Month 1: Fundamentals of React

Week 1: Introduction to React.js

Module 1: Course Introduction

Lecture 1: What is React.js?

Lecture 2: Setting Up the Development Environment

Lecture 3: Creating Your First React Component

Week 2: React Components and JSX

Module 2: React Components

Lecture 4: Functional Components

Lecture 5: Class Components

Lecture 6: Props and State

Module 3: JSX (JavaScript XML)

Lecture 7: Introduction to JSX

Lecture 8: JSX Elements and Syntax

Lecture 9: JSX Expressions and Fragments

Week 3: Component Lifecycle and Events

Module 4: Component Lifecycle

Lecture 10: Component Lifecycle Methods

Lecture 11: Mounting, Updating, and Unmounting

Module 5: Handling Events

Lecture 12: Event Handling in React

Lecture 13: Synthetic Events

Lecture 14: Event Propagation

Week 4: State Management

Module 6: State Management in React

Lecture 15: State vs. Props

Lecture 16: setState() Method

Lecture 17: Lifting State Up

Module 7: Context API and Redux

Lecture 18: Introduction to Context API

Lecture 19: Managing Global State with Redux

Month 2: Advanced React Topics

Week 5: Routing and Navigation

Module 8: React Router

Lecture 20: Introduction to React Router

Lecture 21: Configuring Routes

Lecture 22: Navigation and Route Parameters

Week 6: Forms and Form Handling

Module 9: Forms in React

Lecture 23: Controlled vs. Uncontrolled Components

Lecture 24: Form Validation

Lecture 25: Form Libraries (e.g., Formik)

Week 7: API Integration and Data Fetching

Module 10: Making API Requests

Lecture 26: Fetching Data from APIs

Lecture 27: Axios and Fetch API

Module 11: Async Patterns

Lecture 28: Promises and Async/Await

Lecture 29: Handling Async Data

Week 8: Testing and Optimization

Module 12: Testing React Applications

Lecture 30: Unit Testing with Jest

Lecture 31: Testing React Components

Module 13: Performance Optimization

Lecture 32: React Performance Best Practices

Lecture 33: Code Splitting and Lazy Loading

Week 9: Project Week

Module 14: Project Week

Students work on a React project of their choice.

Instructor provides guidance and assistance as needed.

Presentation and discussion of projects.