

Vuex install :

npm install --save vuex@next

Then from **main.js** code structure,

```
import { createApp } from 'vue';
import { createStore } from 'vuex';

import App from './App.vue';

const app = createApp(App);

const store = createStore({
  state() {
    return {
      counter: 1,
    };
  },
});

app.use(store);

app.mount('#app');
```

ekhn from .vue file e jevabe fetch korte hobe,

```
<h3>{{ $store.state.counter }}</h3>
```

State er file ke computed er maddhome jevabe fetch kore,

```
computed: {
  counter() {
    return this.$store.state.counter;
  },
},
```

Ekhn ekta method kore just counter er value barano holo,

```
methods: {
  addOne() {
    this.$store.state.counter++;
  },
},
```

.vue file theke jevabe method ke execute korte hobe,

```
<button @click="addOne">Add 1</button>
```

----- Mutations -----

Code structure from store variable, from **main.js**,

```
const store = createStore({
  state() {
    return {
      counter: 1,
    };
  },

  mutations: {
    increament(state) {
      state.counter = state.counter + 1;
    },
  },
});
```

Now from the .vue file,

```
methods: {
  addOne() {
    this.$store.commit('increament');
  },
},
```

----- getters with mapGetters and getters -----

From main.js,

```
getters: {
  getCounter(state) {
    return state.counter;
  },
},
```

From **.vue** file with both examples,

```
<template>
  <div>
    <h1>{{ getData }}</h1>
    <button @click="addOne">Add 1</button>
  </div>
</template>

<script>
import { mapGetters } from 'vuex';

export default {
  methods: {
    addOne() {
      this.$store.commit('increament');
    },
  },
  computed: {
    ...mapGetters(['getCounter']),
    getData() {
      return this.$store.getters.getCounter;
    },
  },
};
</script>
```

----- Actions with mutation and dispatch -----

From main.js,

```
const store = createStore({
  state() {
    return {
      counter: 1,
      test: 0,
    };
  },

  mutations: {
    increament(state) {
      state.counter = state.counter + 1;
    },
    testMutation(state, payload) {
      state.counter = state.counter + payload;
    },
  },

  actions: {
    async testAction({ commit }, payload) {
      commit('testMutation', payload);
    },
  },
});
```

Now using it from .vue file,

```
methods: {
  addOne() {
    // this.$store.commit('increament');

    this.$store.dispatch('testAction', 1);
  },
},
```

----- Multiple modules (Breaking states) -----

Firstly just alada ekta const variable create korte hobe jekhane state, getters, mutations egular shob part gulo thakbe,

```
const counterModule = {
  state() {
    return {
      counter: 1,
    };
  },
  mutations: {
    increament(state) {
      state.counter = state.counter + 1;
    },
    testMutation(state, payload) {
      state.counter = state.counter + payload;
    },
  },
  getters: {
    getCounter(state) {
      return state.counter;
    },
  },
  actions: {
    async testAction({ commit }, payload) {
      commit('testMutation', payload);
    },
  },
};
```

Then erpor just **main state** er moddhe module kore add kore dite hobe,

```
const store = createStore({
  modules: {
    counterModule,
  },
});
```

----- Accessing data from different states -----

Onno ekta state ke jekhon module wise niye asha hoy tokhon oi module er data ke onno state er moddhe access korar jonno actions er help nite hoy.

Ekhane **rootState.counterModule.counter** er data ashse onno ekta state theke jeta ekhane module wise added ase.

```
actions: {
  login({ commit, rootState }) {
    commit('setAuth', { isAuth: true });
    console.log(rootState.counterModule.counter);
  },
},
modules: {
  counterModule,
```

----- Namespacing modules -----

Firstly jei module ta ke use korte hobe shetay namespace add korte hobe,

```
const counterModule = {
  namespaced: true,
};
```

Then eta ke main store er moddhe execute korte hobe,

```
const store = createStore({
  modules: {
    numbers: counterModule,
  },
});
```

Ekhon er baki function gula ke **.vue** file theke access korte hobe tar example gula dewa holo.

Example 1:

```
methods: {  
  addOne() {  
    // this.$store.commit('increament');  
  
    this.$store.dispatch('numbers/testAction', 1);  
  },  
},
```

Example 2:

```
computed: {  
  counter() {  
    return this.$store.getters['numbers/getCounter'];  
  },  
},
```