{codenation}®

Creating Employable Talent

MASTER: CODING
COURSE BROCHURE

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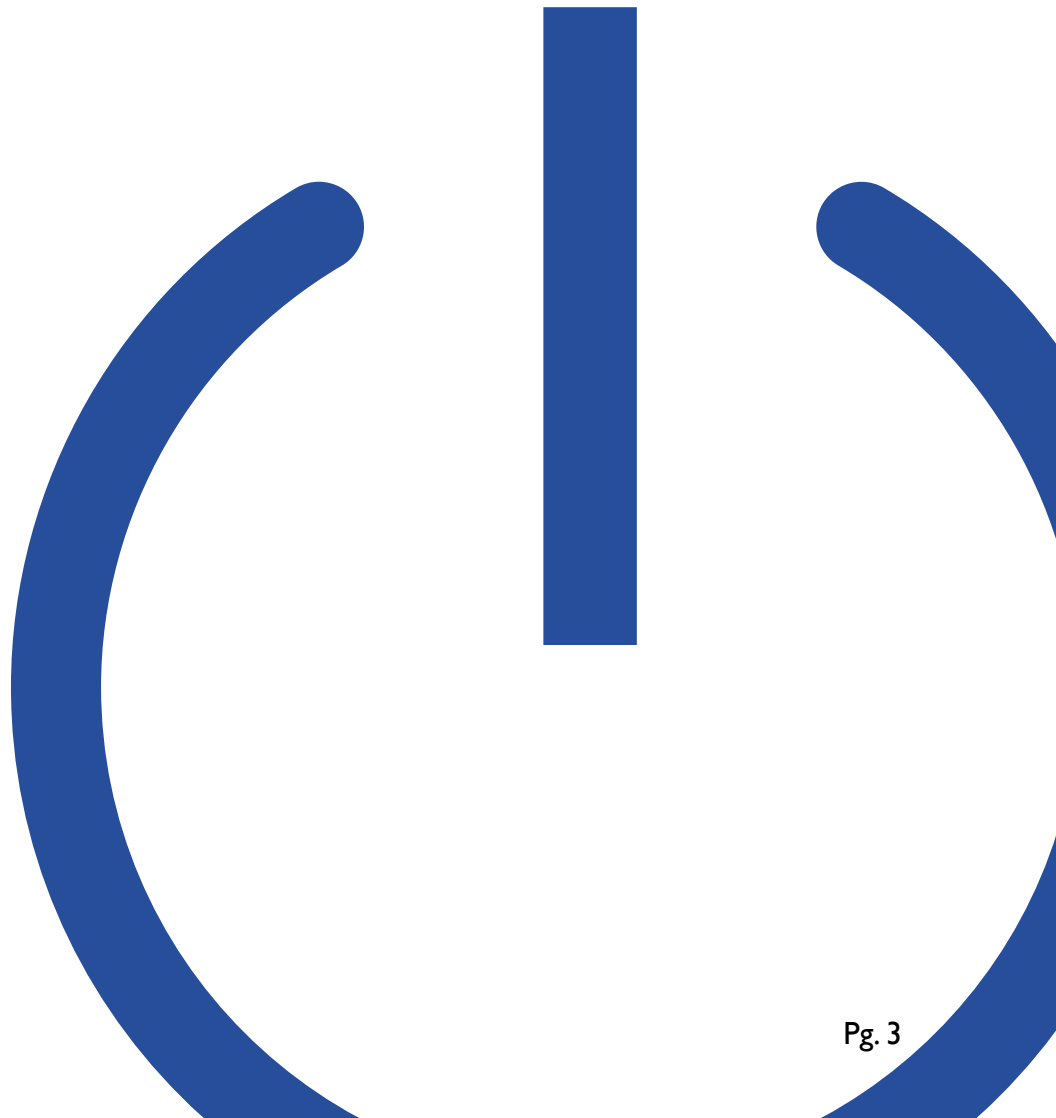
WHO WE ARE

Code Nation is a forward-thinking training provider specialising in coding, software development, cyber security and extended reality. We run a variety of courses tailored for people at each stage of their coding journey. We run 1-2 day taster courses, 3-week introductory courses, fast-track 12-week courses and software developer apprenticeships.

OUR MISSION

To help bridge the digital skills gap we will remain relevant and current by focusing on 4 key areas:

Inspiring.

Inspire more people, from all areas and backgrounds, to take that first step into Digital.

Accessible.

Our courses are accessible to all, we focus on:

- Affordability - Our courses are free or funded through Government or Employer support or subsidy.
- Education - Course completion will be achievable for all educational backgrounds.
- Diversity - We appeal to all genders, race and age.

Personalised.

Your learning, Your way - Learn from home, our campus, our partner organisations or an employer...or a hybrid of them all. You will have an individual learning plan, and we will support you to achieve your pathway to a positive outcome, whether that's employment or further education or learning.

Employment.

We involve Businesses and Employers in everything we do, from inspiring to co-creating curricula, delivery, interviewing and hiring our alumni.

{ CN }

Although on the first day we jumped straight into learning JavaScript, which sounds daunting to newcomers to code, the teaching style of the CN tutors made it so easy to understand. To think that you will be writing your first line of code on day 1 gives you an idea of the amount you learn throughout the 12 weeks.

~ 1 million	200+	16 and 58
Current digital job vacancies	Employers worked with	Youngest and Oldest learner
✓	✓	✓

WHO WE ARE

OUR VALUES

Passion.

Digital education pioneers - we are passionate about our mantra of creating employable talent and take great pride in the achievements of our students and colleagues.

Innovation.

Continuously moving forward, innovating, and improving - we care about the small things.

Improvement.

Promote an environment where we can deliver and accept feedback with humility and in a respectful way.

Teamwork.

Work together as a team, do the right things in the right way. We will always be there for for our learners, colleagues, employers and partners.

Trusted.

Act with honesty, respect and integrity for the rights, differences, and dignity of others.

Friendly.

Take personal responsibility for making every day enjoyable, for everyone involved with Code Nation, creating an enviable place to work and learn.

2500+	**86%**	**38%**
Code Nation Alumni	of learners had no prior coding skills	of learners are women
✓	✓	✓

OUR COURSES

From Fortnite to Spotify, Just Eat to Instagram - these amazing platforms started with a single line of code.

Coding is the foundation of the websites, applications and games we use every day, combining problem solving with creativity to build the next generation of technology used by people all over the world. If you've got a great attitude and a desire to learn, you've got what it takes to become a professional coder.

Wherever you are on your journey, we have the course and pathway for you. We make our training accessible so if you have no experience or you've done some online courses, we will support you.

Our courses are entirely immersive and project led – whether it's in a physical campus or the virtual learning environment – you'll learn tech skills, acquire commercial attributes and be exposed to industry practice from day one.

MASTER: CODING

Our 12-week Master: Coding bootcamp is truly shaped by business. You'll learn essential knowledge that can't be found in a text book - like problem solving, communication skills and working in a team, as well as the key technical and commercial skills you need to land a great career in tech.

**480 Hours of
Hands on Coding Experience**

✓

**Funding Available for
Qualifying Students**

✓

**Study Remotely or in one of
our dedicated campuses**

✓

MASTER: CODING

Become a techinal professional and start your career as a software engineer. Covering:

- Fundamental coding principles using JavaScript, HTML & CSS
- Modern JavaScript UI libraries - React.js
- Server-side programming using JavaScript/Node.js and NPM.
- Working with databases such as MySQL and MongoDB.
- Full stack web application development
- Working in an Agile environment with Kanban, timesheets & Trello
- Development/technical responsibilities to project managers/client-services
- Lightning talks from our employer network and guest speakers

**Built in Employabilty Training
from our Employers**

✓

**Access to the Talent Portal
for more opportunities**

✓

**Dedicated Access to our
Virtual Learning Environment**

✓

"Everything that was taught was explained clearly and was accompanied with understandable examples which made learning so much easier"

MASTER: CODING

CURRICULUM

In a world where there's increasing demand for digital skills, there couldn't be a better time to start your journey to becoming a business-ready Software Developer.

Developed in collaboration with our network of 250+ employers so we are confident that in just 12 weeks, you will become a junior full stack web developer capable of securing roles as a Software Developer, Games Developer, Web Developer, Applications Developer, Mobile App Developer or Software Tester.

We deliver not only a technical curriculum but also include the wider interpersonal and employability skills employers are looking for e.g. communication, problem solving, presentation skills, leadership and the ability to learn.

You will learn how to work in an agile environment with Kanban boards, the lifecycle of a technical project and how to work in teams as software developers.

You'll have the opportunity to develop your communication skills throughout the course and understand the traits of a valuable team member. You will also be able to attend weekly talks by employers and developers in the industry, available to answer any questions you may have.

This is a full time 12 week course helping you fast-track your learning to become a work-ready Junior Developer in as little as 3 months.

Our Courses are flexible meaning that each course may run slightly differently week on week. This is to reflect the demands of a constantly changing industry. The following pages show a typical example of what our 12-Week Master:Coding course includes and how it will be ran.

WHAT TO EXPECT

Hands on Coding

Unlike other routes into the industry, our bootcamp includes over 480 hours of coding experience with the latest languages being used today.

Experienced Instructors

Our Instructors have industry experience in development teams across the world. They understand the real world applications for coding and can offer you unique insight into the industry.

Online learning

With access to our VLE and regular trainer support, you will have the flexibility to own your learning, your way.
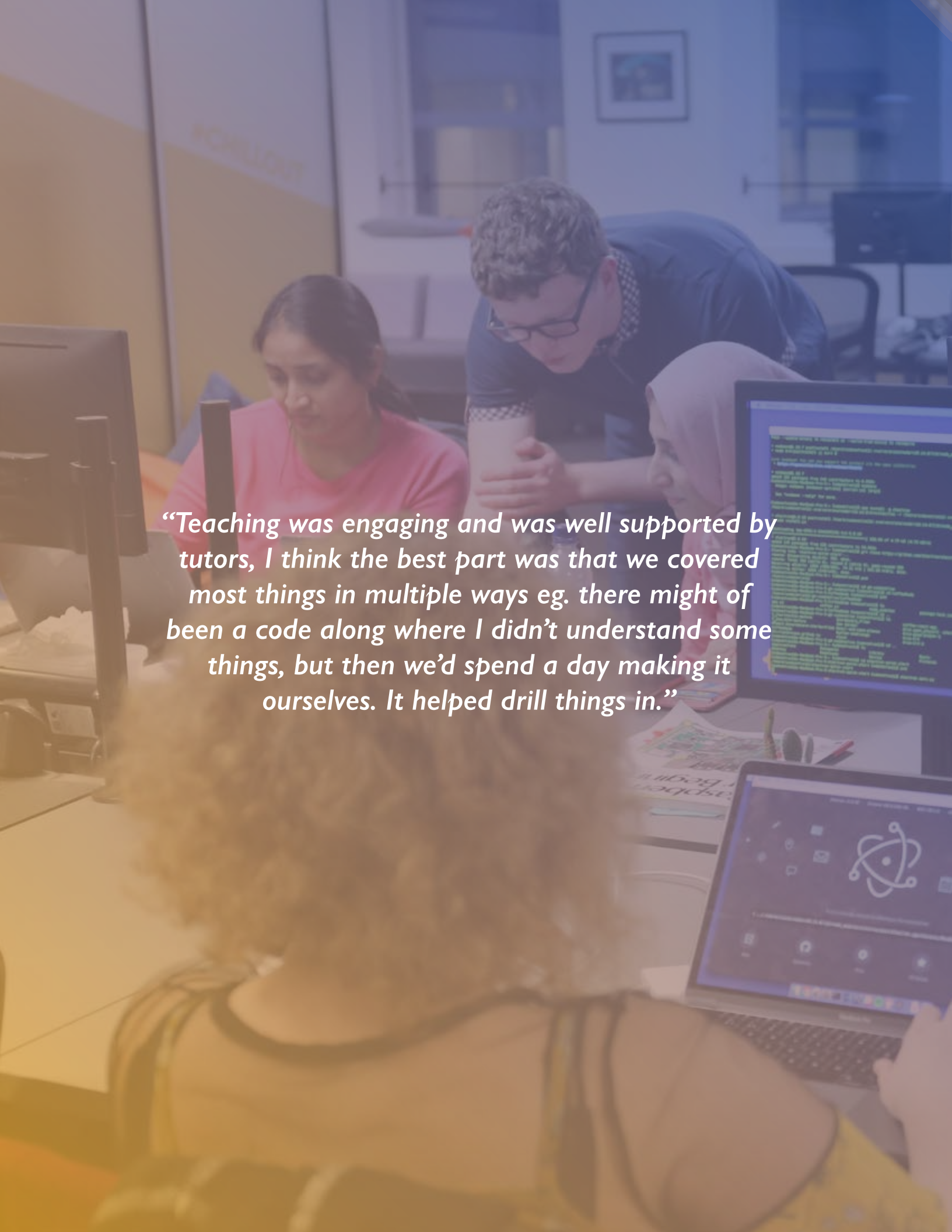
Career Advice and Guidance

You will have access to our Employment team to discuss your needs and aspirations. You will then enter our Talent Portal to get exclusive insights and updates in the industry. You will also have weekly employer talks where you can find out more about getting into industry.

Mindfullness and Wellbeing

We understand that to perform your best, you need to feel your best. That's why we run regular yoga classes, webinars on wellbeing, resilience and imposter syndrome workshops and have a flexible learning environment.

"Teaching was engaging and was well supported by tutors, I think the best part was that we covered most things in multiple ways eg. there might of been a code along where I didn't understand some things, but then we'd spend a day making it ourselves. It helped drill things in."

MASTER: CODING

An example journey through our Master:Coding Course

WEEK ONE: JAVASCRIPT FUNDAMENTALS

In your first week, you will be given an introduction to the Virtual Learning Environment, meet your development team, and download all of the software you need to become a developer.

- Using the Command Line
- Fundamentals of JavaScript
- Core Programming Concepts

WEEK TWO: HTML AND CSS

In your second week, you will learn about intermediate HTML and CSS and how it can be used to create websites and applications. You will take part in mini-projects throughout the week.

- Understand how the Web Works
- Using HTML and CSS to begin creating your own website
- Using CSS Flexbox to build responsive designs

WEEK THREE: JS DOM & FRONT END

You will learn how JavaScript interacts with websites using the DOM and create your own scripts to manipulate on page elements. You will also work collaborativley to analyse others code.

- Creating Animation with CSS
- Create your own web based games using JavaScript and the DOM
- Understand how the browser reads HTML, CSS and JavaScript
- Use GitHub to store and manage projects

WEEK FOUR: INTERMEDIATE JAVASCRIPT

In this week, you will explore JavaScript in more detail, looking at how JS Engines work, working with higher order functions.

- Explore the JavaScript Engine
- Use Higher Order Functions
- Recognise and Handle errors in Code

WEEK FIVE: REACT.js FUNDAMENTALS

In this week, you be introcuded to React, what it is and its benefits. You will use React.js and create basic applications with API's and multiple components.

- Introduction to React.js
- Setting up basic React applications
- Writing your own React components
- Using React prompts and state to pass data around

WEEK SIX: REACT.js INTERMEDIATE

You will continue to explore React and cover additional applications of this. You will use lifecycle methods, handle external data and work with GitHub to complete code reviews.

- Understand the Lifecycle of React components
- Work in teams on React projects
- Use Third Party React packages via npmi
- Use GitHub to deploy and review React Applications

WEEK SEVEN: NODE.JS FUNDAMENTALS

In week seven, you will be introduced to Node.js and Databases. You will execute JavaScript within a Node Environment and create applications that use MongoDB.

- Introduction to Node.js
- Execute JS within a Node.js Environment
- Introduction to Databases and work with MongoDB to create instances
- Perform CRUD operations on a MongoDB database from a Node.js application

WEEK EIGHT: WEB SERVERS & REST APIs

You will learn about the purpose of web servers and REST API's, then create your own web server and REST API. You will learn about JSON and implement authentication systems in Node.js. You will also have an employability session with our Engagement Director sharing top tips for securing a role in the industry.

- Create a basic web server using Express.js (serve static files)
- Create a REST API with Express.js
- Connect to and use database technologies with a REST API in a Node.js application
- Implement a basic authentication system in a Node.js web server
- Employability session covering tips for getting into industry and an introduction to our Talent Portal

WEEK NINE: MySQL

In week nine, you will cover the funadmentals of MySQL, create your own install and then use MySQL to create databases, add tables and implement functions.

- Create and Use a database with MySQL
- Understand and apply constraints to table columns with MySQL
- Use Logical operators and Case statements in MySQL
- Create a simple Node.js application that uses MySQL on the database layer

WEEK TEN: FULL STACK DEVELOPMENT

In this week, you will use your knowledge of front and back end developement to begin creating your own full stack web development applications.

- Explain and diagram the different ways in which frontend applications can be connected with backend applications
- Create a monolithic web application in Node.js
- Create a decoupled web application, connecting a frontend application to a backend application through use of a REST API

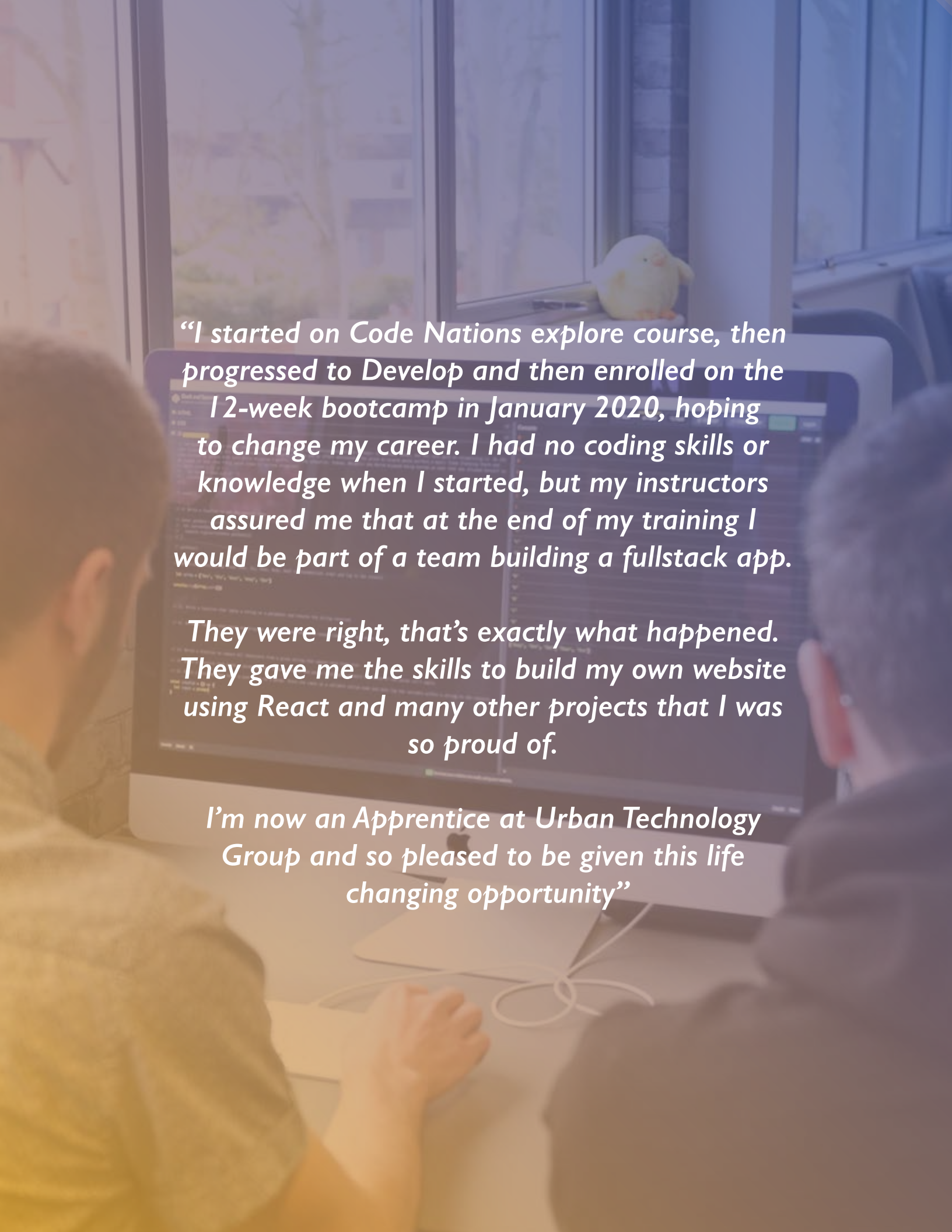# WEEK ELEVEN & TWELVE: PROJECT WORK

In your Final weeks, you will work on team projects, bringing together everything you have learnt over the past 10 weeks. You will have opportunity to work with new technologies and work in a real develmpoment team environment.

- Create a team project
- Work with new technologies
- Implemnent the entire lifecycle of the project (documentation, design, planning sprint, executing sprint, and meeting deadlines.

GRADUATION DAY: NEXT STEPS

On your final day, you and your team will deliver a presentation on their project which outlines the process you went through, as well as a demo of the project being used.

- Project Showcase
- Project Presentation and Evaluation
- Discuss Next Steps and Progression Routes

"I started on Code Nations explore course, then progressed to Develop and then enrolled on the 12-week bootcamp in January 2020, hoping to change my career. I had no coding skills or knowledge when I started, but my instructors assured me that at the end of my training I would be part of a team building a fullstack app.

They were right, that's exactly what happened. They gave me the skills to build my own website using React and many other projects that I was so proud of.

I'm now an Apprentice at Urban Technology Group and so pleased to be given this life changing opportunity"

YOUR LEARNING YOUR WAY

HOW WILL YOU LEARN

We believe everyone learns differently. It is up to whether you work from home, one of our Campuses or a mix of the two, we provide full equipment for all learners allowing you to learn in a way that suits you.

Virtiual Learning Environment.

Using a combination of technologies, you will be able to communicate and collaborate with your instructor and your team. You will be split into groups throughout the day giving you the flexibility to work on unique projects and get a real feel for life in a development team.

Throughout the day, you will have regular group check-ins with your instructor to cover core topics around the course. You will then be able to break away into your own teams and begin applying what you have learnt immedidatley to your own projects.

Through our VLE, you are able to apply a flexible approach to your studies, giving you the chance to work independantly, in your teams and speak directly with your instructor whenever you need to.

On Campus

We have modern campuses in the heart of Manchester and Chester. Full equipment is available at each centre and we have communal breakout areas where you can relax, unwind and chat with us and your team. Our classrooms are fully fitted with Macs giving you access to the technology and equipment you need.

When studying from Campus, you will be able to work with other learners remotely via our VLE and have hands on instructor support when needed.
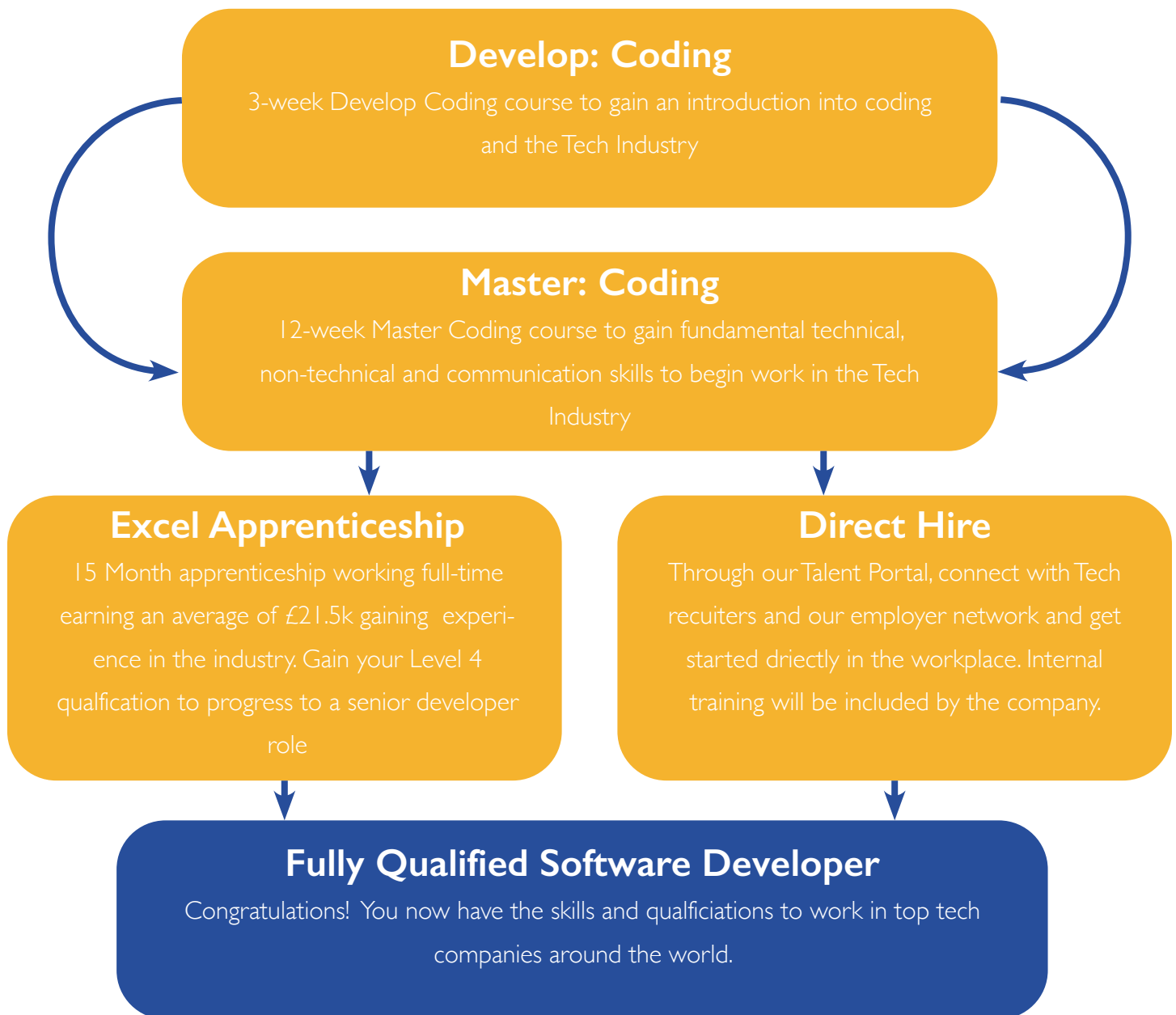
Junior Developer

"Working virtually is not only fun, and engaging but it's helped more with team-work whilst building our collective team project as we are constantly chatting, debugging and using the git collaborative work-flow has been ace"

AFTER MASTER

PROGRESSION ROUTES

After completing our Master: Coding course, you are one step closer to your dream job in Tech. You can continue your training through our Excel Apprentiiceship and gain direct hire opportunities from our Employer Network.

Develop: Coding
3-week Develop Coding course to gain an introduction into coding and the Tech Industry

Master: Coding
12-week Master Coding course to gain fundamental technical, non-technical and communication skills to begin work in the Tech Industry

Excel Apprenticeship
15 Month apprenticeship working full-time earning an average of £21.5k gaining experience in the industry. Gain your Level 4 qualfication to progress to a senior developer role

Direct Hire
Through our Talent Portal, connect with Tech recuiters and our employer network and get started driectly in the workplace. Internal training will be included by the company.

Fully Qualified Software Developer
Congratulations! You now have the skills and qualficiations to work in top tech companies around the world.

BEN'S JOURNEY

## SOFTWARE DEVELOPER APPRENTICE

Ben Sparrow, one of our current Apprentices working as a Software Developer for Logistic Resource started his new role during the pandemic and recently finished his 12-Week bootcamp.

Ben discovered Code Nation when looking at apprenticeship jobs online.

"When I was made redundant from my previous job due to the pandemic, I started teaching myself to code but was finding some concepts really difficult and not having a mentor to turn to made things harder. I found Code Nation's apprenticeship course on Linkedin and made sure to apply as soon as possible."

How did you find the course overall?

"Although on the first day we jumped straight into learning JavaScript, which sounds daunting to newcomers to code, the teaching style of the CN tutors made it so easy to understand. To think that you will be writing your first line of code on day 1, gives you an idea of the amount you learn throughout the 12 weeks."
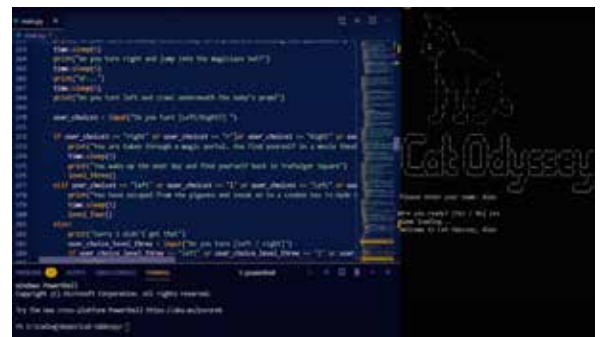
What types of things did you learn?

"The start of the course focuses heavily on learning vanilla Javascript as it's the most in demand language and helps you understand how computer languages work as the concepts are quite universal. Alongside some HTML/CSS, we also covered other libraries and frameworks of JS - like Node and Express for backend, MongoDB for setting up Databases, and React to build out a full stack application. We also learnt version control with Git and Github as well.

I never thought I would have learned as much as I did, but now I have started my role with Logical with the confidence to start building full stack websites and all the resources provided from the apprenticeship. Alongside this, I found the course just really fun learning to code and have made a bunch of friends from the cohort."

Any advice or suggestions for someone thinking about moving into the industry?

"Make sure to do your research to know if this is the career for you. If you're into the latest tech and see yourself as a natural problem solver then you'll fit in very well as a developer. However it takes time so be patient and learn at your own pace."

{CN}

Unlike any other coding school

FUNDING AND FEES

Our Course Prices reflect the unparalled value of dedicated training, support and guidance you will recieve during your studies.

We offer multiple funding options for our courses

Governmet Funding

As part of the government's fast-track digital bootcamp scheme, we offer funding subject to eligibility throughout England. Speak to our Admissions team today to see if you are eligible.

Private Funding

- One Time payment of £4350
- Student Loan*

*We partner with three organisations; Future Finance, Lendwise and Knoma to give you options to access the course via a student loan.

Future Finance: Apply for a loan, pay back a small amount each month whilst studying and then pay the rest after your course.

Knoma: Learn now, pay later. You can get a fee free, interest free loan up to £10,000 and spread the payments over 12 months.

Lendwise: Apply for a loan, receive your provisional loan within 48 hours, Choose to accept the offer and get funded. Loans available from £5,000

Our admissions team are trained to provide independent advice and guidance and can talk through all funding and loan options available.

Get in Touch
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