

## Orientation Recap - Part 2 - Fullstack JavaScript With The MERNT Stack & NextJS

### About Me

I am Omar Jasseh, the Founder and Lead Instructor of JassehCodeCamp (JCC). I have been programming professionally since mid 2014 when I got my first Developer's Job at QCell. I have a keen interest in programming and a huge passion in teaching and sharing my knowledge.

I will be your Instructor for this course with a few other Teaching Assistants (TA) to help deliver this course to our best.

I hope you are all excited and ready for this journey. You may not know, but learning to code is very exciting and interesting as well. A quick heads-up though, sometimes things can be very rocky and seems extremely difficult, but just stick to it. It will click eventually.

### The Junior Developer Program (JDP)

The JDP is a hands-on software engineering bootcamp that teaches students modern, and in-demand technologies they'll need to succeed in the local and global software industry.

After successfully completing the program, you should become a developer that can basically fit in any environment you would find yourself. The whole program last for a year. The program is divided into 3 parts/semesters. This course, **Fullstack JavaScript with the MERNT Stack & NextJS** is the second part in the JDP 2022/23.

### A Brief About Application Development

A typical application whether a Website, Web App, Desktop or Mobile App has 2 main parts - The **Frontend** and The **Backend**.

1. The Frontend is the part of the application that users directly interacts with. For instance the frontend of a website is what the users see on their browsers. Things like buttons, forms, tables, texts, images, videos, etc on a website, are all part of the Frontend. The primary technologies on the Frontend are HTML, CSS, & JavaScript.
2. The Backend is the part that really drives the application. The Backend sends and receives information to and from the Frontend. The Backend is responsible for handling and processing logic and data for the application. Popular Backend languages are PHP, JavaScript (Node JS), Python, Java, Go, C#, etc... The Backend is also referred to as the **Server Side** - this is because the Backend of an application would typically run on a Web Server.

A **Web Server** is a special computer that serve web pages. This is typically done by a **HTTP Server Software** that runs on the Web Server.

### Types of Developers

Generally there are 3 main types of developers:

1. Frontend Developers - work on the Frontend with languages like HTML, CSS JavaScript, and frameworks and libraries like React, Vue, Angular, SolidJS, etc.
2. Backend Developers - work on the Backend/Server side with languages like PHP, Java, JavaScript, Python, C#, C++, Go, and Frameworks like Laravel, NodeJS with Express, Django, Rails, etc..
3. Fullstack Developers - work both on the Frontend and Backend of an application. They typically build applications from start to finish. From using raw technologies like HTML, CSS, and JavaScript to using Frontend frameworks like React, Backend technologies like Node & ExpressJS, and Database technologies like MongoDB, and up to deployment on popular deployment platforms like Netlify, Vercel, etc.

## Which Part In Application Development Are We Going To Learn?

We will be learning technologies at both the Frontend and Backend - **Fullstack**. So our ultimate goal after this course is to become **Fullstack Developers**.

## What are the Technologies you need to know before taking this course?

The main requirement of this course is **Part 1 - Beginning Frontend Web Development** of the JDP. If you are not coming from the Part 1 course, then you should have a solid background in **HTML, CSS, JavaScript**, and some fundamentals of **Git** and **GitHub**.

## What Tools Do You Need To Effectively Do This Course

1. You need a normal PC (Laptop recommended) with at least 4GB of memory (Ram), and at least 60GB of storage (Hard Drive). You are also expected to come with your laptop during lectures.
2. We will provide all the learning materials, including books, lecture notes, tools and software applications you would need.

## How To Survive And Effectively Do This Course

There are few things you would need to effectively do this course and get the most from it.

1. Attend lectures regularly. This is a fundamental key in succeeding in this course. Avoid missing classes or coming late as much as you can. In situations where you are not able to attend a class or will be coming late, please inform the instructor (Mr. Jasseh) via text or call.
2. Be attentive during a lecture session. Avoid using your phone or talking to your peers during a lecture. This does not mean you will not interact with them. In an interactive lesson or exercise you are even encouraged to discuss, share ideas and assist your peers. The ability to collaborate and work in groups is a great trait and skill to possess as a developer. So you will even learn how to work and collaborate with other developers in a team.
3. Get to the habit of studying and practicing everyday, at least **2** hours everyday. You need to love learning! Nowadays a developer is expected to know quite a number of technologies, tools and languages. This is hard to achieve if you are not passionate or eager to learn. So there is always more

to learn in this field. Because we are constantly learning and unlocking new knowledge almost everyday, really makes this field very exciting and never gets boring.

4. You have to be patient. Becoming a developer does not just magically happen or come in just one day or over night. So be patient and know that is a day-by-day process. Start now and build your knowledge and skills gradually. Let me tell you a secret, there is nothing like a "genius" in this. Nobody is born as a developer. We all learn and struggle to improve our skills on a daily basis.
5. You have to be focus and stay focus. You don't need distraction when you are doing this. You can't be learning to code and getting into so many other activities. You may have to stop or reduce the number of hours you spent on movies, social platforms (facebook, instagram, tiktok, etc), watching football, etc..
6. Set a goal. This is very important. You should be aiming for something after you complete this whole program. What do you want to achieve after gaining these skills, or upon completion of this course? Here is a list of few things that people do after gaining programming skills.

1. Work for yourself or be your own Boss through Freelancing or starting your own company.
2. Work for other companies and get paid a very good salary. Software developers are paid very well in most regions and organizations. The pay is super good in continents like Europe, the US, and in some parts of Asia and Africa. Nowadays you don't even need to travel to work in other countries. Remote jobs (working online) are increasingly getting very popular and rewarding as well.
3. Build a SaaS (Software As A Service) product and offer it to clients. Example: an Ecommerce Platform, Accounting System, HR System, Booking System, etc...
4. Improve your workflow in your current workplace or domain. Maybe you are working as an Accountant, System Admin, Network Engineer, Software Developer, etc and want to improve or add programming to your skillset to be more productive, feel more valuable to your company, and eventually get a raise, promotion or more salary.
5. Share your knowledge through teaching, creating content online, youtube, e-books, and get paid.
6. Code as a hobby. Maybe you love the idea of coding, and want to learn and be able to build things for fun.

If your goal(s) of learning is not in the above list, try to figure out what your goals are and work towards them.

## How Our Lectures Are Structured and Delivered

1. Lectures are delivered twice a week from 5pm to 7:30pm.
2. Lessons are hands-on and interactive. So you are required to come with your laptop and follow along during a lecture session.
3. After every lecture, we send a follow-up recap to help students remember and retain the key points and takeaways of that lesson. This is normally send in the night or the following day of the lecture.

4. You are often giving an assignment/take-home exercise after every lecture to help you practice and solidify your understanding of the topics and things learned in that lecture. These assignments will contribute to your assessments and total score for the course.
5. We often do a 5-10 mins quiz or code challenge before a lecture session. This is to test your understanding of the previous lecture. So you are expected to revise and practice what you learned previously before coming for the next session.
6. You will be working on 4 to 5 different projects on your own. After 2 to 3 weeks of learning, you will start working on your first project. These projects are also part of your assessments.
7. After completing the syllabus and at the end of the course, you will do a final exam which also contributes to your assessments and overall score of the course.

## Certification & Going To The Next Course/Level

You will be given both a **Certificate Of Completion** and a **Certificate Of Competency** and be allowed to go the next course/level when you effectively consume the course materials, and by attending classes regularly, doing your exercises, quizzes, assignments, projects and pass the final exam.

In case your overall score couldn't get you to the next level but you attended classes regularly, you will be given a **Certificate Of Completion** and are also expected to repeat the course.

These certificates are given in every part. At the end of the whole program, you will be given your final JDP Certificate.

## In Conclusion

You can see that this program is demanding, but really is not difficult. You can do it! All you need is dedication and be ready to learn and succeed.

At JCC we strive for excellence, and we will do our part and our best as promised to make sure that you succeed in this course and the program as a whole. We are with you from day one to the last day. We are here to help, so feel free and don't hesitate to ask when you need help in your works, projects or during lessons. I can guarantee you, if you do your part well, then you will definitely succeed.

Once again, welcome to JCC! We are really excited and thrilled to have you all onboard. Happy and successful learning to you all!

By Omar Jasseh

Lead Instructor