

Vue Router (路由) 动手实验

主讲人：和凌志

主要内容

- 组件跳转

创建多个组件的方法

- 组件以 `.vue` 结尾
- 创建 `header.vue` 组件, 在 `components` -> 创建

header.vue 组件

```
<template>
  <div class="my-container">
    <h2>{{msg}}</h2>
  </div>
</template>

<script>
export default {
  name: "Header",
  data() {
    return {
      msg: "This is Header Page! "
    };
  }
};
</script>
```

header.vue

```
<template>
```

```
<div class="my-container">
```

```
<h2> {{msg}} </h2>
```

```
</div>
```

```
</template>
```

```
<script>
```

```
export default {
```

```
  name: "Header",
```

```
  data() {
```

```
    return {
```

```
      msg: "This is Header Page ! "
```

```
    }
```

```
  }
```

```
};
```

```
</script>
```

创建了组件，如何使用它们？

- 如何实现组件之间的跳转？

Vue 路由管理器 —— vue router

路由管理器—— vue router

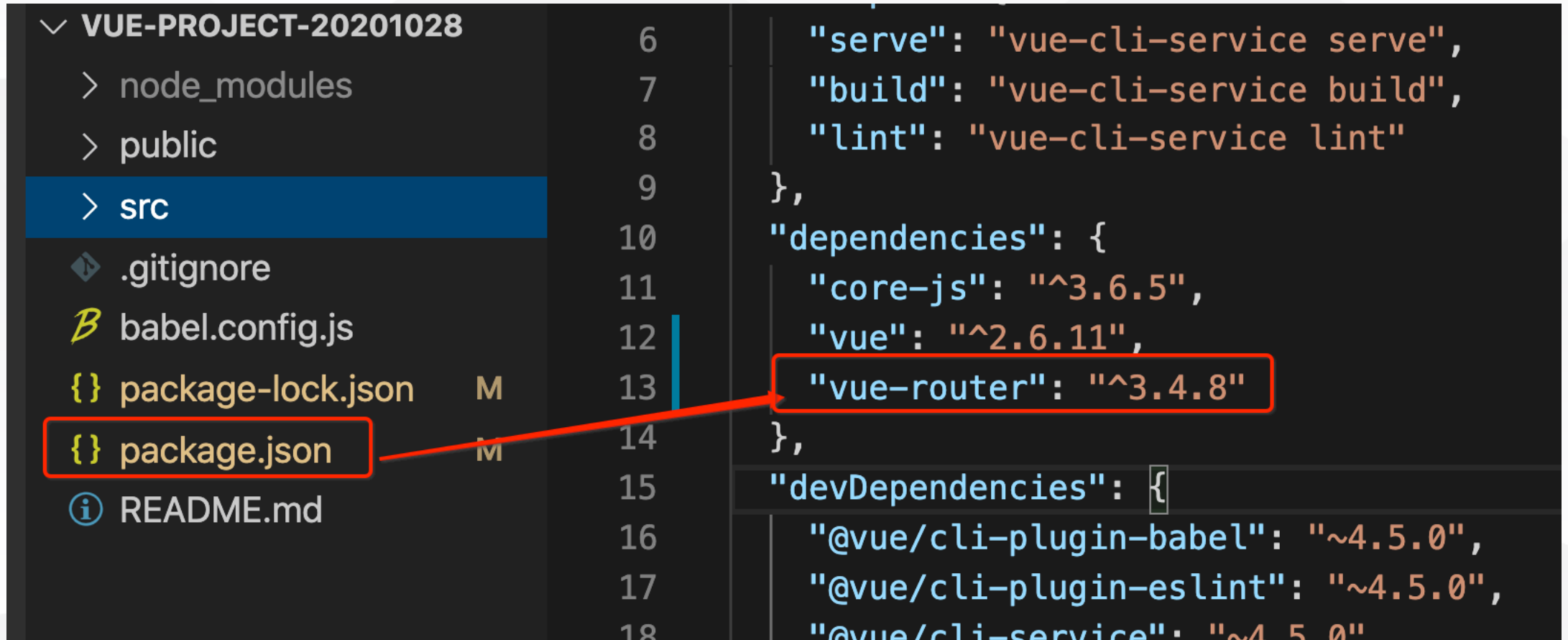
- Vue Router 是 [Vue.js](#) 官方的路由管理器。它和 Vue.js 的核心深度集成，让构建单页面应用变得易如反掌。包含的功能有：
- 嵌套的路由/视图表
- 模块化的、基于组件的路由配置
- 路由参数、查询、通配符
- 基于 Vue.js 过渡系统的视图过渡效果
- 细粒度的导航控制
- 带有自动激活的 CSS class 的链接
- HTML5 历史模式或 hash 模式，在 IE9 中自动降级
- 自定义的滚动条行为

安装 vue-router

在终端窗口，进入到工程所在的目录下。 执行安装命令。 如下：

```
$ npm install vue-router --save
```

npm install xx **--save**

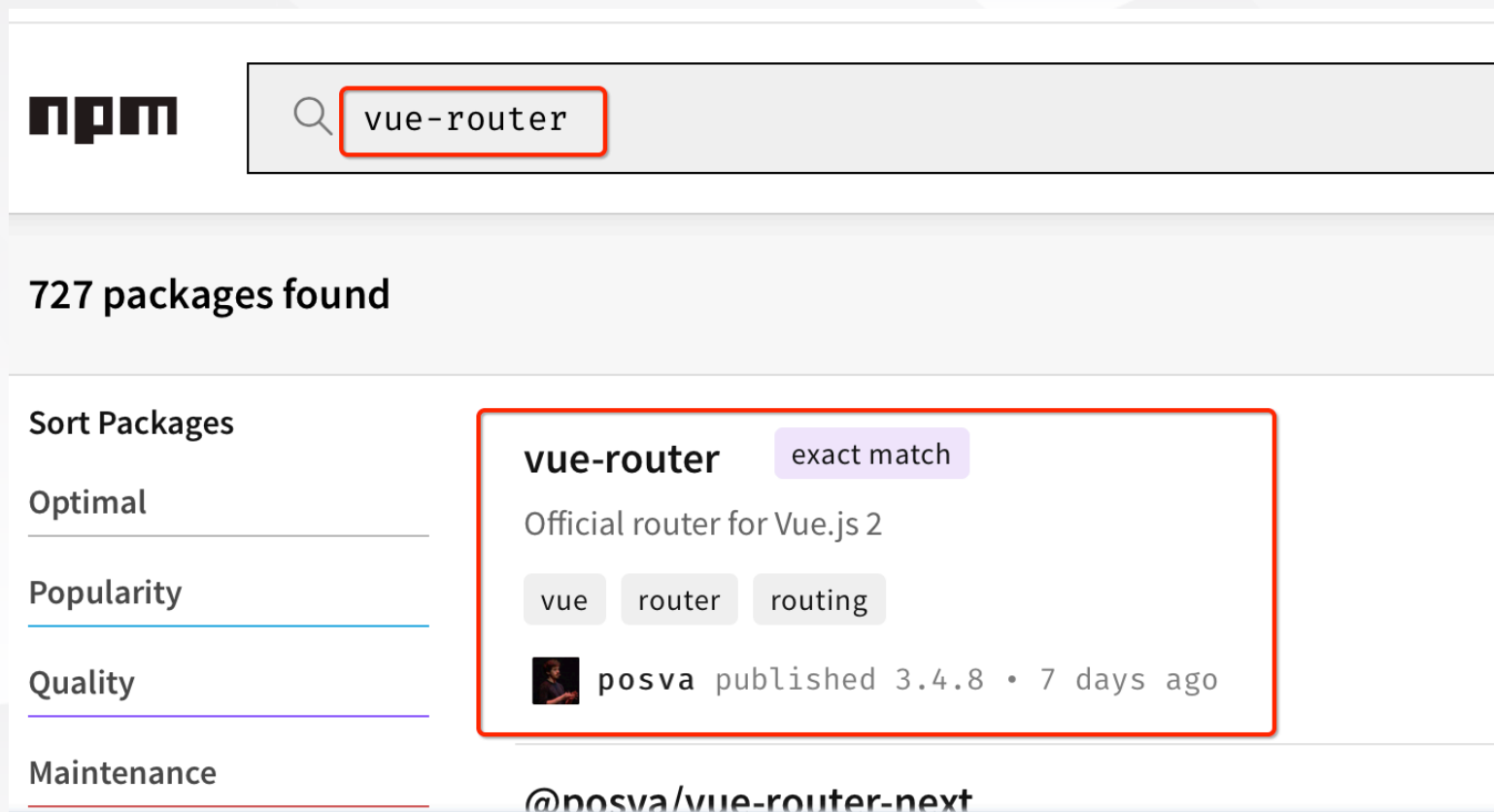


```
6  "serve": "vue-cli-service serve",
7  "build": "vue-cli-service build",
8  "lint": "vue-cli-service lint"
9  },
10 "dependencies": {
11   "core-js": "^3.6.5",
12   "vue": "^2.6.11",
13   "vue-router": "^3.4.8"
14 },
15 "devDependencies": {
16   "@vue/cli-plugin-babel": "~4.5.0",
17   "@vue/cli-plugin-eslint": "~4.5.0",
18   "@vue/cli-service": "~4.5.0"
```

The image shows a code editor interface. On the left is a file explorer for a project named 'VUE-PROJECT-20201028'. It contains folders 'node_modules', 'public', and 'src', and files '.gitignore', 'babel.config.js', 'package-lock.json', 'package.json', and 'README.md'. The 'package.json' file is selected and highlighted with a red box. A red arrow points from this box to the 'package.json' file in the main editor area on the right. The main editor shows the content of 'package.json', which includes scripts for 'serve', 'build', and 'lint', and lists dependencies: 'core-js', 'vue', and 'vue-router'. The 'vue-router' dependency is highlighted with a red box. The 'devDependencies' section is also visible at the bottom of the editor.

所安装的 package 来自 NPM 官网

NPM 官网 : <https://www.npmjs.com>



The screenshot shows the NPM search interface. At the top left is the 'npm' logo. To its right is a search bar containing the text 'vue-router'. Below the search bar, it says '727 packages found'. On the left side, there is a list of sorting options: 'Sort Packages', 'Optimal', 'Popularity', 'Quality', and 'Maintenance'. The 'Quality' option is currently selected. On the right side, a search result for 'vue-router' is highlighted with a red box. This result includes the package name 'vue-router', a tag 'exact match', a description 'Official router for Vue.js 2', three tags 'vue', 'router', and 'routing', and a line indicating it was published by 'posva' as version '3.4.8' '7 days ago'. Below this result, the text '@nosva/vue-router-next' is visible.

npm

727 packages found

Sort Packages

Optimal

Popularity


Quality

Maintenance

vue-router exact match

Official router for Vue.js 2

vue router routing

 posva published 3.4.8 • 7 days ago

@nosva/vue-router-next

通过 vue-router 实现组件的跳转

思路

\$ `install vue-router --save`

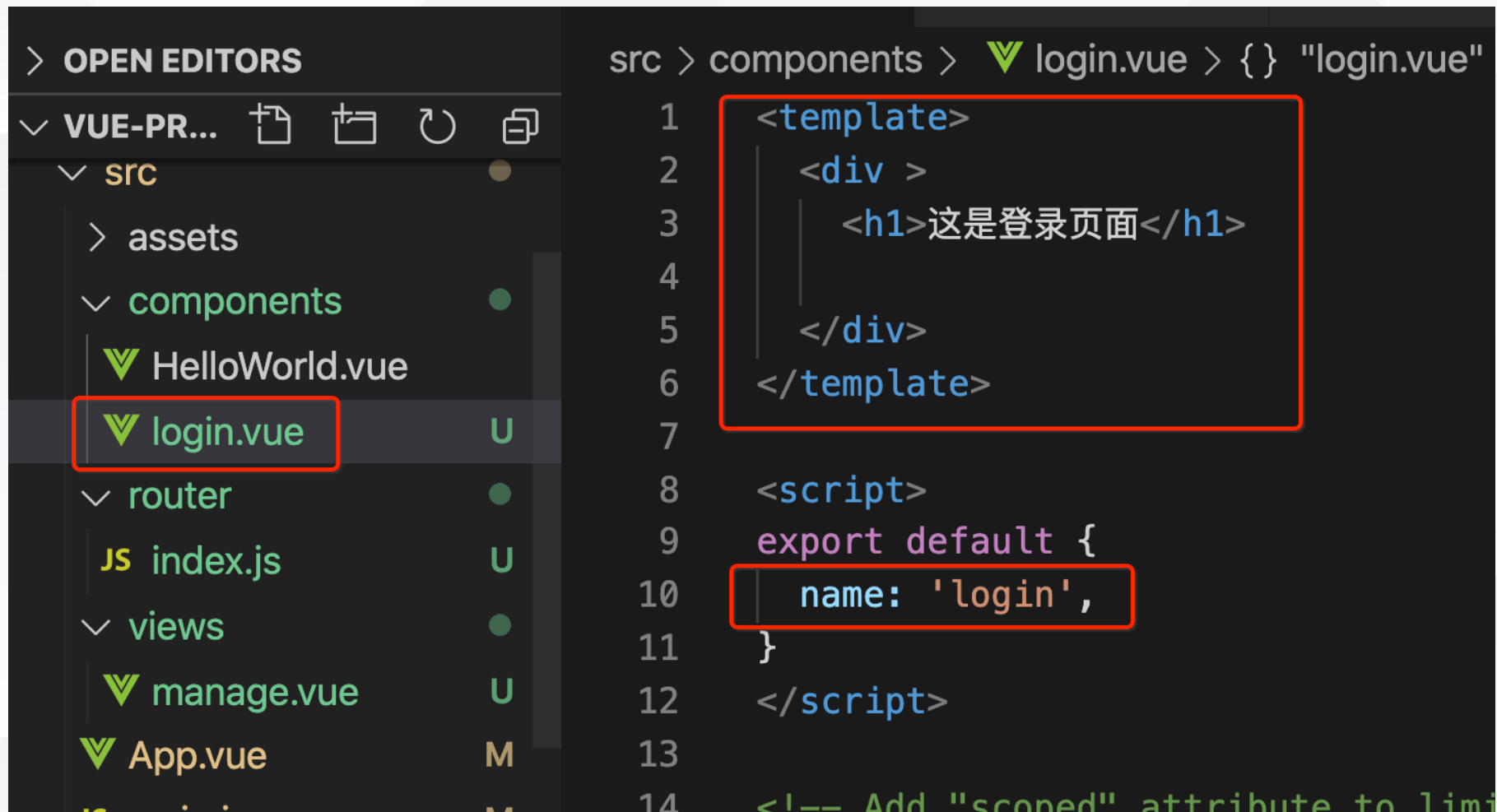
1. 在指定目录下，创建多个组件
2. 新建文件 router->index.js ，并创建 router 实例
3. main .js文件中， 加载 router 实例；
4. App.vue 文件中， 添加 <router-view>
5. 运行

1. 创建多个组件

组件创建注意事项:

- 组件所在的目录 `components >`
或新建创建一个 `views` 文件夹，在 `views` 下创建 `xxx.vue`
- 组件名称
- 组件的引用，一定要注意组件所在的路径

创建 登录组件

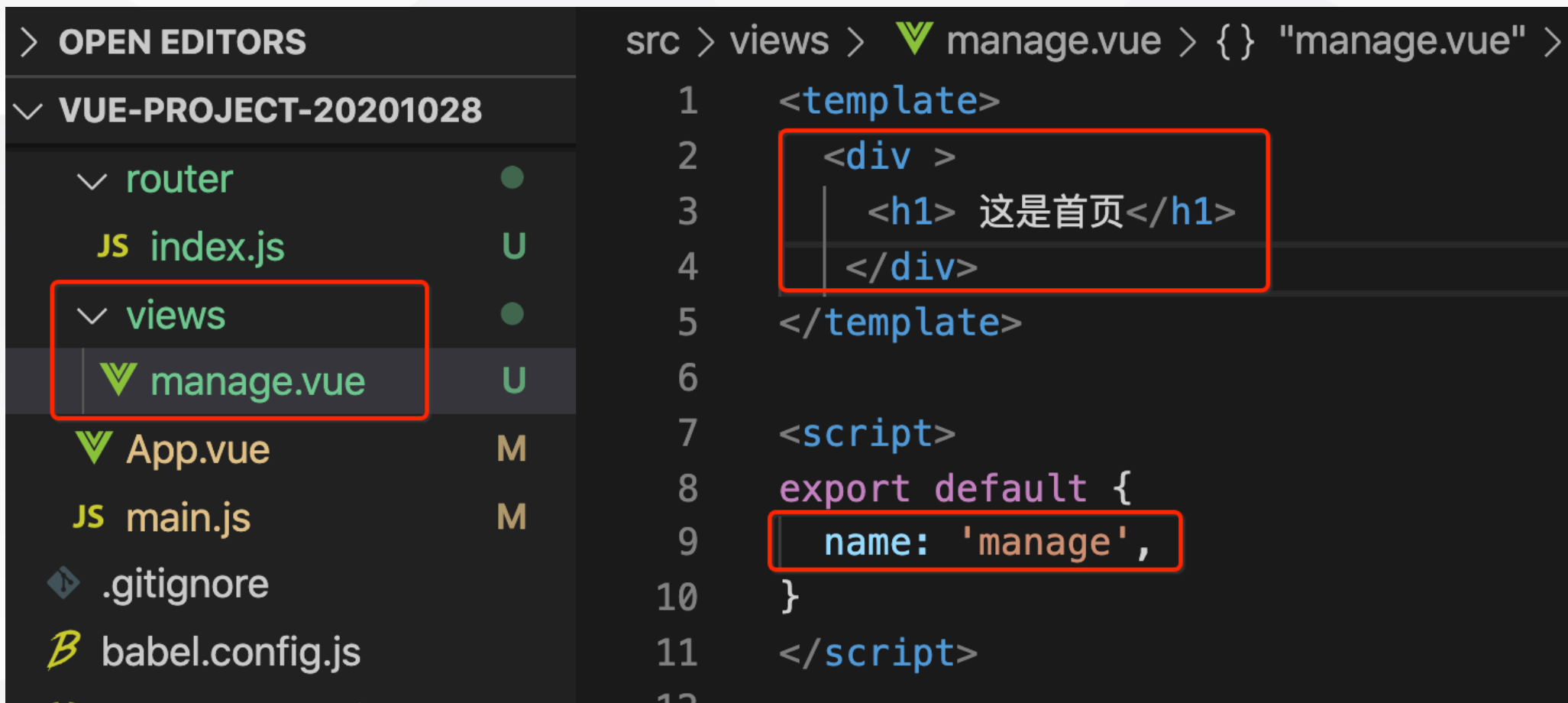


The image shows a VS Code editor interface with two panels. The left panel displays the file explorer for a project named 'VUE-PR...'. The 'src' directory is expanded, showing subdirectories 'assets', 'components', 'router', and 'views'. The 'components' directory is further expanded, listing 'HelloWorld.vue', 'login.vue' (highlighted with a red box), 'index.js', 'manage.vue', and 'App.vue'. The right panel shows the code for 'login.vue'. The file path 'src > components > login.vue > {} "login.vue"' is at the top. The code is as follows:

```
1  <template>
2    <div >
3      <h1>这是登录页面</h1>
4    </div>
5  </template>
6
7
8  <script>
9    export default {
10     name: 'login',
11   }
12 </script>
13
14 <!-- Add "scoped" attribute to limit
```

Red boxes highlight the template section (lines 1-6) and the script section (lines 8-12), specifically the `name: 'login',` property in the script.

创建首页



The image shows a screenshot of the Visual Studio Code editor. On the left, the 'OPEN EDITORS' sidebar is visible, showing a project named 'VUE-PROJECT-20201028'. Under the 'views' folder, the file 'manage.vue' is selected and highlighted with a red box. On the right, the code editor displays the content of 'manage.vue'. The code is as follows:

```
src > views > manage.vue > {} "manage.vue" >
1  <template>
2    <div >
3      <h1> 这是首页</h1>
4    </div>
5  </template>
6
7  <script>
8    export default {
9      name: 'manage',
10    }
11  </script>
12
```

The code is structured with a template section containing a single `<div>` with an `<h1>` element containing the text '这是首页'. The script section defines a default export object with a `name` property set to 'manage'. Red boxes highlight the `<div>` block in the template and the `name: 'manage'` property in the script.

2. 创建路由 router 文件

路由文件的组成：

- 创建 `src > router > index.js`
- 加载组件
- 创建路由实例： `router`

路由文件 router

The image shows a VS Code interface with a file explorer on the left and a code editor on the right.

File Explorer (Left):

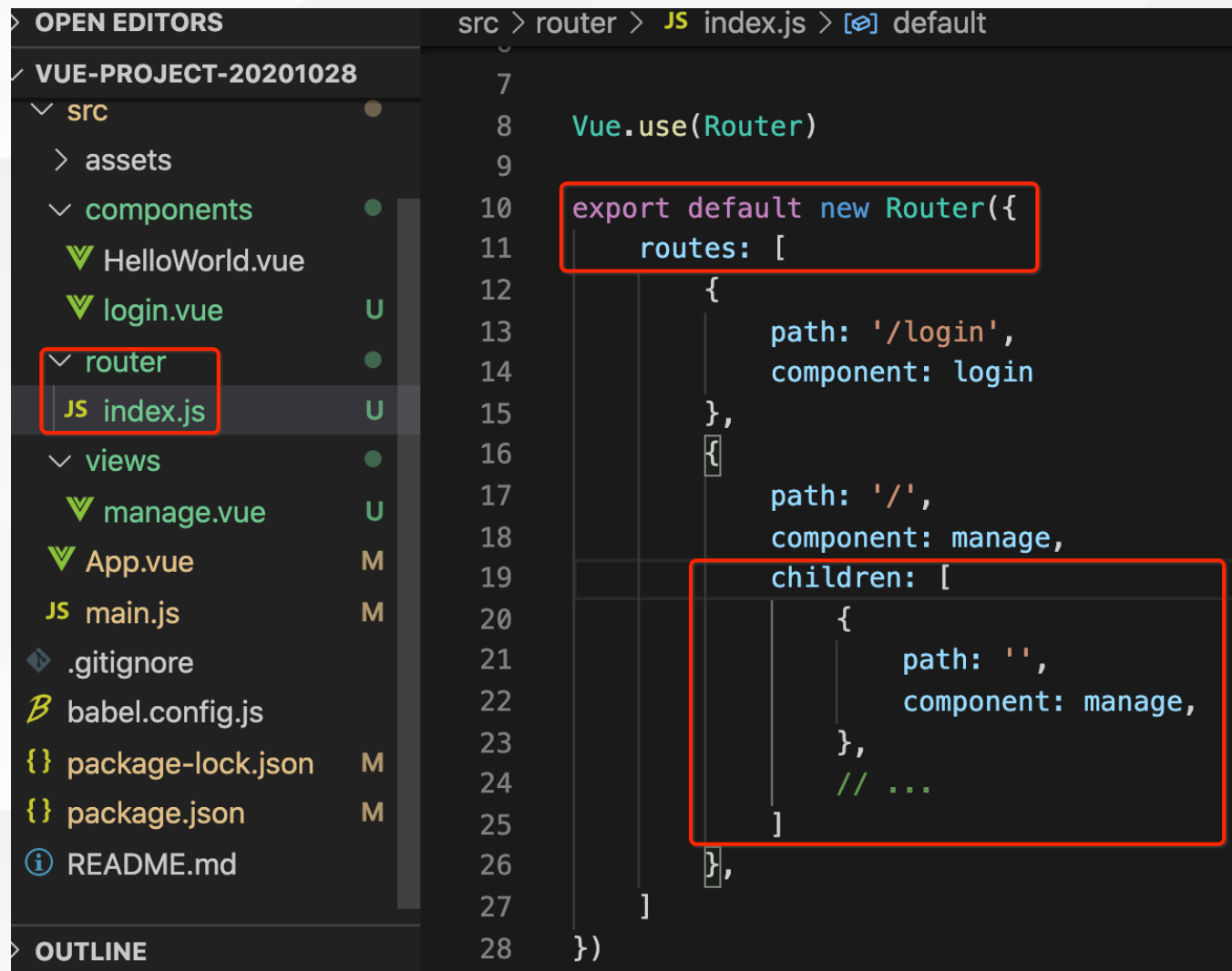
- > OPEN EDITORS
- ✓ VUE-PROJECT-20201028
 - ✓ src
 - > assets
 - ✓ components
 - ▼ HelloWorld.vue
 - ▼ login.vue U
 - ✓ router
 - JS index.js U
 - ✓ views
 - ▼ manage.vue U
 - ▼ App.vue M

Code Editor (Right):

src > router > JS index.js > [🔗] default

```
1  import Vue from 'vue'
2  import Router from 'vue-router'
3
4  import login from '@components/login'
5  import manage from '@views/manage'
6
7
8  Vue.use(Router)
9
10 export default new Router({
11   routes: [
12     {
13       path: '/login'
```

路由文件 router - 创建子路由



The image shows a VS Code editor with a project named 'VUE-PROJECT-20201028'. The file explorer on the left shows the project structure, with the 'router' directory and 'index.js' file highlighted. The main editor displays the content of 'src > router > JS index.js', which is a Vue Router configuration file. The code defines a default export of a new Router instance with a 'routes' array. Two red boxes highlight specific parts of the code: the first box highlights the 'export default new Router({' statement and the start of the 'routes' array, and the second box highlights a child route configuration within the 'children' array.

```
src > router > JS index.js > [🔗] default
7
8  Vue.use(Router)
9
10 export default new Router({
11   routes: [
12     {
13       path: '/login',
14       component: login
15     },
16     {
17       path: '/',
18       component: manage,
19       children: [
20         {
21           path: '',
22           component: manage,
23         },
24         // ...
25       ]
26     },
27   ],
28 })
```

路由文件 router > index.js

```
import Vue from 'vue'  
import Router from 'vue-router'  
import login from '@/components/login'  
import manage from '@/views/manage'
```

```
Vue.use(Router)  
export default new Router({  
  // .....  
})
```

注意 router path 结构

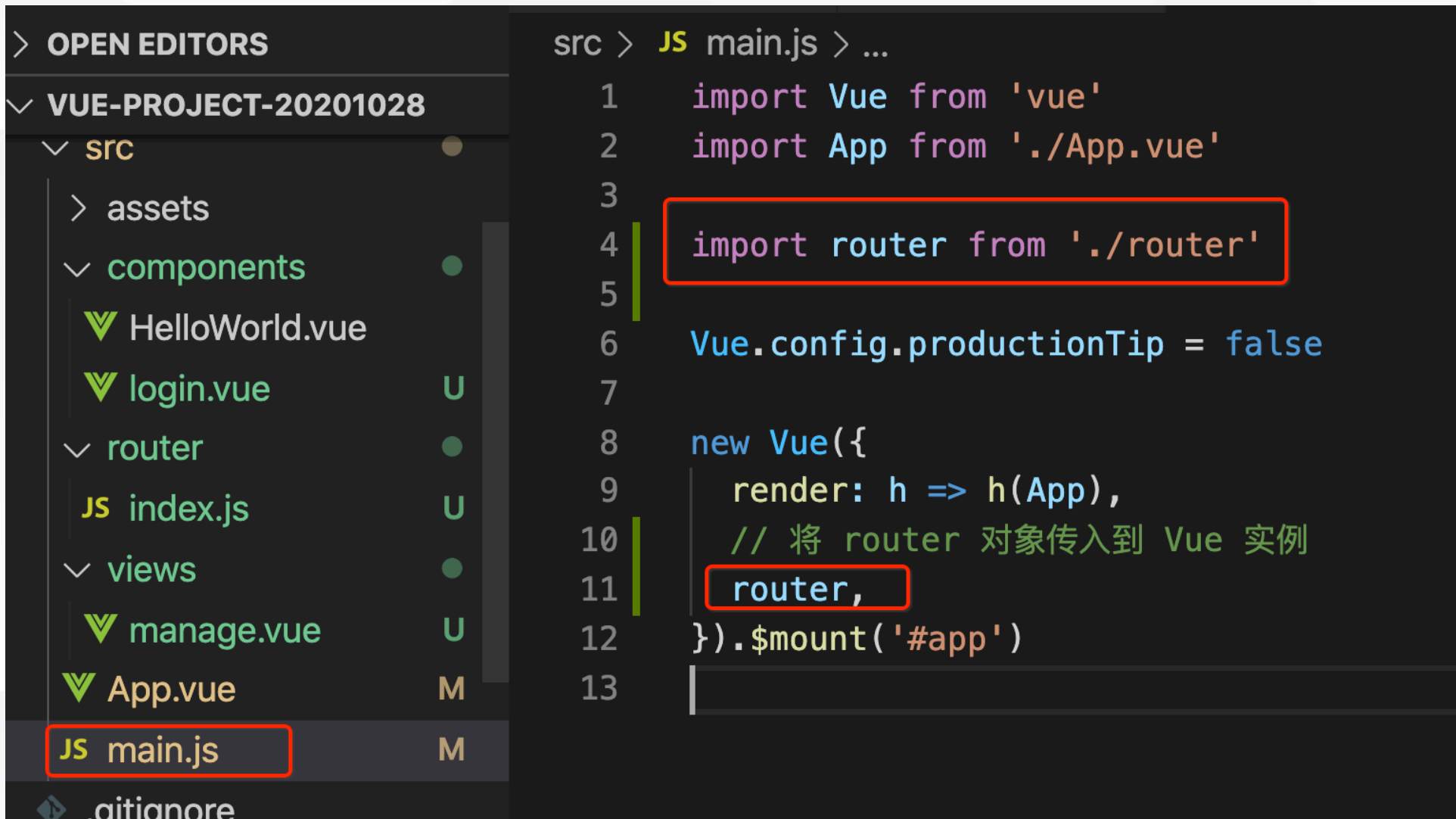
组件与 path 一一映射

子路由：在某个页面内的
跳转

组件发生跳转时，观察浏览器地址栏的变化

```
export default new Router({
  routes: [
    {
      path: '/login',
      component: login
    },
    {
      path: '/',
      component: manage,
      children: [
        {
          path: "",
          component: manage,
        },
        // ...
      ]
    },
  ]
})
```

3. main.js 文件中加载 router 实例

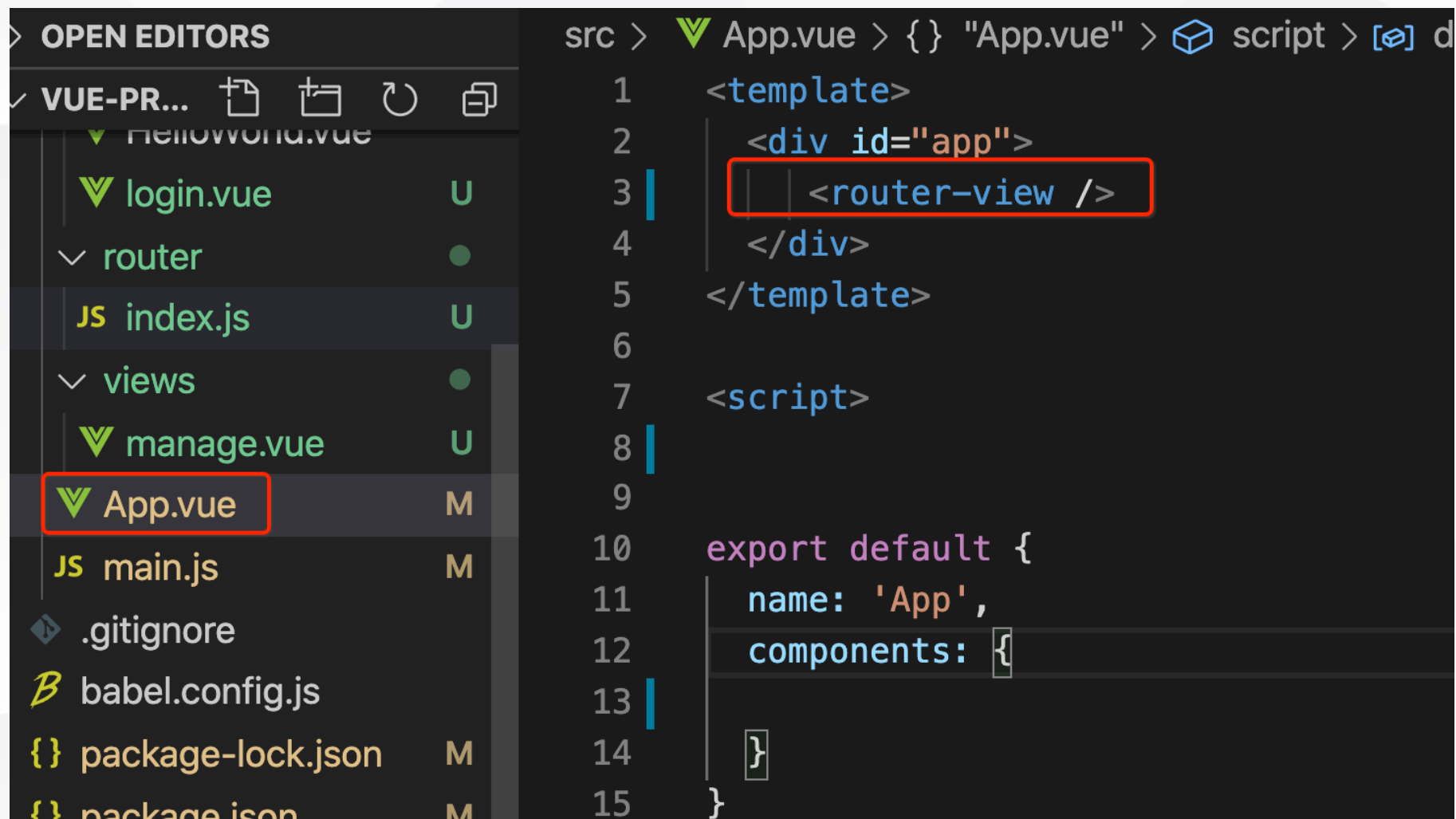


The image shows a VS Code editor interface. On the left, the 'EXPLORER' sidebar displays the project structure for 'VUE-PROJECT-20201028'. The 'src' directory is expanded, showing subdirectories 'assets', 'components', 'router', and 'views'. The 'main.js' file in the 'src' directory is selected and highlighted with a red box. On the right, the 'main.js' file is open in the editor. The code content is as follows:

```
src > JS main.js > ...
1  import Vue from 'vue'
2  import App from './App.vue'
3
4  import router from './router'
5
6  Vue.config.productionTip = false
7
8  new Vue({
9    render: h => h(App),
10    // 将 router 对象传入到 Vue 实例
11    router,
12  }).$mount('#app')
```

In the code, the line `import router from './router'` on line 4 and the `router` property in the Vue instance options on line 11 are both highlighted with red boxes.

4. App.vue 文件中 添加 <router-view>



The screenshot shows the VS Code interface. On the left, the 'OPEN EDITORS' sidebar is visible, showing a list of files. The file 'App.vue' is highlighted with a red box. The main editor area on the right displays the content of 'App.vue'. The code is as follows:

```
src > App.vue > {} "App.vue" > script > [d] d
1  <template>
2    <div id="app">
3      <router-view />
4    </div>
5  </template>
6
7  <script>
8
9
10 export default {
11   name: 'App',
12   components: {}
13
14 }
15
```

路由注意事项

- 要注意，以 / 开头的嵌套路径会被当作根路径。这让你充分地使用嵌套组件而无须设置嵌套的路径。

运行

打开终端窗口，进入到工程所在路径， 运行：

```
$ npm run serve
```

浏览器输入地址： http://localhost:8080

localhost:8080/#/

这是首页

浏览器输入地址： http://localhost:8080/#/login





动手实验

课堂练习及课后作业

- 完成 Vue Router 的创建及应用
- 扩展：
 - 创建一个用户管理组件： `users.vue`
 - 在 `router - index.js` 文件中，引入 `users` 组件，并添加路径映射
 - 在浏览器地址栏中输入： <http://localhost:8080/#/users>

类似方法， 再添加一个 订单管理的组件， 并浏览。

小结

- 熟悉路由的应用
- 实现多个组件之间的跳转