

# 8-Week Frontend Developer Curriculum

Week	Core Topics and Deliverables
<b>Week 1</b>	<b>HTML5 Fundamentals &amp; Core CSS3</b> Semantic HTML, Accessibility basics (ARIA), Forms. Core CSS: Selectors, Box Model, Typography, Specificity. <b>Project:</b> Build a static portfolio landing page using basic HTML/CSS.
<b>Week 2</b>	<b>Responsive Design &amp; Advanced CSS</b> <b>**Layouts:**</b> Flexbox and CSS Grid mastery. <b>**Responsiveness:**</b> Media Queries, 'vw'/'vh'/'rem' units, Mobile-First design. <b>**Styling:**</b> CSS Transitions and basic Animations. <b>Project:</b> Rebuild the portfolio page to be fully responsive across desktop, tablet, and mobile breakpoints.
<b>Week 3</b>	<b>JavaScript I: Language and DOM Manipulation</b> Variables, Data Types, Control Structures, Functions. <b>**The DOM:**</b> Selection, manipulation, creating and removing elements. <b>**Events:**</b> Event listeners, bubbling, and delegation. <b>Project:</b> Create an interactive, functional calculator application.
<b>Week 4</b>	<b>JavaScript II: Modern JS and Asynchronicity</b> ES6+ Features (Arrow Functions, 'let'/'const', Destructuring, Spread/Rest). <b>**Asynchronous JS:**</b> Promises, 'async'/'await', error handling. Introduction to the 'fetch' API. <b>Project:</b> Use an open-source public API (e.g., weather or jokes) to fetch and display data.
<b>Week 5</b>	<b>React JS Fundamentals</b> Setting up a React project. JSX syntax. Functional Components. <b>**Core Hooks:**</b> 'useState' for component state and 'useEffect' for side effects. Handling component props. <b>Project:</b> Convert the API data display project into a multi-component React application.
<b>Week 6</b>	<b>React: State Management and Routing</b> Advanced component communication. <b>**State:**</b> Using the Context API for global state. <b>**Navigation:**</b> Client-side routing. <b>**Forms:**</b> Controlled components and basic validation. <b>Project:</b> Build a complete single-page application (SPA) with 3+ views and shared data (e.g., an inventory manager).
<b>Week 7</b>	<b>Tooling and Styling Ecosystems</b> <b>**Styling:**</b> Introduction to a utility-first framework like <b>**Tailwind CSS**</b> or a preprocessor like Sass. <b>**Build Tools:**</b> Understanding 'npm' scripts and basic bundling (Webpack/Vite concepts). <b>Project:</b> Refactor the SPA styling using Tailwind CSS, focusing on mobile responsiveness.
<b>Week 8</b>	<b>Performance, Testing, and Deployment</b> <b>**Version Control:**</b> Advanced Git workflows. <b>**Deployment:**</b> Deploying the React application to a platform like Netlify or Vercel. <b>**Optimization:**</b> Performance best practices and DevTools usage. <b>Project:</b> Complete and deploy the full-stack application, ensuring high-quality code and a clean deployment pipeline.