Introduction to Vue.js (2 Days)

This 2-day course is designed to get you started building small to intermediate sized front end applications for browsers. The course is structured to match the philosophy of Vue, that is, adopt Vue incrementally. You start by adding small functionalities to an existing application. Later you'll learn to build more ambitious Single Page Application (SPA). With SPA, Vue controls the entire frontend which is completely decoupled from the backend software.

Audience

Developers responsible for building web based frontend UI applications.

Prerequisites

Knowledge of the usual web frontend technologies like HTML, CSS and AJAX.
Good knowledge of JavaScript.
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Course Outline

Chapter 1. Introduction to Vue.js

- What is Vue.js?
- What Makes Vue.js Unique?
- Progressive Adoption of Vue.js
- Using Vue.js
- The Vue Instance
- Data Binding Basics
- Binding to an Attribute
- Computed Property
- A Note About ES6 Object Literal
- Event Handling
- Introduction to Components
- Example Component
- Differences Between Vue Instance and Component

Chapter 2. Template Syntax

- What is a Template?
- Showing Data
- Using Expressions
- Rendering HTML Text

- Setting Element Attributes
- Conditionally Showing Elements
- v-else-if and v-else
- v-show
- Rendering a List
- Using v-for
- Getting the Loop Index
- Identifying Each Item
- Event Handling Inside a Loop
- Grouping Sibling Elements
- Registering Event Handlers
- Event Modifiers
- Conditional CSS Styling
- Supply Class Array
- Inline Styles

Chapter 3. Working With Forms

- Two Way Data Binding
- Example Two Way Data Binding
- Checkbox
- Bind a Non-boolean Property
- Radio Button
- Radio Buttons from a Dynamic List
- Select Dropdown
- Binding an Object to Select
- Working With Numbers
- Handle Form Submission
- Handling Input Change Event

Chapter 4. Vue Components

- Introduction to Components
- Declaring a Component
- The Vue.component() Method
- Component State
- The Component Tree
- Single Root Element
- Passing Data to a Child Component
- Supplying the Input
- Raising Events
- Example: Raising an Event
- Handling the Event from the Parent
- Obtaining Reference to a Child Component

Chapter 5. Lifecycle Hooks

- Lifecycle
- Common Lifecycle Hooks
- Example: Component Lifecycle Hooks
- Use the Component
- Example: Vue Instance Lifecycle
- Other Lifecycle Hooks

Chapter 6. Single File Component

- Shortcomings of Regular Components
- What is Single File Component (SFC)?
- The .vue File Syntax
- Using a SFC
- Vue Command Line Interface (CLI)
- Installing Vue CLI
- Developing SFC
- Editor Extensions

Chapter 7. Single Page Application (SPA)

- What is a Single Page Application (SPA)
- Traditional Web Application Capabilities
- Single Page Application Advantages
- Overview of SPA Using Vue Router
- Create a New Application Project
- Creating View Components
- Setting Up the Route Table
- Adding Links to Views
- Programmatic Navigation
- Supplying Path Parameters
- Test, Build and Deploy

Chapter 8. HTTP Client Development

- Ways to Write HTTP Client
- Using Axios in Single File Component
- Using Axios in a Conventional Component
- The axios Object Methods
- The Configuration Object
- Response Object Properties
- Making a POST Call
- Error Handling