LITS - BRMKL

100 Days Frontend Web Course Outline

Week 1: Introduction to Internet and Web Development

Day 1-5:

1. Introduction to the Internet
2. Understanding Servers and Clients
3. Protocols: HTTP, TCP/IP
4. Evolution of the Internet
5. Impact of the Internet on Society

Week 2: Understanding Web Development

Day 6-10:

6. Introduction to Web Development
7. Roles of Web Developers
8. Career Paths in Web Development
9. Technologies in Web Development
10. Tools in Web Development

Week 3-4: HTML (Hypertext Markup Language)

Day 11-20:
11. Introduction to HTML
12. HTML Document Structure
13. Basic HTML Tags
14. More HTML Tags
15. Semantic HTML
16. Best Practices in HTML
17. HTML Forms
18. Multimedia in HTML
19. HTML5 Features
20. Accessibility in HTML

Week 5-6: CSS (Cascading Style Sheets)

Day 21-30:
21. Introduction to CSS
22. CSS Syntax
23. CSS Selectors
24. CSS Box Model
25. Layout Techniques
26. CSS Flexbox
27. CSS Grid
28. Responsive Design
29. CSS Transitions and Animations
30. CSS Preprocessors (Sass)

Week 7: CSS Frameworks (Tailwind)

Day 31-35:
31. Introduction to CSS Frameworks
32. Advantages of Using CSS Frameworks
33. Introduction to Tailwind CSS
34. Tailwind Utility Classes
35. Customizing Tailwind CSS

Week 8-9: JavaScript/TypeScript

Day 36-50:
36. Introduction to JavaScript
37. JavaScript Syntax
38. Data Types and Operators
39. Functions and Scope
40. Arrays and Objects
41. DOM Manipulation
42. Events and Event Handling
43. Asynchronous JavaScript
44. Introduction to TypeScript
45. TypeScript Basics
46. TypeScript with React

Week 10: React.js

Day 51-55:
51. Introduction to React.js
52. JSX and Components
53. State and Props
54. Lifecycle Methods
55. Hooks

Week 11: API Handling on Frontend (React/Next.js)

Day 56-60:
56. Introduction to APIs
57. RESTful APIs
58. Fetching Data in React
59. Displaying Data in React
60. API Handling in Next.js

Week 12-13: Building Projects and Real-World Applications

Day 61-75:
61. Project Ideation
62. Project Planning
63. Project Setup
64. Project Development
65. Project Testing
66. Project Deployment
67-75. Individual or Group Project Work

Week 14: Testing, Debugging, and Deployment

Day 76-80:
76. Importance of Testing
77. Testing Frameworks (Jest, React Testing Library)
78. Debugging Techniques
79. Deployment Options
80. Deploying to Netlify/Vercel

Week 15: Advanced Topics and Further Learning

Day 81-100:
81. State Management (Redux, Context API)
82. Routing (React Router)
83. Server-side Rendering (Next.js)
84. Performance Optimization
85-95. Deep Dive into Advanced Topics
96-100. Continuous Learning Resources and Self-Exploration