Recipro Skills

Web Development (From Beginner to Intermediate)

Beginner

1. Introduction to Web Development

- Understanding how websites work
- Client vs Server-side programming
- Overview of Web Technologies (HTML, CSS, JavaScript)
- Setting up a development environment (VS Code, Chrome DevTools)

2. HTML - The Structure of Web Pages

- HTML Basics (Elements, Tags, Attributes)
- Forms and Input Elements
- Semantic HTML and Accessibility
- Tables, Lists, and Media Elements (Images, Audio, Video)
- Forms with Validation (Required, Pattern, Email, Number)

3. CSS - Styling the Web

- CSS Basics (Selectors, Properties, Units)
- Box Model (Margin, Border, Padding, Content)
- Flexbox and Grid for Layouts
- Positioning (Relative, Absolute, Fixed, Sticky)
- CSS Transitions, Animations, and Transformations
- Responsive Design (Media Queries, Mobile-first Design)

4. JavaScript - Making Websites Interactive

- JavaScript Basics (Variables, Data Types, Operators)
- Functions and Scope
- DOM Manipulation (Selecting Elements, Modifying Content, Events)
- Event Listeners and Event Delegation
- Asynchronous JavaScript (setTimeout, setInterval)
- LocalStorage and SessionStorage

Intermediate Level

5. Advanced JavaScript Concepts

- ES6+ Features (let, const, Arrow Functions, Template Literals)
- Destructuring and Spread/Rest Operators
- Promises and Async/Await
- Fetch API for HTTP Requests
- Error Handling (try, catch, finally)

6. Version Control with Git & GitHub

- Understanding Git (Repositories, Commits, Branching)
- Cloning, Pushing, Pulling, Merging, and Resolving Conflicts
- GitHub Basics (Forking, Pull Requests, Issues)

7. CSS Frameworks & Preprocessors

- Introduction to CSS Frameworks (Bootstrap, Tailwind CSS)
- Using Preprocessors (SASS, SCSS)
- Utility-First CSS vs Traditional CSS

8. Responsive Web Design & UI/UX Basics

- Mobile-First Approach
- Media Queries and Fluid Layouts
- Using Figma or Adobe XD for UI Design
- Accessibility & Performance Optimization

9. JavaScript Frameworks & Libraries *(Optional for Intermediate Level)*

- Introduction to React.js (Components, Props, State)
- React Hooks (`useState`, `useEffect`, `useRef`)
- Basic Routing with React Router
- Using Third-Party Libraries (Axios, Lodash)

10. APIs & AJAX

- What are APIs?
- REST API Concepts (GET, POST, PUT, DELETE)
- Fetch API vs Axios
- Handling API Responses (JSON Parsing)
- Working with Public APIs

*We suggest you to Follow this Syllabus - Recipro Skills