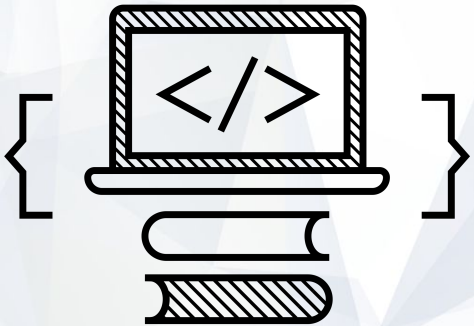
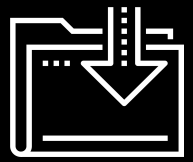


Third-Party APIs

Coding Boot Camp

Module 05



What languages do we use to build web apps?

The Languages of the Web

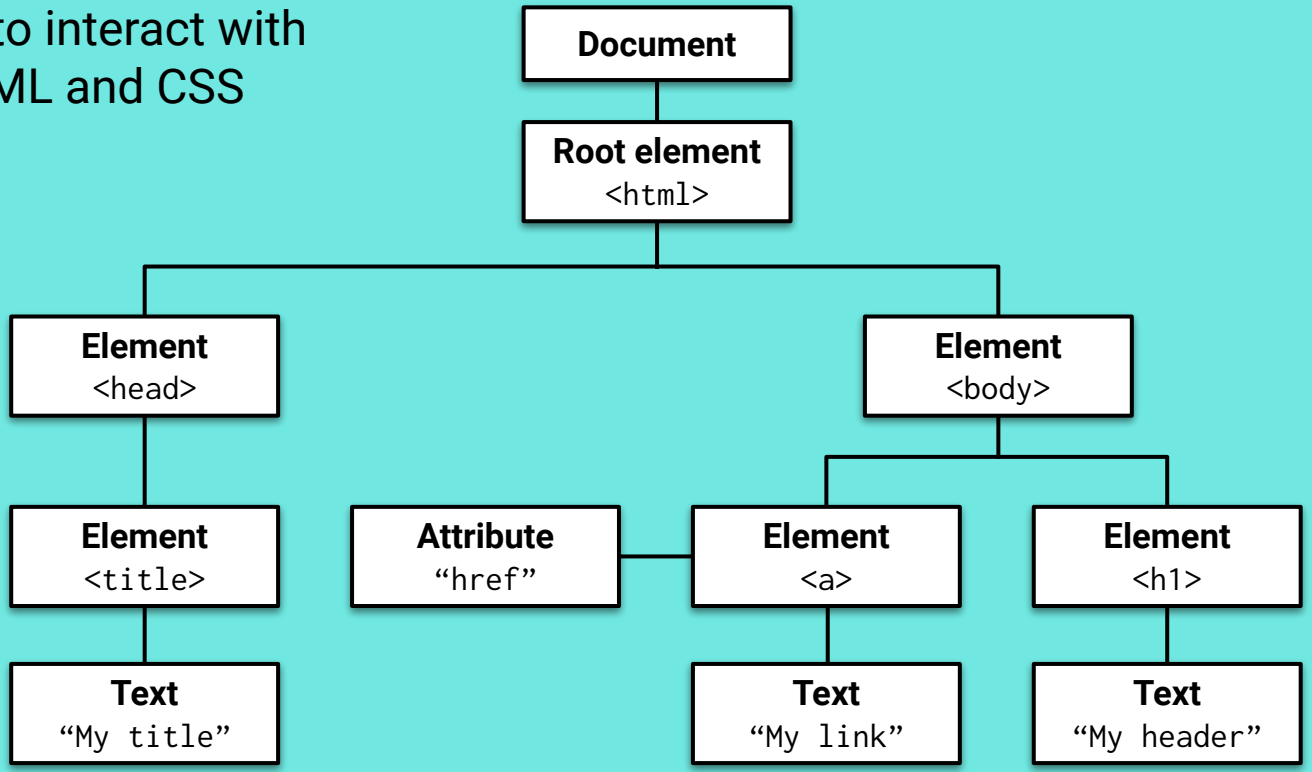
We use HTML for content and structure, CSS for styling and layout, and JavaScript for handling logic, interaction, and fetching data.

HTML	CSS	JavaScript
Used to write content. 	Used to format content. 	Used to create dynamic web applications that take in user inputs, change what's displayed to users, animate elements, and much more. 

How do we interact with HTML and CSS using JavaScript?

The DOM Web API

The document object model interface enables developers to interact with the application's HTML and CSS using JavaScript.



The DOM Web API

Some of these interactions include the following:

Creating HTML elements.

Changing HTML content and attributes.

Binding listeners to execute a function upon a certain event.

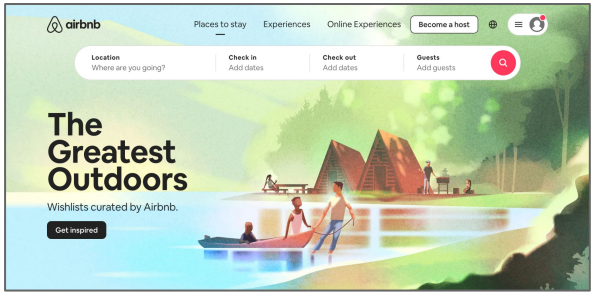
Is the DOM built into the JavaScript language?

Nope. The browser provides it!

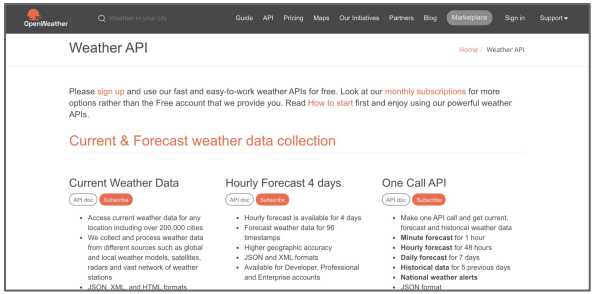
JavaScript and APIs

JavaScript and APIs

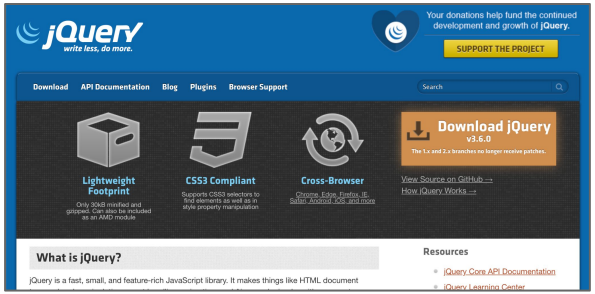
On its own, JavaScript is very limited. Luckily, the browser provides numerous application programming interfaces (APIs) that we can use in JavaScript code.



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



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



Even [jQuery](#) is an API

JavaScript and APIs

Browser-based APIs we've used include the following:

The DOM to interact with our HTML and CSS.

The console to help us debug and print messages.

Timer functions with `setTimeout` and `setInterval`.

Are there APIs we can use that aren’t provided by the browser?

Yes, there are! The web is filled with tools that other developers have built and made available for us to use in our projects!

Third-party APIs

These third-party APIs exist to help us carry out specific tasks that we can do ourselves with CSS or JavaScript but that might be too complex or time-consuming to do by hand.

Third-party APIs

These APIs can help us in the following ways:

Reduce JavaScript code for DOM manipulation.

Set up a styled and laid-out webpage quickly with premade CSS.

Carry out tedious tasks like converting time or currency values.

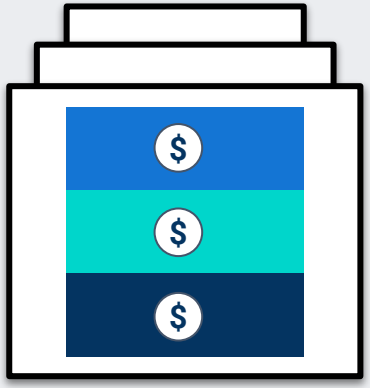
How can we learn to use and implement these APIs?

How to Learn Third-Party APIs

Because these APIs are provided by developers (like us!) of all different backgrounds, there is no one correct way to learn how to use them. What's important is that you identify what problem an API solves for you and how to properly integrate it into your existing application.

Problem

Solution



How to Learn Third-Party APIs

You can try the following strategies to learn more about specific APIs:

Read the official documentation and practice with the provided examples.

Reverse-engineer finished code to see how something was accomplished.

Build something from scratch.

Debug a broken app using Chrome DevTools.

And most importantly, ask questions!

Instructor Demonstration

Mini Project