



**TECHNOCATION FREELANCING TRAINING INSTITUTE & SOFTWARE  
HOUSE**

**12 MONTHS FULL STACK WEB DEVELOPMENT  
PROFESSIONAL LEVEL CERTIFICATION COURSE  
OUTLINE**

**Module 1: Introduction to Web Development**

- First, learn how websites work on the internet.
- Next, understand frontend and backend development roles.
- Then, install VS Code and required development tools.
- Finally, create your first simple web page.

**Module 2: HTML Fundamentals**

- First, learn HTML structure and basic tags.
- Next, create headings, paragraphs, and lists properly.
- Then, add images, links, and tables carefully.
- Finally, build a simple multi-section webpage.

**Module 3: CSS Styling Basics**

- First, understand CSS syntax and styling rules.
- Next, style text, colors, and page backgrounds.
- Then, learn margins, padding, and spacing layouts.
- Finally, design a clean responsive webpage.

**Module 4: Responsive Design & Flexbox**

- First, learn responsive design for modern websites.
- Next, use Flexbox for layout alignment.
- Then, apply media queries for mobile screens.
- Finally, create a responsive landing page.

## **Module 5: JavaScript Basics**

- First, understand variables, functions, and conditions.
- Next, learn loops and basic program logic.
- Then, handle browser events and user actions.
- Finally, build simple interactive webpage features.

## **Module 6: Advanced JavaScript**

- First, explore arrays, objects, and JSON data.
- Next, use DOM manipulation for dynamic pages.
- Then, learn asynchronous JavaScript and APIs.
- Finally, create dynamic frontend applications.

## **Module 7: Frontend Framework (React)**

- First, install React and project dependencies.
- Next, create components and reusable UI elements.
- Then, manage state and props effectively.
- Finally, build a modern interactive frontend app.

## **Module 8: Backend Development (Node.js)**

- First, learn server concepts and Node.js basics.
- Next, create APIs using Express framework.
- Then, handle routes and server requests properly.
- Finally, connect frontend and backend services.

## **Module 9: Database Development**

- First, understand databases and data storage.
- Next, learn MongoDB or MySQL fundamentals.
- Then, create tables and store application data.
- Finally, connect database with backend server.

## **Module 10: Authentication & Security**

- First, implement user login and registration systems.

- Next, use JWT authentication for secure sessions.
- Then, protect APIs with validation rules.
- Finally, secure applications against common attacks.

## **Module 11: Deployment & Project Launch**

- First, prepare project files for deployment.
- Next, use Git and GitHub for version control.
- Then, deploy project using cloud platforms.
- Finally, launch a complete full stack project.

## **Module 12: Certification & Professional Practice**

- First, review all full stack development concepts carefully.
- Next, complete a professional full stack project.
- Then, submit project for final evaluation.
- Finally, receive Full Stack Web Development Certificate.

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