**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