DEVS

PRESENTS

Roadmap for becoming a
Successful Web Dev

Web Development Roadmap (6-8 Months)

Prerequisites:
- Basic understanding of computers and how the internet works. Familiarity with logic, problem-solving, and basic coding concepts.

Week 1-2: Understanding the Web

Topics:
- How the web works (HTTP/HTTPS, DNS)
- Client-server architecture
- Basics of web browsers and developer tools (Chrome DevTools)

Resources:
- MDN Web Docs: How the Web Works (https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web/How_the_Web_works)
- HTTP Crash Course (https://www.youtube.com/watch?v=iYM2zFP3Zn0)

Week 3-4: HTML & CSS

Topics:
- HTML structure, tags, and attributes
- CSS basics: Selectors, Box model, Flexbox, and Grid

Resources:
- HTML Crash Course (https://www.youtube.com/watch?v=UB1O30fR-EE)
- CSS Crash Course (https://www.youtube.com/watch?v=yfoY53QXEn0)

Assignment:
- Build a personal portfolio webpage with HTML and CSS.

Week 5-6: JavaScript Basics

Topics:
- Variables, functions, loops, and conditionals
- DOM manipulation
- Basic event handling

Resources:
- JavaScript for Beginners
- Code Basics (https://www.youtube.com/watch?v=W6NZfCO5SIk)

Assignment:
- Add interactivity to your portfolio webpage (e.g., a responsive navigation bar).

Week 7-8: Advanced JavaScript & ES6+

Topics:

- Arrow functions, Promises, async/await
 - Local storage, sessions, and JSON
- JavaScript modules (import/export)

Resources:

- JavaScript ES6+ Features (https://www.youtube.com/watch?v=NCwa_xi0Uuc)

Assignment:

- Build a simple to-do list app with vanilla JavaScript.

Week 9-10: Version Control (Git & GitHub)

Topics:

- Git basics: add, commit, push
- Branching, merging, pull requests

Resources:

- Git & GitHub Tutorial for Beginners (https://www.youtube.com/watch?v=RGOj5yH7evk)

Assignment:

- Create a GitHub account and host your portfolio website using GitHub Pages.

Week 11-12: Responsive Web Design

Topics:

- Media queries - Mobile-first design - CSS Frameworks (Bootstrap or TailwindCSS)

Resources:

- Responsive Web Design (https://www.freecodecamp.org/learn/responsive-web-design/)

Assignment:

- Redesign your portfolio to be mobile-friendly.

Week 13-14: Front-End Frameworks (React)

Topics:

- React basics: JSX, components, props, and state - React hooks (useState, useEffect)
Resources:

- React for Beginners (https://reactjs.org/tutorial/tutorial.html)
Assignment:

- Rebuild your to-do app using React.

Week 15-16: Back-End Basics (Node.js & Express)

Topics:

- Server-side JavaScript (Node.js)
- Building RESTful APIs with Express
- Connecting to databases (MongoDB or SQL)

Resources:

- Node.js Crash Course (https://www.youtube.com/watch?v=fBNz5xF-Kx4)

Assignment:

- Build a REST API for your portfolio or to-do app.

Week 17-18: Database Management

Topics:

- CRUD operations
- SQL vs NoSQL (e.g., MySQL, MongoDB)

Resources:

- SQL Crash Course (https://www.youtube.com/watch?v=HXV3zeQKqGY)
- MongoDB Tutorial (https://www.mongodb.com/)

Week 19-20: Deploying Web Applications

Topics:

- Deployment using services like Netlify, Vercel, or Heroku
- Setting up CI/CD pipelines

Resources:

- Deploying with Vercel (https://vercel.com/)

Assignment:

- Deploy your full-stack project online.

Ongoing Learning:

- Explore advanced topics like authentication (JWT, OAuth), testing (Jest, Cypress), or working with cloud services (AWS, Firebase). - Stay Updated with new web technologies and frameworks.