

## Vue3 & Vite

Vue3

`vue` `vite`

npm install vue npm install -D vite @vitejs/plugin-vue

Vue `src/main.js`

```
import { createApp } from 'vue'
import App from './App.vue'

createApp(App).mount('#app')
```

`vite.config.js`

```
import { defineConfig } from 'vite'
import Vue from '@vitejs/plugin-vue'

export default defineConfig({
   plugins: [Vue()]
})
```

`index.html`

```
<body>
    <div id="app"></div>
    <script type="module" src="./src/main.js"></script>
</body>
```

# TypeScript

Vite

TypeScript

## **TypeScript**

```
npm install -D typescript
```

### JS TS

```
<script>
export default {
   // ...
}
</script>

<script lang="ts">
   import { defineComponent } from 'vue'
   export default defineComponent({
        // ...
})
</script>
```

```
`*.js` -- `*.ts`
```

## `tsconfig.json`

```
"compilerOptions": {
  "target": "esnext",
 "module": "esnext",
  "moduleResolution": "node",
 "resolveJsonModule": true,
 "lib": ["esnext", "dom"],
  "jsx": "preserve",
  "strict": true,
  "esModuleInterop": true,
  "isolatedModules": true,
  "skipLibCheck": true,
  "preserveValueImports": true,
  "importsNotUsedAsValues": true,
  "forceConsistentCasingInFileNames": true,
  "baseUrl": "./",
```

# **CSS**

CSS / PostCSS Preset Env

Vite CSS

```
# .scss/.sass
npm install -D sass

# .less
npm install -D less

# .styl/.stylus
npm install -D stylus
```

## CSS - PostCSS Preset Env

`postcss-preset-env`

```
npm install -D postcss-preset-env
```

`vite.config.ts`

# **CSS**

### CSS Tailwind CSS / Windi CSS / UnoCSS

```
<button class="py-1 px-4 rounded text-white bg-blue-400 active:bg-blue-500">CLICK</Button>
```

**CLICK** 

npm install -D unocss

```
// vite.config.ts
import { defineConfig } from 'vite'
import UnoCSS from 'unocss/vite'

export default defineConfig({
   plugins: [
     UnoCSS()
   ]
})

// main.ts
import 'uno.css'
```

```
// unocss.config.ts
import {
 defineConfig, presetUno, presetIcons,
 transformerDirectives, transformerVariantGroup
} from 'unocss'
export default defineConfig({
 presets: [
    presetUno(),
   presetIcons()
 transformers: [
    transformerDirectives(),
   transformerVariantGroup()
```

## - Vue Router 4.x

API

```
// router.ts
import {
    createRouter, createWebHistory
} from 'vue-router'

export default createRouter({
    history: createWebHistory(),
    routes: [ /* ... */ ]
})
```

```
// main.ts
import router from './router'
import { createApp } from 'vue'
import App from './App.vue'

createApp(App).use(router).mount('#app')
```

```
<script lang="ts">
import { defineComponent } from 'vue'
import { useRouter, useRoute } from 'vue-router'
export default defineComponent({
 setup() {
   const router = useRouter()
   const route = useRoute()
   return { router, route }
</script>
<template>
 {{ route.name }}
 <button @click="router.push('/about')">About</button>
</template>
```

# - Pinia

### pinia:

```
// main.ts
import { createPinia } from 'pinia'
import { createApp } from 'vue'
import App from './App.vue'

createApp(App).use(createPinia()).mount('#app')
```

#### store

```
// store/counter.ts
import { defineStore } from 'pinia'
export const useCounterStore = defineStore('counter', {
   state: () \Rightarrow ({ count: 0 }),
   actions: {
     increment() {
       this.count++
     }
   }
})
```

#### store

```
<script lang="ts">
import { defineComponent } from 'vue'
import { useCounterStore } from './store/counter'
export default defineComponent({
 setup() {
    const counterStore = useCounterStore()
   return { counterStore }
</script>
<template>
  <button @click="counterStore.increment">
    {{ counterStore.count }}
 </button>
</template>
```

# Script Setup

SFC

```
<template>
  <HelloWorld />
  <button @click="increment">{{ count }}</button>
</template>
<script lang="ts">
import { ref, defineComponent } from 'vue'
import HelloWorld from './components/HelloWorld.vue'
                                                                      <script setup lang="ts">
                                                                      import { ref } from 'vue'
export default defineComponent({
                                                                      import HelloWorld from './components/HelloWorld.vue'
  components: { HelloWorld },
  setup() {
                                                         script setup
                                                                      const count = ref(0)
   const count = ref(0)
                                                                      function increment() {
   function increment() {
                                                                        count.value++
     count.value++
                                                                      </script>
   return { count, increment }
</script>
```

## `unplugin-vue-components`

```
<script setup>
import HelloWorld from './components/HelloWorld.vue'
import Foo from './components/Foo.vue'
import Bar from './components/Bar.vue'
</script>
<template>
  <HelloWorld />
 <F00 />
  <Bar />
</template>
<template>
  <HelloWorld />
 <F00 />
  <Bar />
</template>
```

```
`unplugin-vue-components`
```

```
npm install -D unplugin-vue-components
```

```
`vite.config.ts`
```

```
import { defineConfig } from 'vite'
import Components from 'unplugin-vue-components/vite'

export default defineConfig({
   plugins: [
        Components({
            // default
            dirs: "src/components"
        })
   ]
})
```

## **API**

## API `unplugin-auto-import`

```
import { computed, ref } from 'vue'
import { useRouter, useRoute } from 'vue-router'
const count = ref(0)
const doubled = computed(() \Rightarrow count.value * 2)
const router = useRouter()
const route = useRoute()
                            API
const count = ref(0)
const doubled = computed(() \Rightarrow count.value * 2)
const router = useRouter()
const route = useRoute()
```

## `unplugin-auto-import`

```
npm install -D unplugin-auto-import
```

## `vite.config.ts`

```
import { defineConfig } from 'vite'
import AutoImport from 'unplugin-auto-import/vite'

export default defineConfig({
   plugins: [
     AutoImport({
       imports: ['vue', 'vue-router']
     })
   ]
}
```

## ESLint / Husky

#### eslint:

```
npm install -D eslint @yangss/eslint-config-vue

// .eslintrc.json
{
    "extends": [
        "@yangss/eslint-config-vue"
    ]
}
```

## husky & lint-staged:

```
npm install -D husky lint-staged
npx husky install
npx husky add .husky/pre-commit "npx lint-staged"
```

```
// package.json
{
    // ...
    "lint-staged": {
        "*.(ts|vue)": "eslint --fix"
    }
}
```

## Vitest & test-utils

- Vitest Vite
- Test Utils Vue

- VueUse
- UI Element Plus / Ant Design Vue / Vant UI
- vue-i18n