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React 7:30 PM

Redux Example

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MVC
- Model -View - Controller

Model
- It represents the data we are working with.
- It contains data logic.
- It contains data validation rules
- It contains meta data [changes and updates]
- It is reffered as "single-source-of-truth"

View
- UI
- It defines view and partial view
- It trigers the actions

Controller
- It comprises actions to perform
- It is reffered as subscriber
- It is a reducer.
- It handles the overall communication between model and view.

User Clicks on "Add to Cart" => Collect the Product Details => Store in Redux Store => Assign to CartItems[] => Bind to UI

Step-1: Install Redux Tool Kit for your project

```
 > npm install @reduxjs/toolkit   react-redux  --save
```

Install redux dev tools for your chrome browser

Step-2: Create a Redux slicer

- In redux slicer is used to configure the initial state and actions.

```
      cartItems:any[] = []
      cartCount:number=0
      addToCart:any;
      createSlicer
```

- Add a new file into project

"CartSlicer.tsx"

```
const initialState = {
   cartItems: [],
   cartCount : 0
}

const cartSlice  = createSlice({
   name: 'cart',
   initialState,
   reducers: {
      addToCart(state:any, action){
          state.cartItems.push(action.payload);
          state.cartCount = state.cartItems.length;
      }
   }
});
export const { addToCart } = cartSlice.actions;
export default cartSlice.reducer;
```

Note: Slice comprises of

a) initial state
b) name
c) reducer : actions

Step-3: Configure Store
"store.tsx"

```
import { configureStore } from "@reduxjs/toolkit";
import CartSlicer from "./CartSlicer";

export default configureStore({
   reducer: {
      store : CartSlicer              //initial state[cartItems, count], actions
   }
})
```

Note: It creates a store centralized and adds the references for

a) cartItems[]
b) carCount

Step-4: Configure UI

"ProductsComponent.tsx" [shopping cart page] with Add to cart

```
import { addToCart } from "./CartSlicer";
import { useDispatch } from "react-redux";


const dispatch = useDispatch();
```

```
  {
    products.map(product=>
              <card>
                <Button onClick={()=> handleAddToCart(product)}  className="w-100" variant="contained" >
<span className="bi bi-cart4"></span>  Add to Cart</Button>

            </card>
     )
  }
```

Step-5: Configure store at app level with a provider

index.tsx

```
import { Provider } from 'react-redux';
import store from './ishop/store';   [store.tsx]

<React.StrictMode>
    <Provider store={store} >
      <IshopIndexComponent />
    </Provider>
</React.StrictMode>,
```

React Native, Ionic - Mobile - PWA

Redux.docx
Word

Class comments