**Module #2 - So You Wanna Be A Developer... (Required)**

Well, you've come to the right place! Over the course of the next six months you will be undertaking rigorous training to develop the skills necessary to become a web developer.

But you may be wondering—*"What exactly is a web developer?"*

Great question. For many of us, the idea of a *web developer* is one that evokes vague notions of sketching designs, creating websites, and wearing hipster clothing. But the day-to-day work of web development remains a mystery. To get a grasp on a better answer, it's worth taking a step back to understand how the Internet works.

**How the Internet Works—in 50 seconds...**

Most of us take it for granted that when we click a link online—*something* happens. Maybe a chat window pops up... maybe a video loads... or maybe we end up on a new page completely.

This *something* happens seamlessly, despite the Internet being composed of hundreds of thousands of loosely connected networks of machines and software. In fact, each time you visit a webpage—you are actually *communicating* with one of these networks. The network then recognizes your *request* and, in turn, *responds* with a viewable webpage.

In the old days, this was the end of the story. Viewable webpages were simple documents composed of a little code describing how they should look and act, and because the pages were *static*, the transmission was a simple one-way street. A great example of a *static* website would be a simple Geocities page:

But as time went on, the demands and expectations of users increased. Users were hungry for websites that felt live, responsive, and richly interactive. Because of this, new technologies advanced such that more complex code could be embedded into a webpage's makeup.

Instead of a network being restricted to sending a static webpage, it became possible to send dynamic websites capable of doing much more. For example, the modern website—or *web application*, as they are called—is capable of doing any of the following:

* Displaying real-time data to users
* Responding to multiple user interface elements simultaneously
* Synchronizing visual elements between users across locations
* Live streaming videos
* Maintaining encrypted channels for private information
* Algorithmically predicting user preferences based on historic choices
* And much more!

Because of this added complexity, creating these features require a broad expertise in various technologies and programming methods. As experts in the field, *web developers* play the essential role of being the architects behind users' web experiences.

**So, is it sort of like... Graphic Design?**

Unfortunately, not really. The tools used to architect the web are far from the point in which developers can simply *drag and drop* visual components onto the screen. Instead, developers use specialized languages like HTML, CSS, and Javascript to lay out their designs and functional features in code. This makes the process more challenging for beginners, but at the same time, this is the reason every browser on the web can view webpages in the same way.

**Sounds technical... Do I Need to Have a Computer Science Background?**

Absolutely not! In fact, according to studies, nearly 50% of all professional developers are self-taught. Think about this for a moment. Today, there are few skills that you can learn that present the breadth of job opportunities, the quality of job opportunities, and the creative freedom that come with web development. Yet, unlike most industries, the field isn't restricted to those with a formal degree. It's a powerful opportunity for those looking to make a career change or to reinvent themselves.

**If I don't need a degree... how do I prove I'm actually a developer?**

Another great question! If you remain hardworking, diligent, and focused on learning, then you'll be able to prove your expertise by having a portfolio of works. For many of you, this will be a liberating experience. Instead of being judged solely on the basis of your past credentials or work experiences, your actual *works* will become a gateway to your future career.

For this reason, throughout the program, you will be constantly tasked with building web applications for your homework assignments and projects. Take these seriously! They will often feel very challenging—but swing with the punches, and try your hardest on each assignment. If you stay consistent and remain confident, your work will *gradually* become better and give you the proof you need to demonstrate your skills in the professional arena.

**I'm still a bit fuzzy.**

Understandable. Take a stab at the next assignment, and get one step closer to clarity.

**Assignment (Required):**

* [My Future Job... I think?](https://the-coding-bootcamp.gitbooks.io/pre-work-book/content/assignment2.html)

**Additional Reading / Viewing:**

* [What Does a Web Developer Do?](https://www.youtube.com/watch?v=GEfuOMzRgXo)
* [How Do I Compete as a New Web Developer?](https://www.youtube.com/watch?v=TkKeFbX76rY)

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## Assignment #2: My Future Job... I Think?

### Overview:

This assignment is a quick research task to help you understand the web development landscape.

### Instructions:

1. Read through the ["So You Wanna Be A Web Developer..."](https://the-coding-bootcamp.gitbooks.io/pre-work-book/content/chapter2.html) chapter of Pre-Work.
2. Then, visit a job site like [Indeed](http://www.indeed.com/) or [Dice](http://www.dice.com/).
3. Search for any of the following job positions:
   * Web Developer
   * Frontend Web Developer
   * Backend Developer
   * Javascript Developer
   * Node Developer
4. Read the job postings for at least 10 of the listings. As you are reading, take note of at least one technology, tool, or term, with which you are unfamiliar, from each listing (e.g., Angular, API). See the example below:
5. Then, search online for a definition or description of that technology or term. Try to understand what role it plays in the context of how web applications were described in that chapter.
6. Open a Word or Text file and paste in your description for each of the technologies you researched. You should have a total of 10 descriptions listed.

### Note:

* Don't overthink this. We just want you to begin contextualizing the technologies you'll be learning about in class and beyond.

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