

# Skills Bootcamp in Software Development

## 12 week – Full-Time

### Overview of the course:

Our 12-week Skills Bootcamp in Software Development is an immersive course focused on Web Development and teaches software development concepts using the JavaScript programming language but drawing parallels to other languages where applicable. It focusses on the principles of developing web applications following industry standards for interface design and back-end functionality.

You will be taught to create a full stack application using REST APIs along with back-end technologies such as Mongo.db, Node.js and MySQL.

The course develops skills using GitHub throughout for effective planning and version control. We look at software development methodologies and how these are used in industry. You will also get the opportunity to implement these in a group and solo projects and be practising functional IT with use of different software, folder management, file management, and general computer use.

Additional modules have been added to reflect current industry trends – Iterative AI and Low-Code solutions for web development.

### Eligibility:

Our Skills Bootcamp is aimed at anyone wanting to gain or enhance their technical skills, designed to give you the skills needed to begin an entry level position in the IT sector.

- 19+
- Employed
- Unemployed
- Self employed



Funded by  
UK Government

### Details:

- ✓ **Full-Time-time remote course, running specific days over a 12-week period**  
**10:00am - 16:00pm daily**
- ✓ **FREE if you are a resident in Liverpool City Region and unemployed / self employed**
- ✓ **Funded up to 90% if you're employed in Liverpool City Region**
- ✓ **330 Hours of hands of Software Development Experience**
- ✓ **Guaranteed interview if you are unemployed with hiring employer upon completion**
- ✓ **Hear from Employer speakers during the course**

## Week One

- Induction
- Introduction to Software Bootcamp
- Introduction to Employability Team
- Ice breakers
- Fundamentals of how the web works
- HTML – elements, tags and best practices
- CSS – selectors, properties, Flexbox, transitions and animations
- Initial ILP review meeting
- Update group profile as appropriate to detail any individual support given

## Week Two

- Data types in JavaScript
- Variables in JavaScript
- Selection; if statements, comparison operators, logical operators
- Arrays – Creation and accessing
- Iteration; for loops and while loops
- Functions – Types and using
- Update group profile as appropriate to detail any individual support given

## Week Three

- HTML & DOM structure
- How to apply changes to the DOM by responding to user interaction
- Project
- Update group profile as appropriate to detail any individual support given

## Week Four

- JavaScript engine
- Variable scope
- Higher order functions
- Node.js
- Update group profile as appropriate to detail any individual support given
- Group wellbeing session
- ILP review meeting

## Week Five

- React.JS
- Components
- State
- Map method
- Unit Testing
- Update group profile as appropriate to detail any individual support given

## Week Six

- Class and functional components lifecycle
- Error Handling
- Using CSS in React Applications
- Using workflows in projects
- Update group profile as appropriate to detail any individual support given
- Employability group session

## Week Seven

- Routes
- Express server
- Databases
- Database operations
- Refactoring
- Connecting Front end and backend applications
- Update group profile as appropriate to detail any individual support given

## Week Nine

- REST API
- Express. JS
- Web servers
- Middleware – bcryptjs
- JSON Web Tokens
- Monolithic and Decoupled applications
- Update group profile as appropriate to detail any individual support given
- Group wellbeing session

## Week 11

- Group Project

## Week Eight

- MySQL
- MySQL Workbench
- Creating tables and inserting data
- Database operations in MySQL
- Relationships between tables
- Joins
- SQL Injection Attacks
- Update group profile as appropriate to detail any individual support given ILP review meeting

## Week Ten

- Refresh on React
- Deeper understanding of full stack applications (monolithic and decoupled)
- Build a full stack application
- Introduction to CI/CD
- Hosting web applications
- Update group profile as appropriate to detail any individual support given

## Week 12

- Group Project
- Graduation ceremony

```
// Update the rule with the new access value
$this->_sql->update( 'acl_rules', array( 'access' => $access
}
```