



# Electron with Vue 3 Project Structure

Vue 3 renderer with Composition API and Pinia. Familiar Vue patterns for Electron development.

#electron

#vue

#vite

#desktop

#typescript

#pinia

 PNG

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 Prompt

 Project Directory



## my-electron-app/

-  package.json
-  vite.config.ts
-  electron-builder.json
- > 

 **src/**

> 

 **main/** Main process

 index.ts

 window.ts

> 

 **ipc/**

 index.ts

 files.ts

 dialog.ts

> 

 **services/**

 store.ts

> 

 **preload/**

 index.ts contextBridge A...

> 

 **renderer/** Vue 3 app

 index.html

 main.ts Vue entry

 App.vue

> 

 **components/**

 TitleBar.vue

 Sidebar.vue

> 

 **views/**

 HomeView.vue

 SettingsView.vue

> 

 **stores/** Pinia stores

 app.ts

 settings.ts

> 

 **composables/**

 useElectron.ts IPC wrapper

 useWindow.ts

> 

 **router/**

 index.ts

> 

 **resources/**

 icon.icns

 icon.ico

 icon.png

 Why This Structure?

Vue 3 with Composition API brings reactive, organized code to Electron. Pinia manages state with devtools. Vue composables wrap IPC calls for clean component code. Vue Router handles in-app navigation.

 Key Directories

**src/renderer/composables/** - Vue composables wrapping Electron APIs

**src/renderer/stores/** - Pinia stores for global state

**src/renderer/views/** - Route-level Vue components

**src/preload/** - Context bridge exposing safe APIs

>\_ Getting Started

1. Use `electron-vite` for scaffolding

2. `npm create electron-vite -- --template vue-ts`

3. `npm install pinia vue-router`

4. Configure preload script

5. `npm run dev`

</> Vue Composable

```
// src/renderer/composables/useElectron.ts
export function useElectron() {
  const readFile = (path: string) =>
    window.api.readFile(path);

  const openFileDialog = () =>
    window.api.openFileDialog();

  return { readFile, openFileDialog };
}
```

☒ When To Use This

• Teams with Vue experience

• Apps needing robust state management

• Complex UIs with routing

• Projects wanting Vue devtools

 Trade-offs

**Bundle size** - Vue runtime adds to renderer bundle

**Setup complexity** - Router and Pinia configuration needed

**Build config** - Vite config for Electron requires setup