



Curriculum for Website Design & Development (HTML, CSS, JavaScript & Frameworks [React.js + Vue.js])

Duration: 12 Weeks (3 Months)

Sessions: 3 lessons per week

Total Lessons: 36

Course Objectives

By the end of the course, learners should be able to:

- ✓ Understand and use **HTML, CSS, and JavaScript** for web development
 - ✓ Build **responsive** and **interactive** websites
 - ✓ Work with **CSS frameworks** (Tailwind CSS, Bootstrap)
 - ✓ Develop **dynamic web apps** using **React.js** and **Vue.js**
 - ✓ Deploy websites using **GitHub Pages, Netlify, or Vercel**
 - ✓ Apply web development skills to **real-world projects**
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Curriculum Breakdown

Month 1: Foundations of Web Development

(Start date : 20th March, 2025 - End date: 16th April, 2025)

Week 1: Introduction to HTML & CSS

(Start date : 20th March, 2025 - End date: 26th March, 2025)

- Introduction to Web Technologies & Tools (VS Code, Git, GitHub)
- **HTML Basics:** Elements, Attributes, Forms, Tables, Semantic HTML
- **CSS Basics:** Selectors, Colors, Box Model, Typography
- **Project:** Build a simple **Personal Portfolio Website**



⚡ Week 2: CSS Advanced & Responsive Design

(Start date : 27th March, 2025 - End date: 2nd April, 2025)

- **CSS Flexbox & Grid for Layout**
- **Media Queries & Mobile-First Design**
- **Introduction to Tailwind CSS & Bootstrap**
- **Project: Convert Portfolio into a Responsive Website**

⚡ Week 3: JavaScript Fundamentals

(Start date : 3rd April, 2025 - End date: 9th April, 2025)

- **JS Basics (Variables, Data Types, Functions, Loops)**
- **DOM Manipulation & Events**
- **Project: Build a Basic To-Do List App**

⚡ Week 4: JavaScript Intermediate & APIs

(Start date : 10th April, 2025 - End date: 16th April, 2025)

- **JavaScript ES6+ Features (Arrow Functions, Destructuring, Modules)**
- **Working with APIs & Fetching Data**
- **Local Storage & Session Storage**
- **Project: Create a Weather App using OpenWeather API**

📌 Month 2: Frontend Development with React.js

(Start date : 17th April, 2025 - End date: 14th May, 2025)

⚡ Week 5: Introduction to React.js

(Start date : 17th April, 2025 - End date: 23rd April, 2025)

- **Understanding Component-Based Architecture**
- **JSX & Props**
- **State & Lifecycle Methods**
- **Project: Create a Simple React Counter App**



⚡ Week 6: React Advanced Concepts

(Start date : 24th April, 2025 - End date: 30th April, 2025)

- React Hooks (useState, useEffect, useContext)
- React Router for Navigation
- Handling Forms & Validations in React
- Project: Build a Blog Website with Routing

⚡ Week 7: State Management & API Integration in React

(Start date : 1st May, 2025 - End date: 7th May, 2025)

- Context API & Redux Toolkit (Introduction)
- Fetching & Displaying Data from APIs
- Project: Create a Movie Search App using TMDB API

⚡ Week 8: Authentication & Deployment

(Start date : 8th May, 2025 - End date: 14th May, 2025)

- User Authentication (Firebase/Auth0)
- Deployment with Netlify & Vercel
- Project: Convert Blog Website to a Multi-User Platform with Login

📌 Month 3: Frontend Development with Vue.js

(Start date : 15th May, 2025 - End date: 21st May, 2025)

⚡ Week 9: Introduction to Vue.js

- Understanding Vue.js & Comparison with React.js
- Vue Directives & Components
- Project: Build a Simple Counter App in Vue.js

⚡ Week 10: Vue.js Advanced Concepts

(Start date : 22nd May, 2025 - End date: 28th May, 2025)



- Vue Router & Vuex for State Management
- Fetching Data with Axios
- **Project: Create a Task Management App using Vue.js**

⚡ **Week 11: Vue.js + Firebase Integration**

(Start date : 29th May, 2025 - End date: 4th June, 2025)

- Real-time Database with Firebase
- Deploying Vue Apps
- **Project: Build a Real-Time Chat App using Vue & Firebase**

⚡ **Week 12: Final Project & Portfolio Development**

(Start date : 5th June, 2025 - End date: 11th June, 2025)

- Project Showcase & Code Reviews
- Best Practices in Web Development
- **Final Project: Design & Develop a Full-Stack Web App (React.js or Vue.js)**

🏆 **Capstone Project Ideas (Choose One)**

- 1️⃣ **E-Learning Platform:** A responsive website where users can enroll in courses and take quizzes.
- 2️⃣ **Job Portal:** A job board for listing job opportunities, with a search & filter system.
- 3️⃣ **E-Commerce Store:** A simple online shop with product listings, a cart, and checkout.
- 4️⃣ **Task Manager App:** A to-do list with user authentication and data persistence.
- 5️⃣ **News Aggregator:** A React/Vue.js app fetching and displaying news from an API.

🔥 **Bonus:** *Best Practices*