

— Certified —

# Full Stack Web Developer Bootcamp



## Overview

You're here because you want to learn the skills needed to become a world-class web developer. Or perhaps you're coding already, and want to take your career to the next level. Either way, you've come to the right place. This bootcamp equips you with the skills needed to build dynamic, data-driven and career-boosting web applications using the most cutting edge and popular web development tools in the market today.

Learn to develop dynamic web applications using:



among many other industry-relevant web development technologies.

That sounds great, but is that all you're going to get from this web developer bootcamp? You'll learn far more than merely how to work with different technologies. Throughout the bootcamp, you learn how various technologies and devices interact to make full-stack web applications work like clockwork. You're taught professional approaches to product design, along with the best practice guidelines needed for implementing software development projects.

## Expanding Your Web Development Horizons

Throughout the bootcamp, you're introduced to more than one development framework and different approaches to web development. In addition to all of this, you're introduced to computer science algorithms, and how they're used in web development to produce world-class results.

This bootcamp helps prepare you for interviews and job applications. As you work your way through the programme, you will complete a series of capstone projects to demonstrate your powerful development skills to future employers, or for building your own online business.

### The Process



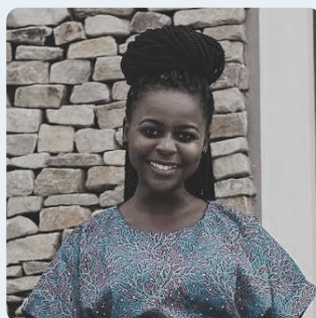


## Outcomes of the Bootcamp:

- ✓ Learn HTML, CSS, JavaScript, MongoDB, Express, React, Node.js, Next.js.
- ✓ Develop and design dynamic web applications using this technology stack.
- ✓ Apply Agile development and product design principles to web development projects.
- ✓ Understand crucial software algorithms, and their application to web development.
- ✓ Create databases and data-driven web applications.
- ✓ Become job-ready with our career support team that guides and prepares you for the tech career you're aiming for.

## Mentors powered by CoGrammar

Our mentors are expertly trained by CoGrammar, the only company that sources, trains and integrates code reviewers into the lives and bootcamp curriculum of our students. The on-demand code review method helps our students become fluent in the language of their choice.



# Career Paths

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## Back-end Developer

This highly coding-intensive job requires you to both write code and understand the system you're working on. Some of the key competencies of this role includes:

- ✓ Setting up the server for the web application and maintaining it. This demands proficiency in the operating system that's installed on the server.
- ✓ Deploying software in the cloud computing environment, and maintaining the deployed software.
- ✓ Developing features that require close integration with databases.
- ✓ Developing an API to expose functionality to other applications.
- ✓ Developing new web pages and maintaining code of old ones.
- ✓ Continuously exploring new web technologies and frameworks.

### Average Salaries

According to [Glassdoor.com](https://www.glassdoor.com), the average US salary for back-end developers is \$88,488/yr, with highs and lows ranging from \$56,000 to \$128,000/yr.



## Front-end Developer

Thanks to the growing use of JavaScript, front-end development has also become coding-intensive. The introduction of front-end frameworks like React and Bootstrap make it easier, but product managers continue to demand new and complex features, which require a mastery of JavaScript.

Responsibilities of a front-end developer include:

- ✓ Using JavaScript and Ajax calls to implement client-side functionality.
- ✓ Implementing user experience features suggested by experts.
- ✓ Creating unique looks for web applications by developing CSS with graphic designers.
- ✓ Exploring and implementing emerging front-end web technologies.

### Average Salaries

According to [Glassdoor.com](https://www.glassdoor.com), the average US salary for front-end developers is \$88,680/yr, with highs and lows ranging from \$61,000 to \$118,000/yr.

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## Full Stack Developer

Full stack developers are able to delve into their comprehensive understanding of both front-end and back-end web development, empowering them to design software solutions to real-world problems. This role combines the skills of front-end and back-end development, and makes the full stack developer an invaluable addition to any company's team.

### Average Salaries

According to [Glassdoor.com](https://www.glassdoor.com), the average US salary for full-stack developers is \$88,488/yr, with highs and lows ranging from \$56,000 to \$128,000/yr.



## UX Designer

Thanks to the growing use of JavaScript, front-end development has also become coding-intensive. The introduction of front-end frameworks like React and Bootstrap make it easier, but product managers continue to demand new and complex features, which require a mastery of JavaScript.

This role includes:

- ✓ Enhancing the user experience by coordinating with front-end developers and graphic designers to implement client-side features.
- ✓ Defining a design language of theme for the web application.
- ✓ Translating the brand into the web application.

### Average Salaries

According to [Glassdoor.com](https://www.glassdoor.com), the average US salary for UX Designers is \$97,460/yr, with highs and lows ranging from \$69,000 to \$120,000/yr.

# Structure of the Bootcamp

The bootcamp is structured to allow you to start coding as soon as possible. Tasks are designed to:

- 1 Teach you the theory needed to develop a skill
- 2 Enable you to practice implementing your knowledge by completing practical tasks.

Remember: with HyperionDev, you're never alone. Contact your mentor for 1:1 support whenever you need help with a task. The code you submit for each task is reviewed by an expert, ready to help improve the efficiency and quality of your code within a day of submission.



## Web Development Essentials

Tasks: 15  
Capstone Projects: 2

	Tasks	Description
1	Introduction to HTML	Create your first HTML page! Learn what HTML is. This task also introduces HTML elements, tags and attributes. Titles, paragraphs, and headings are also discussed, as well as how to define ordered and unordered lists.
2	Introduction to Web Development	Learn what the web is. To write programs that run on the web, we first need to grasp what it is, and how people interact with it.
3	HTML II	Learn how to make links to other web pages and add multimedia to an HTML document. HTML tables and HTML forms are also explained in this task. The span and div tags are discussed.
4	Introduction to CSS	This task explains what CSS is and how it is applied to HTML. It also discusses selectors, properties and values, as well as colours and text. Margins, padding and borders are also discussed.
5	CSS II	This task explains class and ID selectors and how to define your own selectors. Grouping and nesting, pseudo classes, and page layout are also explained.
6	CSS III: Build attractive pages faster using Bootstrap	Learn how to style like Twitter does.
7	Capstone Project I: Create an online store using HTML and CSS	Create an attractive online store using HTML and CSS.
8	Programming fundamentals using JavaScript I: variables and operators	This task explains what JavaScript is and how it relates to HTML and CSS. It also discusses variables and arithmetic operators.
9	Programming fundamentals using JavaScript II: conditional statements and looping	Learn to extend the functionality of your website by using conditional statements and looping.
10	Programming fundamentals using JavaScript III: scripting and event handling	In this task, learn how to create JavaScript functions that handle events on your HTML pages.

11	Programming fundamentals using JavaScript IV: arrays	This task gives a brief introduction creating and manipulating arrays in JavaScript.
12	Programming fundamentals using JavaScript V: OOP	This task introduces the concept of object oriented programming.
13	Programming fundamentals using JavaScript VI: JSON	Learn how JSON and the Web Storage API are used to facilitate communication between the client and web server.
14	Introduction to jQuery I: Write less, do more	A brief introduction to the popular "Write Less, Do More", JavaScript Library.
15	Capstone Project II: Make your online store interactive using JavaScript	Create an interactive online store using JavaScript. Implement a "shopping cart" for your online store.



## Web Development with React and Express

**Tasks: 20**  
**Capstone Projects: 2**

	Tasks	Description
1	The command line for web development	Learn to use the command line for web development. Learn basic commands and functionality used with the command line.
2	ReactJS I (Introduction to ReactJS)	This task introduces ReactJS (a JavaScript library for building user interfaces) and guides you through setting up your environment and creating React Elements using JSX.
3	ReactJS II (Components)	This task introduces the most important concept when using ReactJS: components.
4	ReactJS III (Events)	Learn how to create React applications that respond to events.
5	ReactJS IV (States)	Learn about states and how to make React components more dynamic.
6	Capstone Project I: Create a ReactJS web application	Create a web application that covers all ReactJS concepts introduced so far.
7	Introduction to Version Control	Learn what version control is, what Git is and how to install Git.
8	Git Basics for version control	Explore how to set up a repository for a new or existing project, use common Git commands, commit a modified file, view your project's history and branching.

9	Capstone Project II: Deploy your app	Deploy your app to Heroku.
10	Introduction to Full Stack Web Development	Understand the concept of the 'full stack' web development.
11	Advanced JavaScript	Introduces advanced concepts that make JavaScript different from other programming languages including the Event Queue and Asynchronous Processing.
12	Introduction to Node.js	Install Node.js and learn about Node.js and its advantages. Use existing Node.js modules (HTTP module and File modules) and create new modules.
13	Express Web Framework I	Introduction to Express, the fast, unopinionated, minimalist web framework for Node.js.
14	Express Web Framework II	Learn to use Express' routing and application-level middleware.
15	Testing in Node and Express	Learn the importance of using test-driven development. Learn how to use popular testing frameworks.
16	The Fetch API	Explain AJAX and Fetch API and how React uses this.
17	Next.js I	Create a web app using Next.js, the React framework for server-rendered apps. Navigate between pages and share components using Next.js.
18	Next.js II	Create dynamic pages with Next.js.
19	Next.js III	Create a custom server for your Next app using Express.
20	Capstone Project III: Create a full-stack web application	Create a full-stack web application using Next.js and Express.