Most Basic Setup RT K(Redux Tool Kit)

Using Vite– Fastest Way

```
npm create vite@latest my-app --template react
cd my-app
npm install
npm run dev
```

Now Install Tailwindcss

```
npm install tailwindcss @tailwindcss/vite
```

vite.config.ts

```ts
import { defineConfig } from 'vite'
import react from '@vitejs/plugin-react'
import tailwindcss from '@tailwindcss/vite'
// https://vite.dev/config/
export default defineConfig({
plugins: [react(),
tailwindcss(),
],
})
```

src /index.css

```css
@import "tailwindcss";
```

Main.jsx

```jsx
import React from 'react';
import ReactDOM from 'react-dom/client';
import App from './App';
import './index.css';
import { Provider } from 'react-redux';
import { store } from './redux/store';
ReactDOM.createRoot(document.getElementById('root')).render(
<Provider store={store}>
<App />

</Provider>
```

```
  );
```

index.html

```html
<!doctype html>
<html lang="en">
<head>
<meta charset="UTF-8" />
<link rel="icon" type="image/svg+xml" href="/vite.svg" />
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title>Vite + React</title>
</head>
<body>
<div id="root"></div>
<script type="module" src="/src/main.jsx"></script>
</body>
</html>
```

Vite set Up done

Redux Toolkit Setup

File Structure Example

```
/src
  /redux
    store.js
    counterSlice.js
  /components
    Navbar.jsx
  App.jsx
  main.jsx
  index.css
```

src/redux/counterSlice.js

```js
import { createSlice } from '@reduxjs/toolkit';
const counterSlice = createSlice({
  name: 'counter',
  initialState: { value: 0 },
  reducers: {
    increment: (state) => {
      state.value += 1;
    },
```

```
    decrement: (state) => {
      state.value -= 1;
    },
  },
});
export const { increment, decrement } = counterSlice.actions;
export default counterSlice.reducer;
```

src/redux/store.js

```
import { configureStore } from '@reduxjs/toolkit';
import counterReducer from './counterSlice';
export const store = configureStore({
  reducer: {
    counter: counterReducer,
  },
});
```

src/App.jsx

```
import { useDispatch } from 'react-redux';
import { increment, decrement } from './redux/counterSlice';
import Navbar from './components/Navbar';

export default function App() {
  const dispatch = useDispatch();

  return (
    <div>
      <Navbar />
      <div className="flex flex-col items-center mt-20 gap-4">
        <h2 className="text-3xl font-semibold">Counter</h2>
        <div className="flex gap-6">
          <button
            onClick={() => dispatch(increment())}
            className="bg-green-500 hover:bg-green-600 text-white px-6 py-2 rounded shadow"
          >
            Increment
          </button>
          <button
            onClick={() => dispatch(decrement())}
            className="bg-red-500 hover:bg-red-600 text-white px-6 py-2 rounded shadow"
          >
            Decrement
          </button>
```

```
        </div>
      </div>
    </div>
  );
}
```

src/main.jsx (Entry Point)

```jsx
import React from 'react';
import ReactDOM from 'react-dom/client';
import App from './App';
import './index.css';
import { Provider } from 'react-redux';
import { store } from './redux/store';

ReactDOM.createRoot(document.getElementById('root')).render(
  <Provider store={store}>
    <App />
  </Provider>
);
```

Run the App
npm run dev