15 Days - Fundamentals of Frontend Development

Module 1: Introduction to Frontend Development (1 Day)

- What is Frontend Development?
- Role of a Frontend Developer
- Tools Setup: VS Code, Browser Dev Tools

Module 2: HTML Basics (3 Days)

- Structuring web pages with HTML
- Semantic tags and accessibility

Module 3: CSS Basics (3 Days)

- Styling elements
- CSS Selectors, Box Model, and Flexbox

Module 4: JavaScript Basics (5 Days)

- Syntax: Variables, Loops, Functions
- DOM Manipulation and Events

Module 5: Mini Project (3 Days)

• Static and interactive webpage

30 Days - Intermediate Frontend Development

Includes All 15-Day Modules

Module 6: Advanced CSS (5 Days)

- Responsive Design with Media Queries
- Introduction to CSS Frameworks (Bootstrap/Tailwind CSS)

Module 7: JavaScript Advanced Concepts (5 Days)

- ES6 Features: Classes, Promises, and Arrow Functions
- LocalStorage and Fetch API

Module 8: Git and Version Control (2 Days)

- Setting up Git and GitHub
- Basic Git commands for collaboration

Module 9: Introduction to Frontend Frameworks (React.js) (5 Days)

- Basics of React: Components, JSX, and Props
- State Management with Hooks (useState)

Module 10: Intermediate Project (3 Days)

• Responsive website using Bootstrap and JavaScript

45 Days - Advanced Frontend Development

Includes All 30-Day Modules

Module 11: Advanced JavaScript Features (5 Days)

- Event Bubbling, Delegation, and Closures
- Working with APIs and Promises

Module 12: React.js Advanced Features (10 Days)

- React Router for Navigation
- Context API and useEffect Hook

Module 13: Advanced CSS and Animations (5 Days)

- Keyframes and Transitions
- Advanced Flexbox and Grid techniques

Module 14: Advanced Project (5 Days)

• Interactive website using React.js

60 Days - Comprehensive Frontend Development

Includes All 45-Day Modules

Module 15: Advanced State Management (5 Days)

- Redux for State Management in React
- React Context API Advanced Usage

Module 16: Deployment and Hosting (5 Days)

- Hosting on Vercel/Netlify
- Debugging and Performance Optimization

Module 17: Frontend Tooling (5 Days)

- Introduction to Webpack, Babel, and NPM
- Managing project dependencies

Module 18: Comprehensive Project (10 Days)

• Build a modern single-page application

90 Days - Professional Frontend Development

Includes All 60-Day Modules

Module 19: Testing and Debugging (5 Days)

- Unit Testing with Jest
- Debugging with Chrome DevTools

Module 20: Advanced Frontend Techniques (10 Days)

- Animations and Motion Design with React Spring/Framer Motion
- Accessibility Standards and Best Practices

Module 21: Performance Optimization (5 Days)

- Optimizing Webpack Builds
- Lazy Loading and Code Splitting

Module 22: Real-World Projects (15 Days)

- E-commerce website
- Portfolio website with animations

180 Days - Master Frontend Development

Includes All 90-Day Modules

Module 23: Advanced Framework Features (20 Days)

- React Advanced Patterns (Compound Components, Higher-Order Components)
- Server-Side Rendering (Next.js)

Module 24: Frontend with APIs and Real-Time Features (20 Days)

- Integration with GraphQL
- Building real-time features with WebSockets

Module 25: Advanced UI/UX Design Principles (15 Days)

- User Experience Design Fundamentals
- Tools: Figma and Adobe XD

Module 26: Portfolio and Capstone Projects (30 Days)

- Multiple large-scale projects for various industries
- Portfolio website for showcasing skills