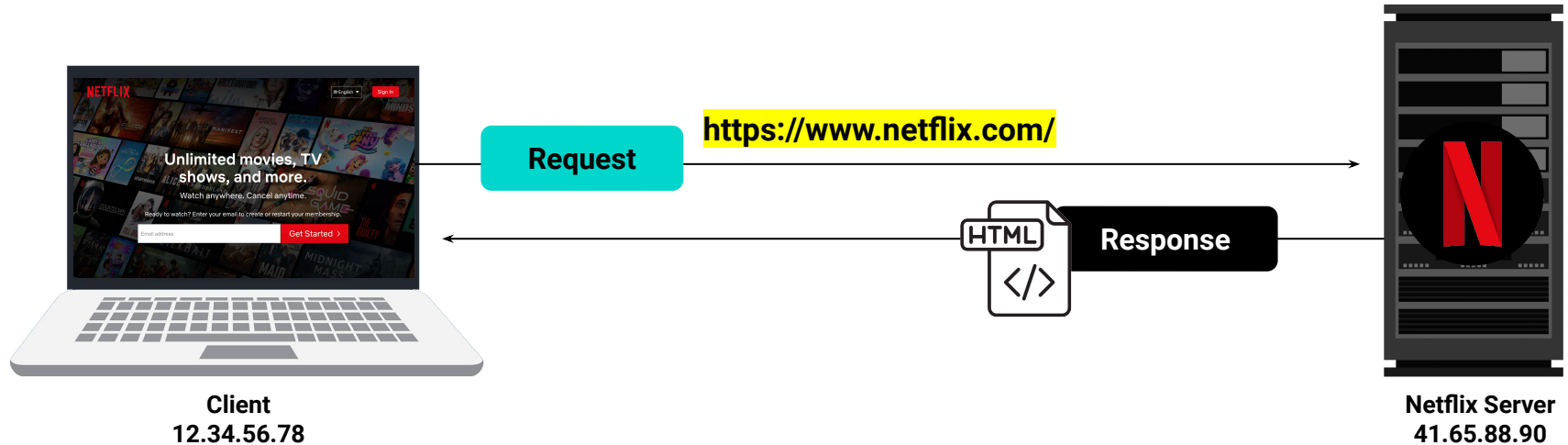
What is the web browser?

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



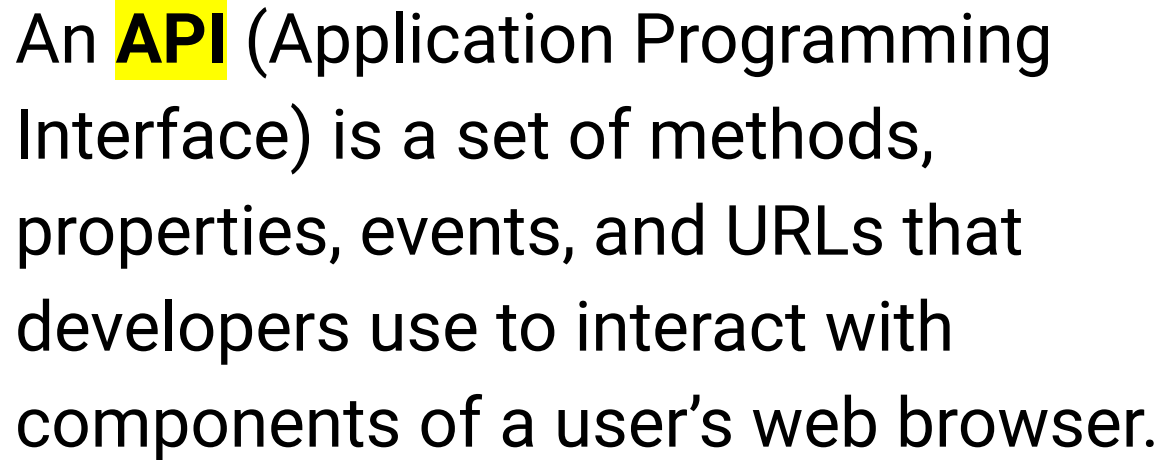
Browsers Access Information on the Web

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.





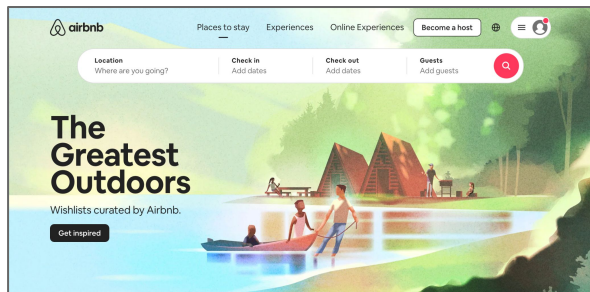
What is an API?



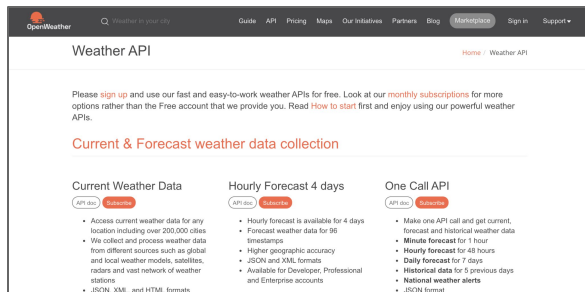
An **API** (Application Programming Interface) is a set of methods, properties, events, and URLs that developers use to interact with components of a user's web browser.

Application Programming Interface

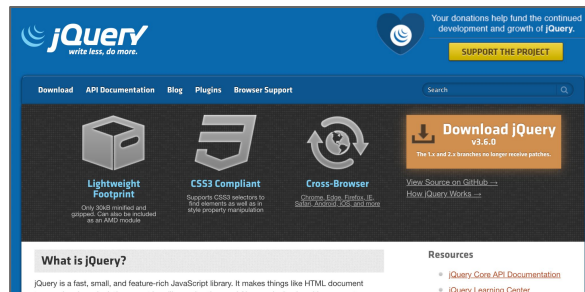
APIs can also interact with data sets, hardware or software on a user's computer, and third-party software and services.



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



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



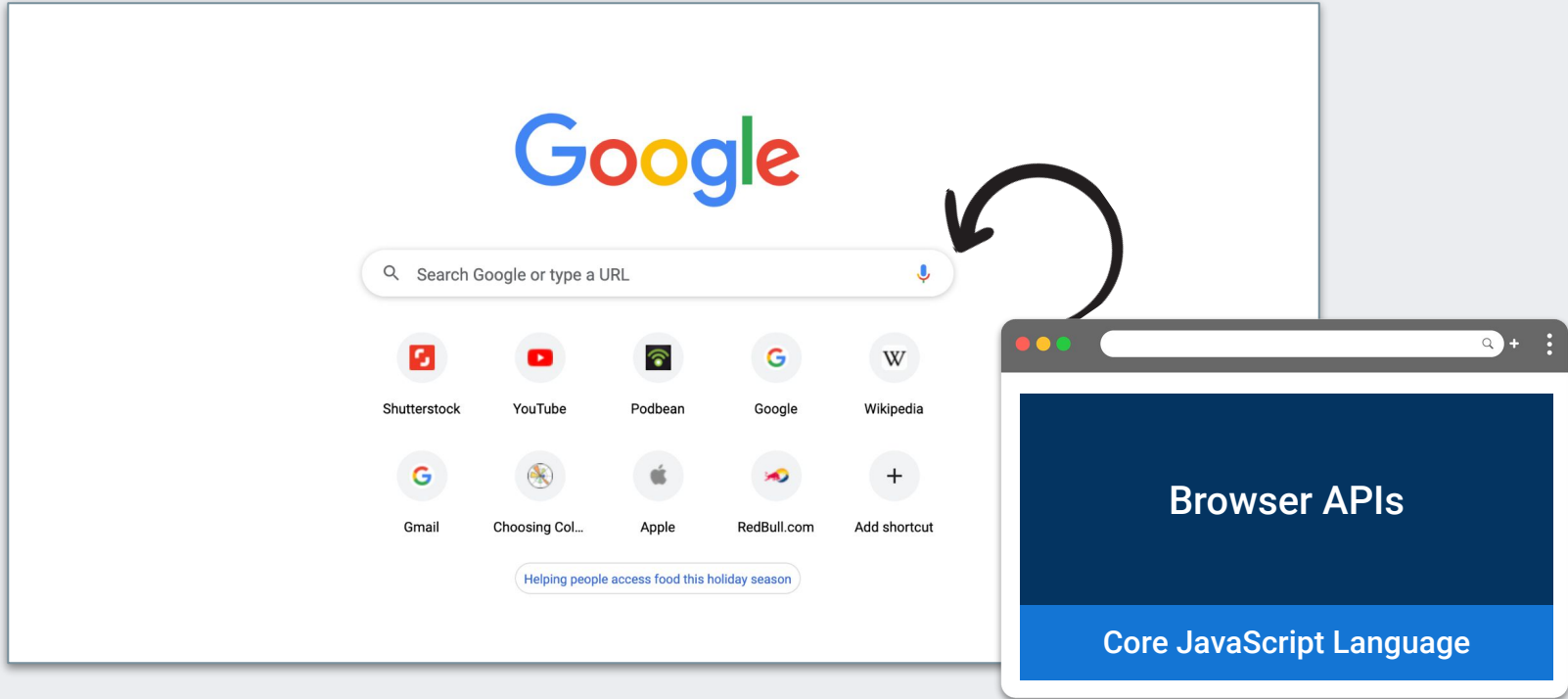
Even [jQuery](#) is an API



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.





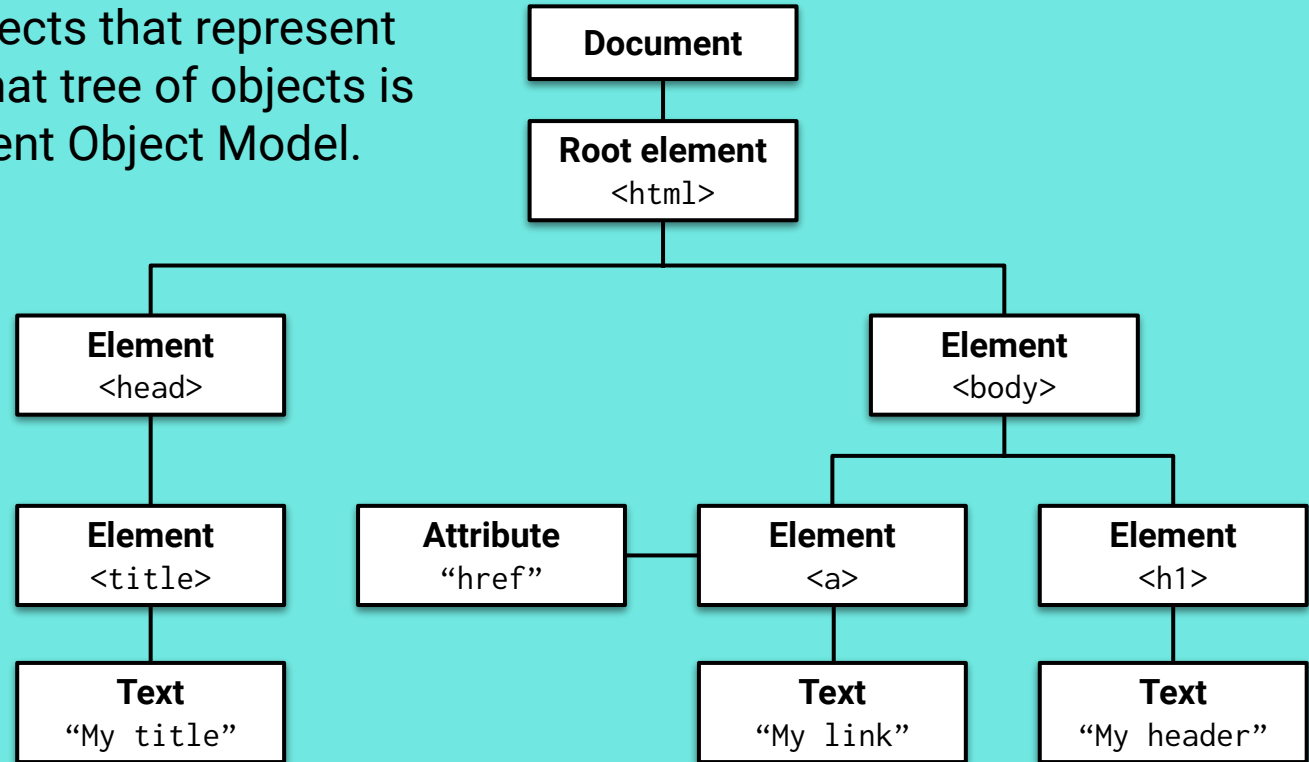
We use Web APIs to create elements and add them to the browser or to add and remove styles and attributes—all via JavaScript.



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.

Today's Goals

By the end of today's class you should be able to:

01

Inspect the Window object.

02

Traverse the DOM using various Web APIs.

03

Query the DOM for elements by their selector.

04

Add styles to specific elements using `setAttribute()`.

05

Create and append elements to the document.

06

Implement timers using `setInterval()` and `clearInterval()`.



Instructor Demonstration

Mini Project



Instructor Demonstration

Window Object



Your turn - Window Object

Follow the instructions in the Readme.md file of folder:
[02-Stu Window-Object](#)

Suggested Time:

15 minutes



Instructor Demonstration

Traverse DOM



Your turn - Traverse DOM

Follow the instructions in the Readme.md file of folder:
[04-Stu Traverse-DOM](#)

Suggested Time:

15 minutes



Instructor Demonstration

Setting Attributes



Your turn - Setting Attributes

Follow the instructions in the Readme.md file of folder:
[06-Stu Setting-Attributes](#)

Suggested Time:

15 minutes

15 Minute

Break





Instructor Demonstration

Create Append



Your turn - Create Append

Follow the instructions in the Readme.md file of folder:
[08-Stu Create-Append](#)

Suggested Time:

15 minutes



Instructor Demonstration

Timers & Intervals



Your turn - Timers & Intervals

Follow the instructions in the Readme.md file of folder:
[10-Stu Timers-Intervals](#)

Suggested Time:

15 minutes

Questions?



*The
End*