

# Routing - Vue Router

## Background

Single Page Applications (SPA) e.g Email Clients, enables a user not to update/refresh the browser when a page is requested.

## Steps for Setup

1. Install vue-router

To install the vue-router into the project folder, cd into the project folder and run,

```
npm install vue-router
```

2. Import vue-router

Import vue-router in the main.js file

```
import VueRouter from 'vue-router' //vue-router is a plugin
```

3. Import the rest of the vue pages/components

4. To use the vue-router

Vue-router is a plugin, hence we need to tell vue to use it

```
Vue.use(VueRouter);
```

5. Define routes.

There are two ways to introduce the routes

a) First Method- is similar to when we did simple routes `const routes = {}`

b) The Second Method- We initiate a `new VueRouter` instance and then declare our routes inside.

```
const router = new VueRouter({
  routes: [
    {path: '/', component: HelloWorld},
    {path: '/tasks', component: Tasks },
    {path: '/user/:id', component: User },
    {path: '/about', component: About },
    {path: '*', component: NotFound },
  ],
})
```

In the above, each route has two parameters, `path` and `component`

The last path, catches everything that is not in the path list and returns NotFound

6. Tell Vue instance about our router.

In the vue instance, pass in `router`

```

new Vue({
  router,
  render: h => h(App),
}).$mount('#app')

```

NOTE:

Vue router is not supported by old browsers, hence they will reload the whole page.

And in the address bar (url), a pound sign # appears

```
localhost:8080/#/
```

Hence to remove support for older browsers and hence to remove, the pound sign,

after the routes, we are to introduce `mode:` which is set to `'history'` inside the `vueRouter` instance

```
mode: 'history'
```

## 7. Placement of component.

Since the `app` is displaced by the browser, we bring in the components through the router

hence in the `.src/App.vue` write

```
<router-view></router-view>
```

This tells the router where to place the component.

## 8. Adding Links

In the `App.vue`

```

<ul>
  <li><router-link to="/" >Home</router-link></li>
  <li><router-link to="/tasks" >Tasks</router-link></li>
  <li><router-link to="/user/:id" >User</router-link> </li> <!-- To pass
in Second PArAmeter to the url -->
  <li><router-link to="/about" >About</router-link></li>
</ul>

```

## 9. To get access to a variable inputted into the url eg `/user/:id` we use

```
{{ $route.params.id }}
```

`.src/main.js`

```

import Vue from 'vue'
import App from './App.vue'
import VueRouter from 'vue-router' //vue-router is a plugin
import HelloWorld from './components/HelloWorld.vue';
import Tasks from './components/Tasks.vue';
import User from './components/User.vue';
import About from './components/About.vue';
import NotFound from './components/NotFound.vue';

Vue.use(VueRouter);

Vue.config.productionTip = false

const router = new VueRouter({
  routes: [
    {path: '/', component: HelloWorld},
    {path: '/tasks', component: Tasks },
    {path: '/user/:id', component: User },
    {path: '/about', component: About },
    {path: '*', component: NotFound }, // This catches everything that is not in
    routes list
  ],

  mode: 'history'

});

new Vue({

  router,

  render: h => h(App),
}).$mount('#app')
```

.src/App.vue

```

<template>
  <div id="app">

    <!-- To create a single page application, and add the routes link, we use
    route link -->
    <ul>
      <li><router-link to="/" >Home</router-link></li>
      <li><router-link to="/tasks" >Tasks</router-link></li>
      <li><router-link to="/user/:id" >User</router-link> </li> <!-- To pass in
      Second Parameter to the url -->
      <li><router-link to="/about" >About</router-link></li>
    </ul>

    <router-view></router-view>
    <!-- router-view allow us to attach our component at this part, -->
```

```

<!-- while using router-view check if the componets are used in any instance, un
import imported component -->
  </div>
</template>

<script>
//import HelloWorld from './components/HelloWorld.vue'

export default {
  name: 'App',
  components: {
    //HelloWorld
  }
}
</script>

<style>
#app {
  font-family: Avenir, Helvetica, Arial, sans-serif;
  -webkit-font-smoothing: antialiased;
  -moz-osx-font-smoothing: grayscale;
  text-align: center;
  color: #2c3e50;
  margin-top: 60px;
}
</style>

```

./src/components/User.vue

```

<template>
  <h1>
    {{$route.params.id}}
  </h1>
</template>

```