**Vue 2**

Babel instead of vite

Router

Vuex instead of pinia(vuex3)

Javascript

Lint/prettier

Unit testing (Jest)

e-e (cypress)

Bootstrap for css

Steps project vue 2 creation:

1. Nvm install 16.2.0
2. Nvm use 16.2.0

Creation of project

1. Npx vue create vue2-dashboard

Using vue

npm install -g @vue/cli@4

1. vue create vue2-dashboard
2. checked babel , eslint , default vue 2
3. npm install bootstrap bootstrap-vue bootstrap-icons
4. npm install axios
5. npm install chart.js@2.9.4 vue-chartjs@3
6. main.js setup
7. install router npm install --save vue-router
8. npm install vuex@3
9. chart is not compatible used npm uninstall chart.js
10. used npm install [chart.js@2.9.4](mailto:chart.js@2.9.4)
11. npm uninstall chart.js vue-chartjs
12. npm install chart.js@2.9.4 [vue-chartjs@3.5.1](mailto:vue-chartjs@3.5.1)
13. Integrated cards and charts in to dashboard

**Project Structure**

* src/main.js: Entry point using Vue 2 + Vuex + Vue Router + BootstrapVue
* App.vue: Contains layout with <Header />, <Sidebar />, and <router-view />
* components/: Organized into:
  + layout/: Shared layout components (Header, Sidebar)
  + charts/: Reusable Chart.js-based components (LineChart, PieChart, EarningsChart)
  + ui/: UI widgets (BaseCard, ChartWrapper, StatsCard, UserDetailsForm)

**Dependencies**

From package.json:

* **Core Libraries**: vue@2.6.11, vue-router@3, vuex@3
* **UI**: bootstrap, bootstrap-vue, bootstrap-icons
* **Charts**: chart.js@2.9.4, vue-chartjs@3.5.1
* **Utilities**: html2canvas, jspdf, xlsx, axios, file-saver

**Features**

* Dashboard-style layout with responsive sidebar
* Chart components using vue-chartjs
* Form component for user input
* PDF and Excel export utilities

Key differences:

| **Category** | **Vue 2 (Original)** | **Vue 3 + Vite + TypeScript (Converted)** |
| --- | --- | --- |
| **Build Tool** | Vue CLI (vue-cli-service) | **Vite** (faster, ESM-native) |
| **Language** | JavaScript | **TypeScript** |
| **Vue Version** | Vue 2.6 | **Vue 3.x** |
| **App Init** | new Vue({ ... }) | **createApp(App).use(...).mount(...)** |
| **Component API** | Options API only (data, methods) | Supports **Options API** and **Composition API (<script setup>)** |
| **Router** | Vue Router v3 | **Vue Router v4** (with createRouter) |
| **Vuex** | Vuex v3 | **Vuex v4** (minor API changes) |
| **Bootstrap** | bootstrap-vue@2 | bootstrap-vue-3 |
| **Chart Library** | vue-chartjs@3 (wraps Chart.js v2) | **vue-chartjs@5 + Chart.js v4** |
| **Component Props** | props: { msg: String } | **defineProps<{ msg: string }>()** in <script setup lang="ts"> |
| **Performance** | Heavier (webpack-based) | **Much faster** with Vite |
| **Config Files** | babel.config.js, .eslintrc.js, etc. | **vite.config.ts**, tsconfig.json (lightweight) |
| **HTML Entry** | Handled via CLI template | **Explicit index.html** (customizable, fast) |
| **Scoped Styles** | Supported with scoped | Still supported + now supports **CSS vars, v-bind in CSS** |
| **Reactivity** | data(), this references | Composition API with ref(), reactive() is preferred |
|  |  |  |

Vue3 key features:

**Moved from options API to CompositionAPI (moved away from concept of data , methods and computed functions) to reactive declarations using script setup.**

**Moved away from babel/ webpack to Vite, making it simpler to bundle and reacts quickly**

**Steps to migrate:**

1.npm create vite@latest my-vue3-app -- --template vue-ts

2. upgrade node to min (20.19.0)

3.npm install vue-router@4 vuex@4

4.npm install bootstrap bootstrap-icons

5.npm install chart.js vue-chartjs(necessary dependencies)

6.npm install html2canvas jspdf xlsx file-saver(necessary dependencies)

7. npm install axios chart.js vue-chartjs file-saver html2canvas jspdf xlsx @types/file-saver

8. mkdir -p src/components/layout src/components/charts src/components/ui src/views src/assets/styles

9.Update dependencies and package configurations

10.changing main.js to main.ts

11.Converting UI components

12.Converting chart components

13.Converting views

14.Update build config and assets.

15.Configuring index.html

16.Adding type declarations in vite env config