

Title: 4-Month Web Development Learning Roadmap for Intermediate Learners (Text-heavy, 8 hours/week)

Week 1-2: HTML & CSS Fundamentals

1.1. Introduction to HTML5 and CSS3

- Resource: Mozilla Developer Network (MDN) Web Docs: HTML
(<https://developer.mozilla.org/en-US/docs/Web/HTML>) & CSS
(<https://developer.mozilla.org/en-US/docs/Web/CSS>)

2.1. HTML Semantics

- Resource: HTML5 Doctype, Semantics, and Accessibility (W3Schools)
(https://www.w3schools.com/html/html5_semantic_elements.asp)

3.1. CSS Box Model, Positioning, and Flexbox

- Resource: CSS Box Model (MDN)
(https://developer.mozilla.org/en-US/docs/Learn/CSS/Building_blocks/The_box_model) & CSS
Flexbox (MDN)
(https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Flexible_Box_Layout/Basic_Concepts_of_Flexbox)

4.1. CSS Grid

- Resource: CSS Grid Layout (MDN)
(https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Grid_Layout)

Week 3-4: JavaScript Basics

5.1. JavaScript Introduction

- Resource: JavaScript (MDN) (<https://developer.mozilla.org/en-US/docs/Web/JavaScript>)

6.1. Variables, Data Types, Operators, and Functions

- Resource: JavaScript Guide (W3Schools) (<https://www.w3schools.com/js/>)

7.1. Control Structures: Loops, Conditionals, and Switch Statements

- Resource: JavaScript Flow Control Structures (MDN)

(https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Flow_Control_Statements)

8.1. Event Handling, DOM Manipulation, and the Document Object Model (DOM)

- Resource: JavaScript DOM (MDN)

(https://developer.mozilla.org/en-US/docs/Web/API/Document_Object_Model) & Event handling

(MDN) (<https://developer.mozilla.org/en-US/docs/Web/API/Event>)

Week 5-6: Intermediate JavaScript: ES6 and beyond

9.1. Modern JavaScript: ES6 Features

- Resource: ECMAScript 6 (ECMA) (<https://www.ecma-international.org/ecma-262/6/>) & ES6 Features (W3Schools) (https://www.w3schools.com/js/js_es6.asp)

10.1. Promises, async/await, and ES7-ES12 Features

- Resource: Promises (MDN)

(https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Using_promises) & Async/Await

(MDN)

(https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/async_function)

11.1. Debugging, Testing, and Linting

- Resource: JavaScript Debugging (MDN) (https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps/Debugging) & Jest (Facebook) (<https://jestjs.io/>)

Week 7-8: Introduction to React

12.1. React Introduction and JSX

- Resource: React (Official Documentation) (<https://reactjs.org/docs/getting-started.html>) & React with JSX (W3Schools) (<https://www.w3schools.com/react/>)

13.1. Components, Props, and State

- Resource: Components and props (React Official Documentation) (<https://reactjs.org/docs/components-and-props.html>) & State and Lifecycle (React Official Documentation) (<https://reactjs.org/docs/state-and-lifecycle.html>)

14.1. Handling Events, Forms, and Routing

- Resource: Handling Events (React Official Documentation) (<https://reactjs.org/docs/events.html>) & Forms (React Official Documentation) (<https://reactjs.org/docs/forms.html>) & React Router (Official Documentation) (<https://reactrouter.com/web/guides/quick-start>)

Week 9-10: Building a Project

15.1. Project Planning and Design

- Resource: React Project Development (FreeCodeCamp) (<https://www.freecodecamp.org/learn/front-end-libraries/react/>)

16.1. Implementing the Project

- Resource: FreeCodeCamp (<https://www.freecodecamp.org/learn/front-end-libraries/react/>)

17.1. Deployment and Optimization

- Resource: Deployment (React Official Documentation) (<https://reactjs.org/docs/faq-build.html>) & Optimizing Performance (React Official Documentation) (<https://reactjs.org/docs/optimizing-performance.html>)