

# Month 1 – HTML, CSS, JavaScript Basics

#### Week 1: HTML + CSS Basics

Day	Topic
Day 1	Introduction to HTML – Structure, Tags, Basic Elements
Day 2	Forms, Inputs, Tables, Lists, Media
Day 3	CSS Basics – Selectors, Colors, Fonts
Day 4	Box Model (Margin, Padding, Border)
Day 5	Flexbox & Grid Layout
Day 6	Responsive Design (Media Queries)
Day 7	Mini Project: Responsive Portfolio Page

#### **Week 2: Advanced CSS + JavaScript Basics**

Day	Торіс
Day 8	CSS Transitions & Animations
Day 9	Pseudo-classes & Pseudo-elements
<b>Day 10</b>	JavaScript Basics – Variables, Data Types, Operators
Day 11	Functions, Conditions, Loops
Day 12	Arrays & Objects
Day 13	DOM Manipulation Basics
Day 14	Mini Project: Interactive To-Do List

#### Week 3: Advanced JavaScript

Day	Topic
Day 15	Event Handling & Form Validation
<b>Day 16</b>	ES6 Features (let/const, arrow functions, spread/rest)
<b>Day 17</b>	Callbacks, Promises, Async/Await
<b>Day 18</b>	LocalStorage & SessionStorage
<b>Day 19</b>	Fetch API & JSON
Day 20	Mini Project: Weather App (API)
<b>Day 21</b>	Review & Practice

**Week 4: JavaScript Deep Dive** 

Day	Торіс
Day 22	Array Methods (map, filter, reduce)
Day 23	Functions – Higher Order & Closures
Day 24	Object-Oriented JS (Classes, Prototypes)
Day 25	Error Handling & Try/Catch
Day 26	Modules (import/export)
Day 27	Async Patterns (chaining, error handling)
Day 28	Mini Project: Quiz App

## **Month 2 – React Fundamentals**

**Week 5: Introduction to React** 

Day	Topic
Day 29	What is React? Setup (Vite/CRA)
Day 30	JSX & Functional Components
Day 31	Props in React
Day 32	State (useState)
Day 33	Rendering Elements
Day 34	Conditional Rendering
Day 35	Mini Project: Counter + Greeting Card

**Week 6: Core React Concepts** 

Day	Topic
<b>Day 36</b>	Lists & Keys
Day 37	Event Handling in React
Day 38	useEffect Hook
Day 39	useContext Hook
Day 40	useRef Hook
Day 41	Mini Project: Notes App with Context
Day 42	Review & Practice

Week 7: Styling in React

	Day Topic
Day 43	Inline Styling & CSS Modules
Day 44	Styled Components
Day 45	Tailwind CSS with React
Day 46	Bootstrap with React
Day 47	Material UI / Shaden UI
Day 48	Mini Project: Styled Portfolio App
Day 49	Review & Practice

**Week 8: Forms in React** 

Day	Topic
Day 50	Controlled Components
Day 51	Uncontrolled Components
<b>Day 52</b>	Form Validation (manual)
Day 53	React Hook Form
Day 54	Formik Basics
Day 55	Mini Project: Login + Signup Form
<b>Day 56</b>	Review & Practice

## Month 3 – Advanced React

**Week 9: Routing & State Management** 

Day	Topic
Day 57	React Router Basics
<b>Day 58</b>	Dynamic & Nested Routes
Day 59	Protected Routes (Authentication)
Day 60	Prop Drilling & Context API
Day 61	Redux Toolkit Basics
Day 62	Redux Thunk & Saga
Day 63	Mini Project: Blog App with Authentication

#### Week 10: APIs & Performance

Day	Торіс
Day 64	Fetch API & Axios in React
Day 65	Handling Async Data (loading, error, success states)
<b>Day 66</b>	React Query / TanStack Query
<b>Day 67</b>	Performance Optimization – React.memo
<b>Day 68</b>	useMemo & useCallback
Day 69	Code Splitting & Lazy Loading
Day 70	Mini Project: Movie Search App (API + Optimized)

#### Week 11: Advanced Patterns + TypeScript

Day	Торіс
Day 71	Advanced Patterns – HOC
Day 72	Render Props Pattern
Day 73	Compound Components Pattern
Day 74	Context + Reducer Pattern
Day 75	TypeScript with React – Props & State
<b>Day 76</b>	Typing Hooks (useState, useReducer)
Day 77	Mini Project: TypeScript + React Dashboard

## Week 12: Testing, Security & Deployment

Day	Торіс
Day 78	Testing – Jest (Unit Tests)
Day 79	React Testing Library
Day 80	Snapshot Testing
<b>Day 81</b>	E2E Testing (Cypress / Playwright)
Day 82	React Best Practices (Folder Structure, Error Boundaries, ESLint &
	Prettier)
Day 83	React Security (XSS, JWT, OAuth)
Day 84	Deployment (Vercel, Netlify, GitHub Pages, CI/CD) Final Project:
	Build & Deploy E-commerce App / Chat App