

## **Vue.JS with Vue-Ex**

**Duration: 40 Hours (5 Days)**

### **Overview**

The Vue.js with Vuex course is an in-depth guide designed to equip learners with a comprehensive understanding of Vue.js, one of the most popular JavaScript frameworks. It is tailored to help learners build dynamic and powerful single-page applications efficiently. Module 1: Understanding Vue 3 and Creating Components serves as an introduction to Vue.js, explaining why it is a go-to framework for modern web development. It walks through the creation of a first project using Vue CLI, crafting custom components, and enhancing code reusability with mixins. As learners progress, they will delve into data binding, form handling, managing events, and leveraging computed properties to create responsive and interactive web interfaces. They'll explore component communication, ensuring components work together seamlessly. The course also covers how to fetch data from the web using HTTP requests, manage application state with Vuex, and handle routes with vue-router. Additionally, it introduces UI frameworks such as Vuetify to style applications beautifully and discusses best practices in unit testing to ensure code reliability. By the end, participants will have a solid grasp of Vue.js, allowing them to build and maintain scalable web applications.

### **Audience Profile**

Koenig Solutions' Vue.JS with Vue-Ex course is a comprehensive training program for developers looking to master Vue.js and modern front-end development.

- Front-End Developers
- JavaScript Developers
- Full-Stack Developers
- Web Developers
- UI/UX Designers interested in learning to implement their designs with Vue.js
- Technical Leads and Architects seeking to adopt Vue.js in their projects
- Software Engineers looking to transition to front-end development
- IT Professionals wanting to upskill in modern JavaScript frameworks
- Computer Science Students and Graduates aiming to enhance their front-end skills
- Freelancers aiming to offer Vue.js development services
- Entrepreneurs or Startup owners looking to understand Vue.js for their tech stack

### **Course Syllabus**

#### **Chapter 1: Understanding Vue 3 and Creating Components**

- Introduction to Vue JS
- Why VueJS
- Reason to learn VueJS
- Creating your first project with Vue CLI
- Creating your first Vue component with vue-class-component
- Creating a custom mixin with vue-class-component

## **Chapter 2: Data Binding, Form Validations, Events, and Computed Properties**

- Creating the "hello world" component
- Creating an input form with two-way data binding
- Adding an event listener to an element
- Removing the v-model from the input
- Creating a dynamic to-do list
- Creating computed properties and understanding how they work
- Displaying cleaner data and text with custom filters
- Adding form validation with Vuelidate
- Creating filters and sorters for a list
- Creating conditional filters to sort list data
- Adding custom styles and transitions
- Using vue-devtools to debug your application

## **Chapter 3: Components and Component Communication**

- Using slots and named slots to place data inside your components
- Passing data to your component and validating the data
- Accessing your children components data
- Creating a dynamic injected component
- Creating a dependency injection component
- Lazy loading your components

## **Chapter 4: Fetching Data from the Web via HTTP Requests**

- Creating a wrapper for the Fetch API as an HTTP client
- Using axios as the new HTTP client
- Creating your fake JSON API server with MirageJS
- Creating a CRUD interface with Axios and Vuesax

## **Chapter 5: Managing Routes with vue-router**

- Creating a simple route
- Creating a programmatic navigation
- Creating a dynamic router path
- Creating a route alias
- Creating route redirects
- Creating a nested router view
- Creating a 404-error page
- Creating and applying authentication middleware
- Lazy loading your pages asynchronously

## **Chapter 6: Managing the Application State with Vuex**

- Creating a simple Vuex store
- Creating and understanding the Vuex state

- Creating and understanding the Vuex mutations
- Creating and understanding the Vuex getters
- Creating and understanding the Vuex actions
- Creating a dynamic component with Vuex
- Creating a Vuex module

#### **Chapter 7: Creating Beautiful Applications Using UI Frameworks**

- Creating a page, a layout, and a user form with Vuetify
- Creating custom tables
- Creating custom UI Designs
- Custom Pagination