

Couch 2 Coder - Build your own website

Introduction and Setup

Welcome to the second iteration of Couch to Coder! In the next few weeks, we will give you all the necessary skills to be able to build your own website from scratch, using HTML, CSS, and a little bit of JavaScript! At the end, we will even show you how you can host this site, so you can share it with friends and family to showcase your new skills!

First, we will show you what you will need to get started.

Tools of the trade

You can work from any Windows, Mac or Linux-based computer. The necessary softwares are available for all 3 operating systems.

The two things we will need is a text editor and a browser to see what we are building. Let's start with the text editor!

We will use Visual Studio Code (or VS Code for short) for our text editor. It's free, featurful, and popular withing the development world. You can use other text editors, but the tools and extensions we will use will be VS Code exclusive.

You can download and install it for free from their website: [Click here](#)

Next, we will need a browser. It's up to you which one you'll prefer, our choice will be Google Chrome - it's free to use, popular, and at the time of writing this course, it has a 65% market share of all browsers. Download it here: [Click here](#)

Once you have both of these installed, we are ready to get started!

Intro to Web Development

Let's talk about the fundamentals of web development! At its core, the modern web was born in the late 80s - early 90s, when the HTTP protocol was created for easy access of multiple different documents via so called "hyperlinks" - the blue links with the underline that you might remember clicking often to navigate in a given website.

HTTP stands for Hyper Text Transfer Protocol, which allowed the developers to create

documents that can be shared online - and what do you know, one of the ways to share documents is by using HTML files - Hyper Text Markup Language documents, which can be enriched using images, styled via CSS and made dynamic with JavaScript! Now we know why most websites can be accessed with the mandatory HTTP prefix in the browser bar.

One thing you will quickly realise is how non-magical development and software engineering is - it is complex, it is deep, but it's by no means some otherworldly, magical secret that only a few chosen ones are privy to!

Most websites meant for the public are using HTML files to describe their content, CSS to style it and JavaScript to make it dynamic. You can think of HTML as the text of a magazine, and CSS as the layout, paragraphs, images added and colours used to enhance the experience of the reader.

Let's create our very first website!

My first webpage

If you've ever tried programming, you're probably aware that traditionally the first program anybody ever writes is a Hello World app. Although HTML is *not* a programming language, it is still a good idea to get something quickly up and running!

First, let's create a folder designated for our coursework - this can either be on our desktop, in our Documents folder or anywhere else where we can find it comfortably!

From this point onwards, we will use our chosen text editor, VS Code, to create new files and folders.

Let's open up VS Code - it pays off to keep it as a quick access icon!

Once we've opened up VS Code, we will be greeted by a lot of options - it might be overwhelming, but don't worry, it will make sense soon!

Let's click on File -> Open/Open Folder, and find the folder we just created, then click `Open` .

Let's create a new folder called `day_1` ! Be mindful of the underscore - it pays off well if you get used to using it instead of whitespaces to separate file or folder names.

This will create the file under the folder which is highlighted. Give it the name `my_first_webpage.html` . The extension `.html` is very important, as are the underscores for separating words!

Let's double click on the file and create our first HTML tag, with the text `Hello World!` in it:

```
<!--in my_first_webpage.html-->  
<h1>Hello World</h1>
```

Then we can save it. Here is our first lesson in efficiency - start using the shortcuts that are given to us by both Macs and Windows machines. To save your file, you can press `command + s` on Macs, or `ctrl + s` on Windows machines. From this point onwards, use these 2 buttons (command and control) interchangeably - command for Macs, ctrl for Windows.

If your saving was successful, the dot next to your filename in the tabs section should change from a dot to an X.

Always save your files - it will not reflect the changes if you forget it.

Once you're done, we can open our file in our browser - right click on the file's name, then `Reveal in finder/explorer`. Once the finder window opened up, click on `Open With -> Google Chrome`, and rejoice at the sight of your first website! Congratulations - now you can consider yourself a web designer!