

Frontend:

Vue.Js (MIT): Vue.js provide functionalities to our html web-file, from the vuejs, we are able to provide RWD, and a lot more functionality, see below:

Vue Router(MIT): the vue router creates a front-end web router from pages to pages, it allows us to display different pages in different paths.

<https://github.com/vuejs/vue-router/blob/dev/src/index.js> .

- vue router class provides functionalities such as letting us define a mode, in the code the mode is defined as key:value pair where key is mode and value is a string, which the source code will then check by a switch to determine the mode that web-app is running on (line 61)

- On line 94, the vue router explained that it will push the parameter “app” (a list of routing paths, with name, path, and components) into a const variable “apps”, which every path will be listened on line 141 by using a foreach statement

- On line 201 in the same file, the vue router provides how it binds the components into the vue router, it decodes the route from line 141 and maps the component file with that path location.

Vuex(MIT) vuex provides a central data storage system for us to track some global variables which exist in different paths/files , for example a logged in status should be tracked everywhere in the site to prevent users from getting locked out or having to log in on every path.

The index.js <https://github.com/vuejs/vuex/blob/dev/src/index.js> will be importing all its functionality (“mapState” is what we need) from other component files and export it as “Store” (what we need)

<https://github.com/vuejs/vuex/blob/dev/src/store.js> and this is the file we want to dig.

In the project,we are going to use the “state’, and “commit”

- State : state is relatively simply, it simply sets a variable to a certain value which we can run get and set on it, the get function, on line 73 , will simply return the value of the values which we want. Then we have the replaceState on line 197 , which will take in a variable and set the old variable with the new value.

- Commit: I mentioned on how `replaceState` work in “State”, but in reality, for the state we do not want to make any changes for the variable in the state, in fact for any changes that want to be made to the state, we will call `Commit` on that variable in the state. Starting on line 449 in <https://github.com/vuejs/vuex/blob/96a265a345c76ec7d0f81a115aef74b7eda89452/dist/vuex.common.js#L449> , we have the prototype function `commit`, which takes in a type (“state”) and a payload (“some value to pass in”).

Axios(MIT)

From axios, we used two methods for posting and getting the jsons to/from server.

Get:

In the case of the get request, what axios will do is take the information from the client, then read whether if the method requested is in fact an item in the method that it allowed, in fact this is a part of `function forEachMethodNoData:` see

<https://github.com/axios/axios/blob/f2057f77b231d88ea94ad88e84e4fd9f99506880/lib/core/Axios.js#L114>

After the recognition of the correct method, by looking at the source code from <https://github.com/axios/axios/blob/f2057f77b231d88ea94ad88e84e4fd9f99506880/dist/axios.js#L1537>

It was recognized that the requested method sent to the destination url, and asked for the information which server should provide, then came back and started packing the response to send back to the server, in this packet, 3 information were sent back: 1. The methods, 2. The url of the destination, 3. The data achieved from the destination url. Note that 1 and 2 are provided at the initial axios get request, axios module simply pick them up by specific index.

<https://github.com/axios/axios/blob/f2057f77b231d88ea94ad88e84e4fd9f99506880/lib/core/Axios.js#L27>

Post:

<https://github.com/axios/axios/blob/f2057f77b231d88ea94ad88e84e4fd9f99506880/dist/axios.js#L583>

The post request are somewhat identical to the get request, the only big difference is how one is method with no data and the other one is `function` `forEachMethodWithData`. Once again, axios will decode the method and url from <https://github.com/axios/axios/blob/f2057f77b231d88ea94ad88e84e4fd9f99506880/lib/core/Axios.js#L27>, However One big difference is that for the post method is does contain some data, so when it come to post request, note that the data is no longer an empty json, instead it will use the data from the client side and pass that json into the data (line 589) so that post will able to send the data to the server and wait for an response.

All 4 technologies here are under MIT license, which means that we can read, write, modify the codes for free, and we can use these modules even for commercial purposes.