NEXT COACH

Comprehensive

JavaScript with React

Curriculum

FROM BEGINNER TO EXPERT

Duration - 3 Months

JavaScript with React Curriculum

1 - Advanced HTML and CSS Overview

HTML and CSS Foundations: (Prerequisites)

- Understanding Box Models (Margin, Border, Padding)
- Introduction to Flexbox Layout
- CSS Grid Layout Fundamentals
- Responsive Design Principles

2 - Foundations of JavaScript

- Introduction to JavaScript
- JavaScript Syntax and Examples
- Variables and Data Types
- Operators and Expressions
- Functions and Scope

3 - Control Flow and Loops

- Conditional Statements (if-else, switch)
- Iterative Statements (for, while, do-while)
- Loop Control Statements (break, continue)

4 - Developer Essentials

- Development Workflow and Tools
- HTML and CSS Essentials for JavaScript (Review)

JavaScript with React Curriculum

5 - Version Control with Git

Introduction to Version Control:
- Understanding the need for version control
- Benefits of using Git

Git Basics
- Installing Git
- Git configuration
- Creating a Git repository

Working with Git
- Git workflow (add, commit, push, pull)
- Branching and merging

6 - Object-Oriented Programming in JavaScript

- Objects and Prototypes Arrays and Array
- Methods String Manipulation and Regular
- Expressions Date and Math Objects
- Advanced Object Concepts

7 - Browser Object Model (BOM)

- Working with the Window Object Managing
- Browser History Accessing Navigator and Screen Objects

Document Object Model (DOM)
- DOM Manipulation Techniques Event
- Handling and Event Propagation Working with Forms and Form Validation Dynamic
- Content Updates

8 - Functional Programming in JavaScript

- Functional Concepts: Immutability and Pure Functions
- Higher-Order Functions and Function Composition
- Working with Closures and Lexical Scoping

JavaScript with React Curriculum

9 - Advanced JavaScript Features

ES6 and Beyond:

- Arrow Functions
- Template Literals
- Destructuring, Spread, and Rest Operators
- Classes and Inheritance in JavaScript
- Generators and Iterators
- Promises and Async/Await for Asynchronous Operations
- Fetch API for making HTTP requests
- Arrow Methods (map(), reduce(), filter(), for Each())
- Cookies and Local Storage

10 - Animations using JavaScript and jQuery

- **JavaScript Animations:**
  - Implementing animations with setTimeout and setInterval Creating smooth transitions and effects
- **jQuery Animations:**
  - Introduction to jQuery for DOM manipulation
  - Animating HTML elements using jQuery methods like animate()
  - Various jQuery libraries such as Light Gallery, venobox, and others.

11 - Error Handling and Best Practices

- Exception Handling with try-catch
- Utilizing Strict Mode for Cleaner Code
- Effective Debugging Strategies

12 - Introduction to Node.js

- Introduction to Node.js
- Setting Up a Node.js Project
- Working with npm for Package Management

React (front-end SPA library)

- Introduction to React
- React Components and JSX
- State and Props
- Handling in React
- React Hooks (useState, useEffect, etc.)
- Routing with React Router

Real-World Applications Projects

1. **Weather Widget with API Integration:**
• Develop a weather widget that fetches and displays weather data from a public API based on user location or input.

2. **Portfolio Website:**
• Create a professional portfolio website showcasing your projects, skills, and resume. Include interactive elements such as modals, sliders, and animations.

3. **Blog Platform:**
• Build a blog platform where users can create, edit, and delete posts.

4. **Quiz Application:**
• Build an interactive quiz application with multiple categories and difficulty levels. Include features like a timer, scoring system, and result analysis.
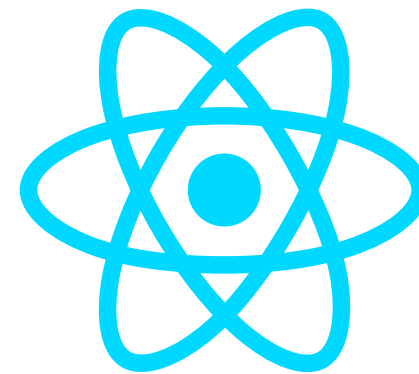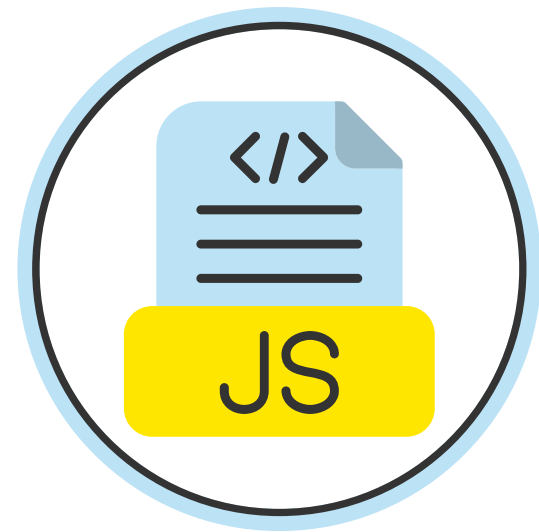
Projects and Practical Applications

1. **Hands-on Projects integrating learned concepts**

2. **Final Project Showcase and Presentation**

Technologies to learn

Job Roles that can be applied after completion of this course

- Front-End Developer
- Web App Developer
- JavaScript Developer
- Full-Stack Developer
- React Native Developer
- Node.js Developer
- UI/UX Developer
- QA Engineer
- Junior Software Developer
- Technical Project Manager

How to Apply for Next Coach Program

At Next Coach, we're dedicated to helping students unlock their full potential and achieve their academic goals. **To join our program, follow these simple steps:**

1. **Visit Our Website** (www.nxtcoach.com.np)
2. **Click "Enroll Now"**
3. **Complete the Application Form**
4. **Submit Your Application**
5. **Wait for our Response and Prepare for the Evaluation**
6. **Complete the Evaluation**
7. **Class starts**

Join Next Coach and take the next step towards your academic success. We're here to guide you every step of the way!

If you have any queries or need assistance during our application process, please get in touch with our Admission Department. We look forward to welcoming you to the Next Coach program and helping you achieve your next learning and career goals.

WHY CHOOSE US?

Personalized Mentorship

At Next Coach, you'll benefit from one-on-one mentorship by industry experts. They provide personalized guidance, answer questions, and help you achieve your learning goals— a dedicated coach for your success.

Real-World Tech Projects

We offer students the opportunity to work on real industry-based projects. You'll apply your newly acquired tech skills to solve practical problems, gain hands-on experience, and build a professional portfolio. It's a crucial step in preparing for a successful tech career.

Assured Learning Success

We guarantee that you'll achieve your learning goals. We provide the support, resources, and guidance you need to succeed. Our commitment to your success ensures that you leave our programs with the knowledge and skills you need to excel in the tech industry.

Get In Touch

NEXT COACH

+977-9820-993-099 Birgunj-15,
Parsa, Nepal

www.nextcoach.com.np

in f 📷
@nextcoachlab