

Good Morning Everyone

will start the class

sharp at

7:05 AM ==.

## Agenda

\* Why redux?

\* What is redux?

\* Core principle behind the redux

\* Understanding of global state & imp concepts of redux. with the help of redux data flow:

- store

- slice

- provider

- action

- dispatch

- reducer

→ used to get state values.

\* hooks used in redux: useSelector &

useDispatch  
→ used to get methods which updates the states

\* How to integrate redux with react?

\* Implementation of redux with some example.

\* Redux devtools.

Why redux? → Why should you use redux?

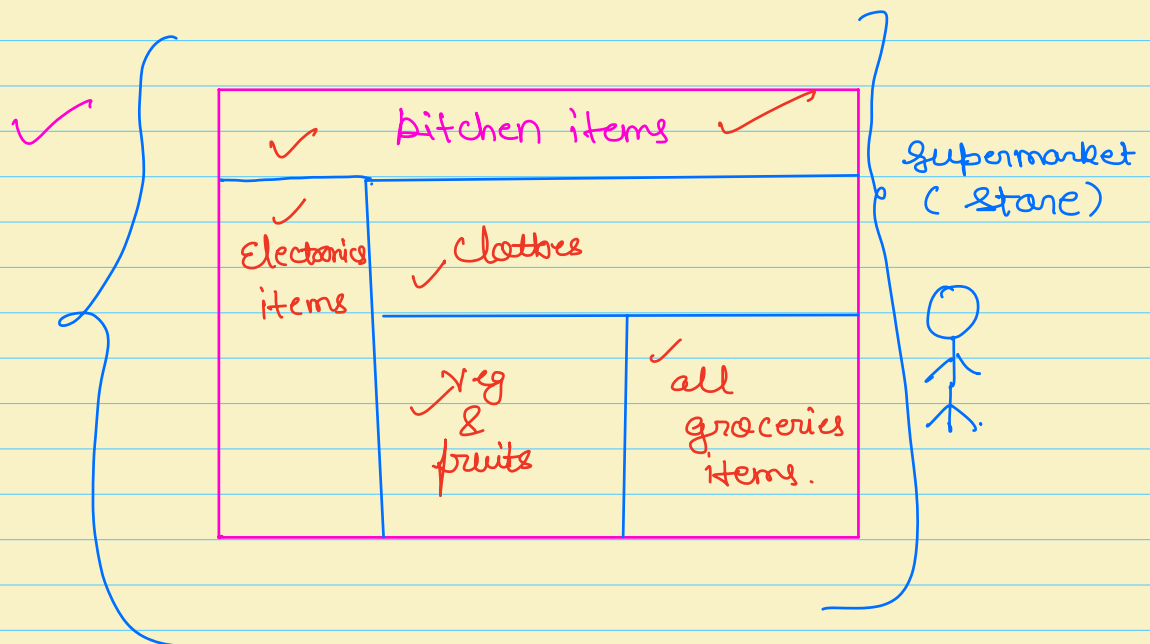
① When your's app's state becomes complex.

② predictable changes:

- gives you a clear steps to update the data.

③ Centralized store:

- your all app's data is stored at one place (store), which makes easier to manage & control the state.



④ Reusable logic

- redux logic can be reused.

⑤ Complex & bigger web apps.

⑥ Active Community / Bigger Community in Redux to seek some help if you get somewhere stuck.

⑦ Debugging is easier in Redux

What is Redux?

→ A third party state management JS library. (you have to install the Redux)

→ Provides you a solution of managing the state of your app in a more organized & controlled manner.

→ It centralizes your web app's data at one place which is called as store.

→ Redux follows a clear pattern for changing the data through 'actions' and handling those changed data with 'reducers'.

(M. imp I @)

What is the core principle behind redux?

① Single source of truth.

- global states are going to be stored at one place (store)

② State is read-only.

- When you want to update the data (or change the state), you have to dispatch an 'action' that describes what had happened.

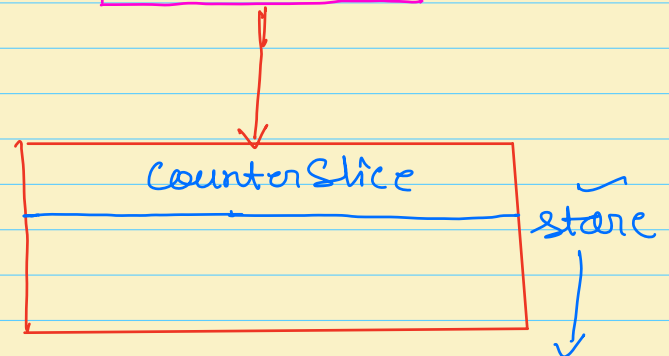
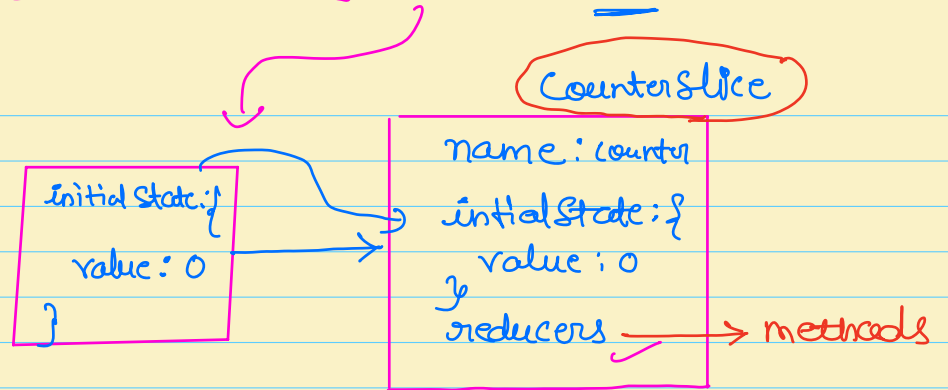
③ changes are made with the help of pure functions.

- based on the actions, you are going to write 'reducers'.

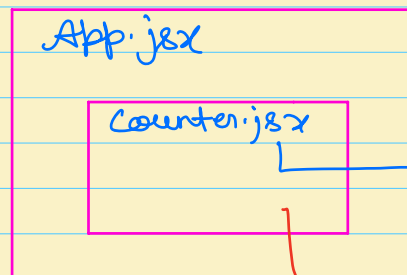
Redux Data flow:

- Redux is having a unidirectional data flow.
- Redux is always having a single store.

const [Count, setCount] = useState(0);



`<provider store = {store}>`



`</provider>`

`useSelector()`

↳ we will get the initial & updated state values

`useDispatch()`

↳ we can call any methods from reducers to update the state values.

How to setup the redux in react apps?

you have to do 2 things:

① install react-redux.

② install redux toolkit (RTK)  
@reduxjs/toolkit.

```
npm i react-redux @reactjs/toolkit.
```