VUEX

Vuex

What is Vuex?

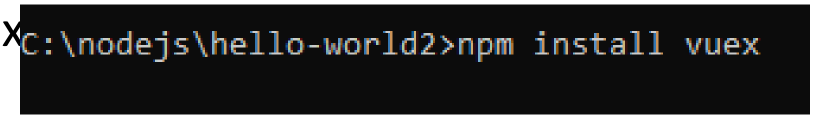
- It is a state management library
- It is commonly used in Vue framework
- It is a centralised store for all components

Why use Vuex?

- Components need to share state in many cases
- Vuex provides a single source for data/state
- No need to emit events up and props down
- If you update the state from one components, every other components that use this state will also get updated

Install Vuex

- Use npm to install vuex
  npm install vuex



```
C:\nodejs\hello-world2>npm install vuex
```

- Then, create a src/store folder with an index.js file that contains the following code.

```
// store/index.js
import { createStore } from 'vuex'

export const store = createStore({
    state: {},                  // data to be shared
    getters: {},                // computed properties
    mutations: {},              // methods to change the state
    actions: {}
});
```

Install Vuex

To include this in our root Vue instance, we have to import our store/index.js file and pass it in our Vue app.

```
// main.js
import { createApp } from 'vue'
import { store } from './store'
import App from './App.vue'

const app = createApp(App)
app.use(store)
app.mount('#app')
```

Use the store - in store/index.js

```
// store/index.js
import { createStore } from 'vuex'
export const store = createStore({

state () {
   return {
        user: {firstName: 'Amy’,   lastName: 'Brown'    }
   }
},
getters: {
    fullName: state => {
    return "Welcome, "+state.user.firstName+" "+state.user.lastName
    }
},
mutations: {
    changeName (state, newName) {
        state.user.firstName = newName
}
}
});
```

Use the store – in component

```
<template>
...
<h3>Hi {{this.$store.state.user.firstName}} <h3>
<h3>{{this.$store.getters.fullName}}.</h3>
<button @click="changeFirstName" >Change First Name</button>
...
</template>
<script>
export default {
...
    methods:{
        changeFirstName: function() {
                this.$store.commit("changeName", "Bill");      }
    },
...
}
</script>
```