Outline

Checkpoint 1

Intro to HTML and CSS

Welcome to the next stage in your Thinkful journey! At this point, you've learned a few of the fundamentals of JavaScript, and you should feel more comfortable writing some basic code.

Now, it's time to explore two other foundational concepts: HTML and CSS. Learning about HTML and CSS may be the most important step on your path to becoming a web developer. These ideas can get fairly sophisticated, but don't worry. The checkpoints in this module will start at ground zero and help you build your understanding step by step.

By the end of this checkpoint, you will be able to do the following:

- Define HTML and CSS
- Uncover the existing HTML and CSS code on any website

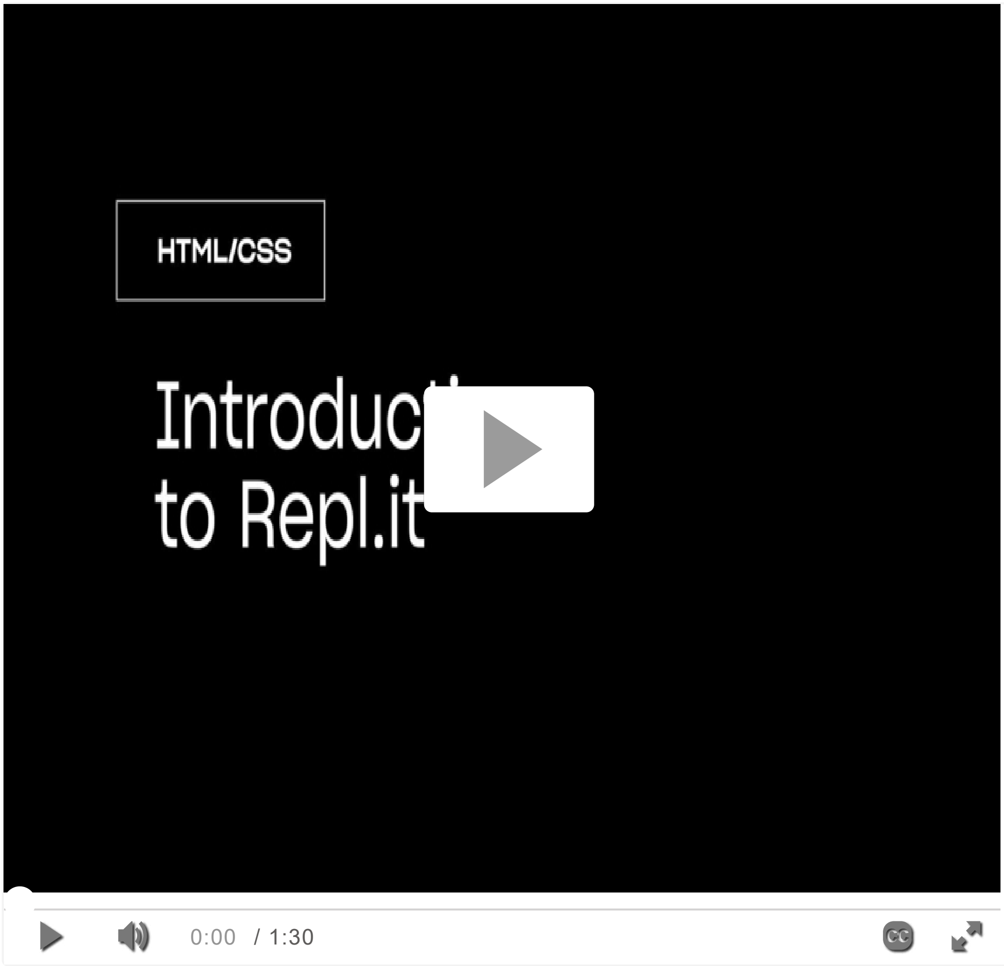
Your portfolio

At the end of this module, you will create your own portfolio website. It will look something like this portfolio example.

Feeling excited? Maybe a bit nervous? No matter what you're feeling right now, you should know that you can do this! Keep your personal and professional goals in mind as you make your way through this module. You're going to learn a ton.

Repl.it review

As you learn HTML and CSS, you'll continue to use Repl.it, the browser-based coding environment you used with JavaScript. As a refresher, watch this short video about best practices to use when working with the REPLs embedded in these HTML and CSS checkpoints.



What is HTML?

Hypertext Markup Language, commonly called HTML, is a straightforward programming language that is used to create the structure of a web page. The basic idea of HTML is that the brackets `< >` surrounding the code of a web page tell the web browser what information it's working with.

At its most basic level, *hypertext* is digital text that references other locations, like one website linking to another. Thanks to the hypertext in HTML, a web page can include links that allow the user to connect to other locations or pages in the website or another website. As the name implies, HTML is also a *markup language*, which means that it uses *tags* in the brackets shown above, like `<head>` and `<body>`, to create HTML *elements*, all of which dictate how content is displayed within a web browser. HTML, like other markup files, relies on familiar words that humans can actually read, rather than just technical programming syntax.

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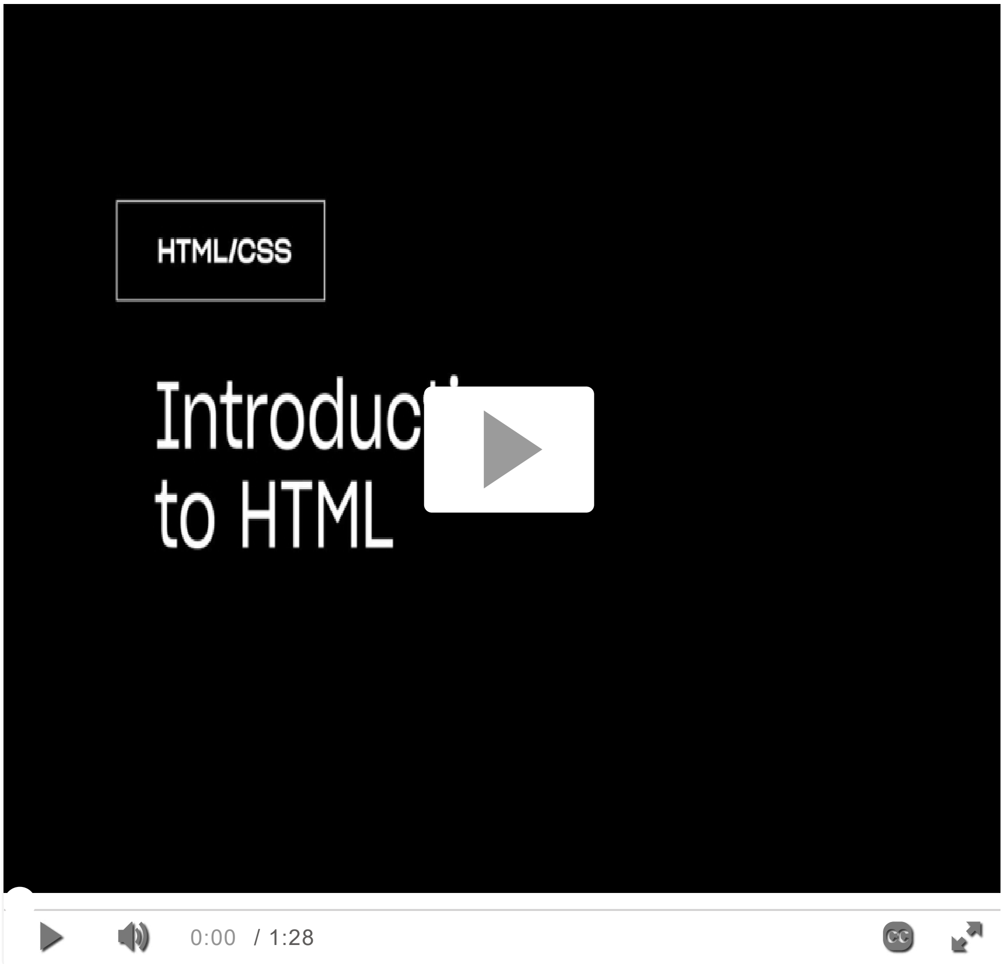
HTML was created in 1989. It has matured over time, and the most current version is HTML5. To learn more about HTML, watch the video below.



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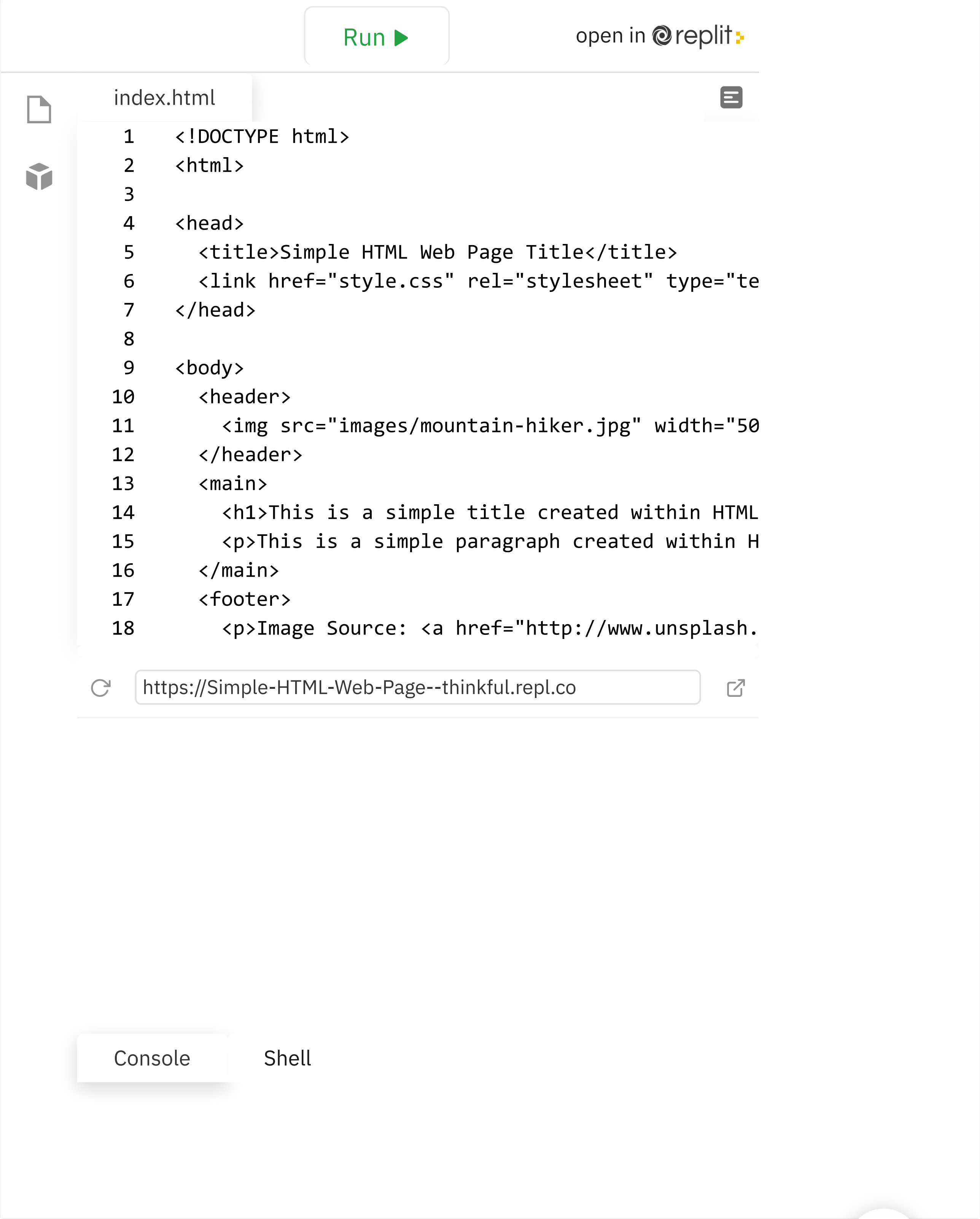
As a foundational component of a website's display, HTML is a great language for adding these elements to a web page:

- **Text:** Words and written content
- **Media:** Images, videos, and other visual or auditory elements
- **Links:** Clickable paths to other places, like other websites
- **Containers:** Elements that are used to give web pages structure for layout purposes

Now, it's time to take a closer look.

Demo: Just HTML

The following is an example of a web page that uses *only* HTML. Review the code and play around. What do you notice?



```
<!DOCTYPE html>
<html>

<head>
  <title>Simple HTML Web Page Title</title>
  <link href="style.css" rel="stylesheet" type="te
</head>

<body>
  <header>
    <img src="images/mountain-hiker.jpg" width="50
  </header>
  <main>
    <h1>This is a simple title created within HTML
    <p>This is a simple paragraph created within H
  </main>
  <footer>
    <p>Image Source: <a href="http://www.unsplash.
```

https://Simple-HTML-Web-Page--thinkful.repl.co

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What is CSS?

Cascading Style Sheets, or CSS, is a low-barrier-to-entry programming language that was specifically created to supplement HTML. As a *style sheet language*, CSS is the code that expresses and explains how a markup language, like HTML, should get presented. When used alongside HTML on a web page, CSS can add a variety of formatting, design, style details that wouldn't otherwise be seen by a user.

To learn more about CSS, watch the video below.

Notably, CSS can add many elements to HTML, such as those listed below.

- **Text:** CSS assigns specific fonts, text sizes, alignments, and colors to text.

- **Media:** CSS assigns the image sizes for images on a web page, and it can add rounded corners and fancy borders to those images.
- **Links:** CSS assigns colors to links.
- **Containers:** CSS assigns the height and width of containers on a web page, as well as the colors or images that are used in the background to provide structure and style.

Demo: HTML with CSS

Take a look at the example in the Repl.it below, which uses both CSS and HTML. How does this one compare with the Repl.it you looked at above?

Finding HTML and CSS

A key part of learning how to code is learning where, and how, can see existing code for yourself. Nearly all the code that is used to create a web page—including HTML, CSS, and JavaScript—can be found online. You just have to know where to look.

Note

A note on browsers: You must use Google Chrome to find the HTML and CSS of any web page. If you don't have Chrome installed, take a moment to install it.

You can use the website Mend in this process, or you can pick another site of your own. A screenshot of Mend's home page can be seen below.

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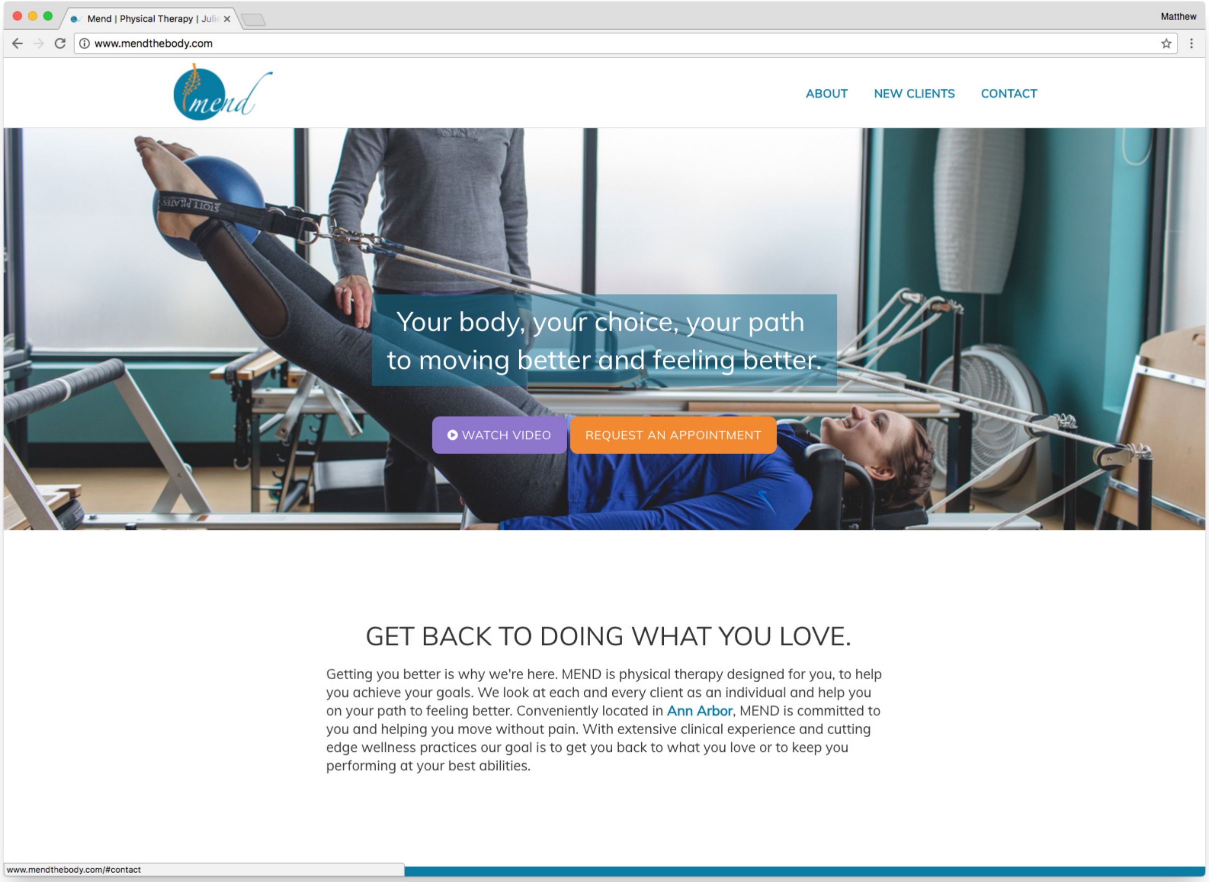

Your body, your choice, your path to moving better and feeling better.

GET BACK TO DOING WHAT YOU LOVE.

Getting you better is why we're here. MEND is physical therapy designed for you, to help you achieve your goals. We look at each and every client as an individual and help you on your path to feeling better. Conveniently located in Ann Arbor, MEND is committed to you and helping you move without pain. With extensive clinical experience and cutting edge wellness practices our goal is to get you back to what you love or to keep you performing at your best abilities.

Steps to finding the HTML

Follow the steps below to view the HTML on the Mend website or another website of your choosing.

1. Right-click the background or text of the web page, which will reveal a drop-down menu.
2. Click the **View Page Source** option in the drop-down.
3. The next page that opens up should reveal all of the HTML code on that web page. Take a moment to look around and review the HTML code. Although you aren't expected to understand any of this yet, you may be able to make sense of some of the code.

Steps to finding the CSS

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The CSS code of a web page is often organized in another web file, which you'll need to look for. Follow the steps below.

1. Right-click the background or text of the web page, which will reveal a drop-down menu.
2. Click the **View Page Source** option in the drop-down.
3. Once you're in the page source, hit `Control+F` (or `Command+F` on a Mac) to open up the **Find** bar. Then, search for `.css`.
4. Your search will likely reveal more than one `.css` file. How many `.css` files are linked to this HTML page?
5. If you can, click on one of the `.css` links to find the CSS.

Pretty cool, huh?

Next steps

Everything you see online is created with code. And you can see that code if you look in the right places. Of course, some websites have fairly simple code, while others are extremely complex. As you learn more about HTML and CSS and begin applying your new technical know-how, you'll become more comfortable reading even sophisticated website code.

Practice

The activity below is only a practice exercise. But the more you practice, the more you'll understand.

First, run the code sample in the Repl.it below to view the project, which uses HTML, CSS, and JavaScript. Then, see if you can answer the questions below.

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1. Delete the CSS page, and run the code again. What happens?
2. Reopen the original code sample to reset. Highlight all the code in the `index.html` file, and then delete it. Run the code again. What happens now?

After working through the questions above on your own, you're likely ready to learn *why* the REPL executed the way it did when you removed certain blocks of code. In the first situation, you deleted the CSS page. As a result, the HTML page displayed the text, images, and links, but there were no styling instructions provided. Without that information, the browser couldn't style the page. In the second case, when you deleted the HTML code, the CSS tried to provide styling, but there wasn't anything to style. As a result, you only saw a blank white web page.

This demonstrates that HTML makes up only the content of a web page, while CSS informs the presentation of that content on the web page.

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Your work

03.04.21 ✓

✓ Completed

Next checkpoint

How would you rate this content?

Report a typo or other issue

Go to Overview

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