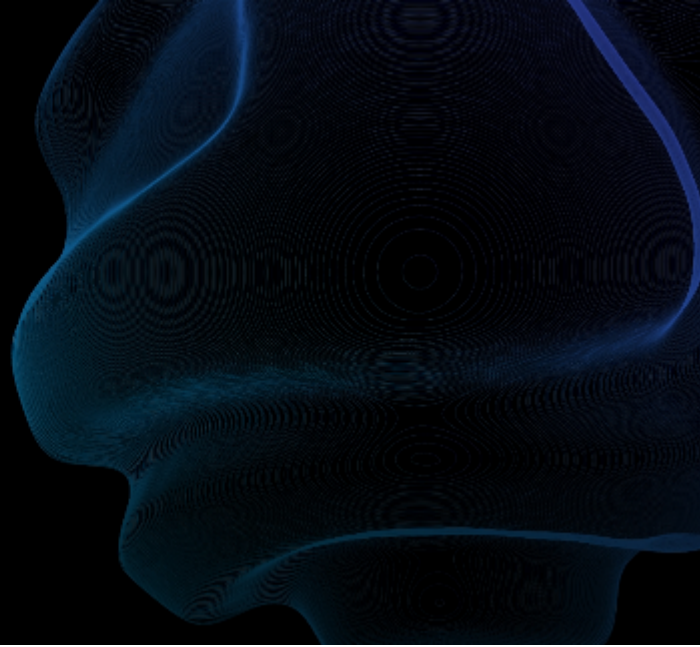# Vue.js

2jours / 14h

Target audience

- Master the key architectural concepts of Vue.js
- Develop the graphical interface for complete web or single page applications with Vue.js
- Implement the development tools specific to Vue.js
- Implement major Vue.js plugins

Prerequisites

Developers, integrators, software architects, technical project managers

Course Outline

1, Introduction to Vue.js

- Principles and philosophy
- Comparison with other major frameworks
- Roadmap
- Vue.js Installer

Workshops

- Vue.js installation
- Quick win: getting started with Vue.js

2. Core Library
    - Instance, life cycle and properties
    - Reactivity
    - Template
    - Directives
    - Workshops:
    - Implementation reactive properties
    - Use of directives: conditionals, lists, events, model, style
    - React to the life cycle of the Vue instance
3. Components
    - Definition
    - Component Registration
    - Props
    - Template, slots
    - Tree structure and communication between components
    - Dynamic components
    - Animations and transitions

Workshops:

- Creation of a single view using several custom components

4. Reusability and Composition
    - Mixins
    - Filters
    - Plugins

Workshops:

- Creation and use of mixins, filters and plugins

5. Tools
    - Vetur, VSCode client
    - Devtools, browser plugin
    - Vue CLI, RAD console
    - TypeScript

Workshops:

- Implementation of a complete development environment

6. Single View Components

- Single File Components
- Different ways to create a SFC

Workshops:

- Create a Single File Component

7. Vue Router library
   - Principles
   - Installation
   - Router access
   - Features: dynamic, nested, programmatic navigation …
   - Navigation Guards

Workshops:

- Creation of a Single Page Application with Router

8. Vuex
   - Application Structure and State Management Pattern
   - Installation
   - Implementation
   - Alternative Libraries

Workshops:

- Centralized state management of an application using Vuex