

Course Title: Introduction to Vue 3: Building Web Applications

Course Description: This course is designed for web developers who want to learn Vue 3, a progressive JavaScript framework for building modern web applications. You'll start with the basics and progress to more advanced concepts, allowing you to create interactive and dynamic web apps.

Course Duration: 6 weeks

Module 1: Introduction to Vue 3

- ❑ **Lesson 1.1:** What is Vue.js?
- ❑ **Lesson 1.2:** Setting up Your Development Environment
- ❑ **Lesson 1.3:** Creating Your First Vue App

Module 2: Vue Components

- ❑ **Lesson 2.1:** Understanding Vue Components
- ❑ **Lesson 2.2:** Data Binding and Templates
- ❑ **Lesson 2.3:** Event Handling and Methods
- ❑ **Assignment:** Build a Simple Component

Module 3: Directives and Interactivity

- ❑ **Lesson 3.1:** Working with Directives
- ❑ **Lesson 3.2:** Conditional Rendering
- ❑ **Lesson 3.3:** Lists and Loops
- ❑ **Assignment:** Create an Interactive To-Do List

Module 4: State Management with Pinia

- ❑ **Lesson 4.1:** The Need for State Management
- ❑ **Lesson 4.2:** Setting Up Pinia
- ❑ **Lesson 4.3:** Mutations, Actions, and Getters
- ❑ **Assignment:** Implement State Management in a To-Do List

Module 5: Routing with Vue Router

- ❑ **Lesson 5.1:** Introduction to Vue Router
- ❑ **Lesson 5.2:** Creating Routes and Navigating
- ❑ **Lesson 5.3:** Dynamic Routing
- ❑ **Assignment:** Build a Multi-Page Application

Module 6: Real-World Applications and Best Practices

- ☐ **Lesson 6.1:** Building a Complete Project
- ☐ **Lesson 6.2:** Optimization and Performance
- ☐ **Lesson 6.3:** Testing and Debugging
- ☐ **Final Project:** Develop a Full-Fledged Web Application

Additional Resources:

- ☐ Links to official Vue.js documentation
- ☐ Recommended readings and articles for further learning
- ☐ Code repositories and GitHub projects for reference

Assessment and Certification:

- ☐ Quizzes at the end of each module to test your knowledge
- ☐ A final project to showcase your Vue 3 skills
- ☐ Certificate of Completion upon successfully passing assessments

Community Building:

- ☐ Discussion forum for questions and collaboration
- ☐ Weekly live Q&A sessions for direct interaction

Course Prerequisites:

- ☐ Basic understanding of HTML, CSS, and JavaScript is recommended.

This course provides a comprehensive introduction to Vue 3, from the fundamentals to building real-world projects. Each module includes practical assignments to reinforce your learning. You'll gain the skills needed to create dynamic and interactive web applications using Vue 3.