JavaScript

Web Development Boot Camp
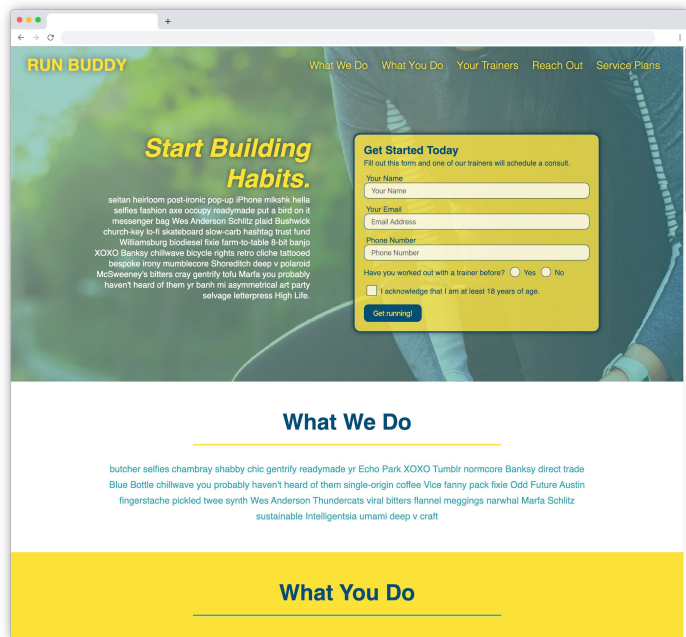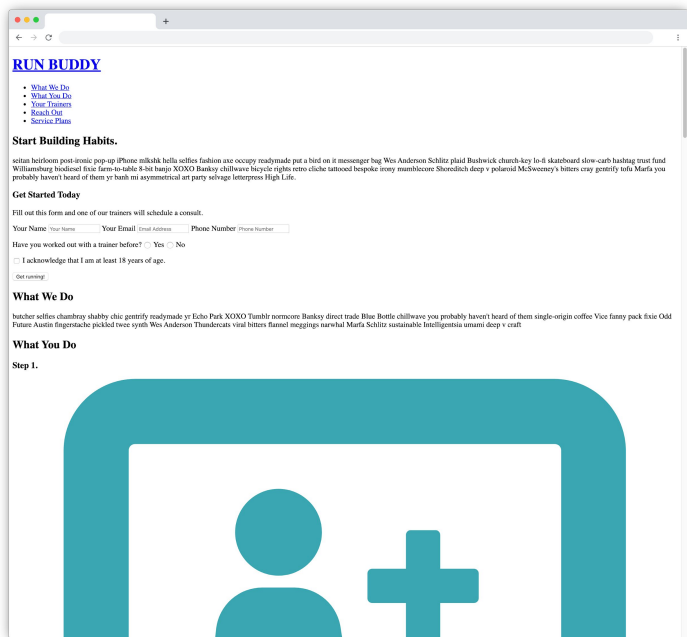
Unit 03

What do we use HTML and CSS for?

HTML & CSS: Languages of the Web

We use HTML to create and organize content on a page and CSS to apply styles, layout, and even animation to that content.

What are some examples of how users interact with a webpage?

Interaction on web pages

We interact with webpages in many ways on a daily basis. Typically the webpage will respond or react to these interactions, making the page feel more dynamic and alive.

These interactions include the following examples:
- Submitting an HTML form to comment on an article.
- Playing audio or video at the press of a button on the page.
- Using the device's camera or microphone to enable a conversation.
- And so much more!

Can we achieve these types of interactions using only HTML and CSS?

HTML & CSS ≠ Functional

While HTML and CSS offer some great built-in features that give users a sense of interaction or functionality on a site, they cannot handle the complex tasks that occur in response to these interactions.

For that reason, web developers utilize another programming language specifically designed for these tasks.
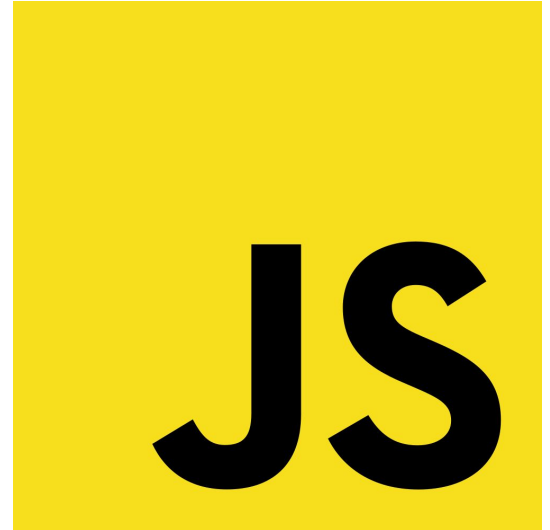
So what is this language that works with HTML and CSS?

The third language of the web: JavaScript!

JavaScript is a programming language originally created to be run in the browser with the intention of enhancing a webpage's capabilities. Today, nearly every page we visit on the internet depends heavily on JavaScript to work.

While HTML and CSS handle content and design, JavaScript handles the overall functionality of the application to make it feel more alive and dynamic.

In what ways do we use JavaScript?

How We Use JavaScript

Front-end developers use JavaScript primarily to dynamically affect a webpage to enhance the user's experience. No other programming language can run in the browser, so JavaScript is a must-have skill for web developers.

JavaScript can be used for the following purposes:
- Showing a user personal data only after they log into the application.
- Fetching weather data to display and update on the page.
- Informing users that they are missing information on a form.
- Remembering a user's preference between light and dark mode themes.
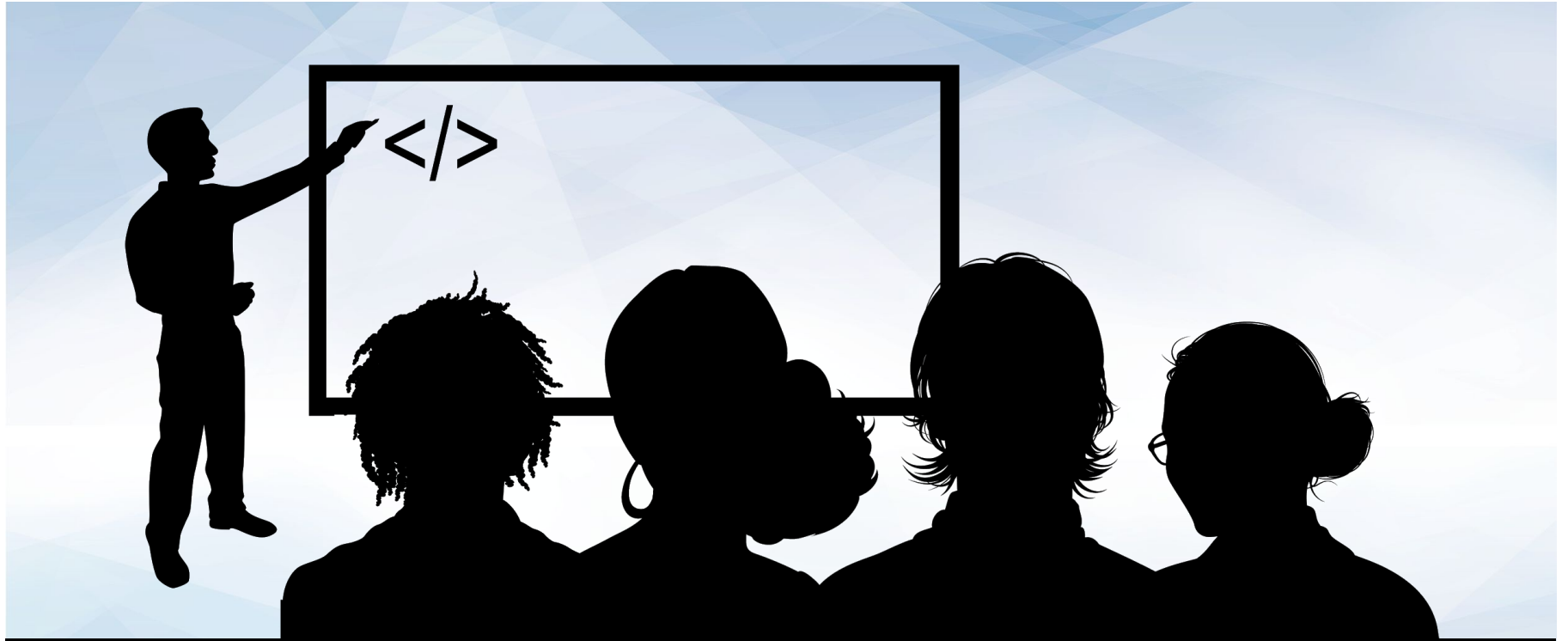
How can we learn to use JavaScript?

How to Learn JavaScript

Unlike some other programming languages, JavaScript doesn't force developers to write code in a specific way. As a result, JavaScript might seem a bit complicated at first, but it can make development work feel incredibly fun and creative as you get to use it more and more.

Try some of the following techniques to learn JavaScript:
- Read the docs and practice with the provided examples.
- Reverse-engineer finished code to see how it was created.
- Build something from scratch.
- Debug a broken app using Chrome DevTools.
- And most importantly, ask questions!

Instructor Demonstration
Mini-Project