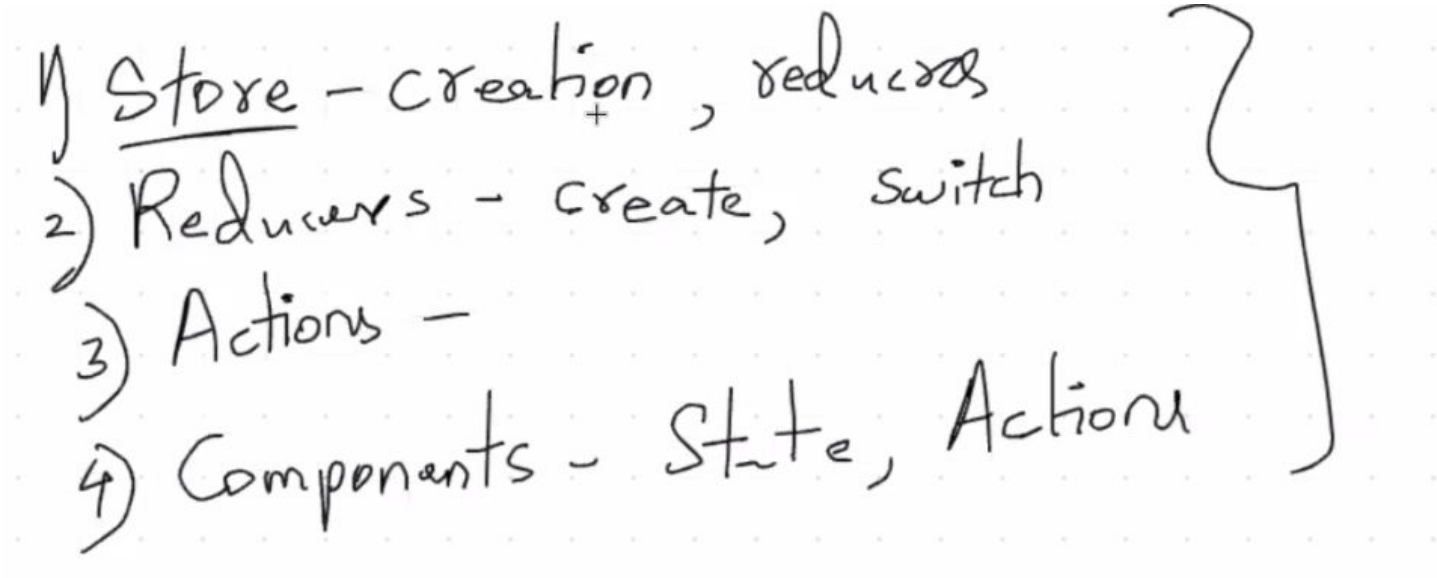
Date : 08 - 07 - 2020
Morning Session : 9 am – 11.00 PM
By ~ Sundeep Charan Ramkumar Today

Topics: React Day 1 (Redux Implementation)



install redux package :

```
JavaScript/React/day-8  master±  npm install redux react-redux
```

Create redux folder :

Within the src folder, create a folder named redux. Inside the redux folder, create folders called action and reducer,and inside the reducer folder,create a reducer.js / store.js file(will refractor later)

Creating store:

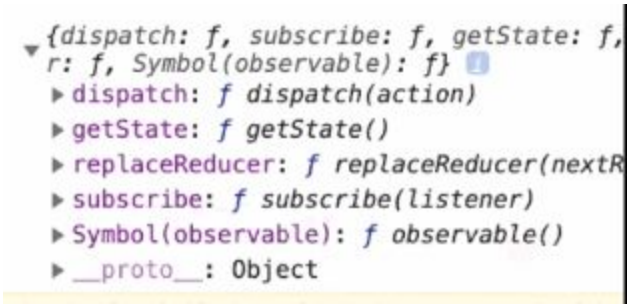
src > redux > JS store.js > ...

```
1  import { createStore } from "redux";
2
3  const initialState = {
4    todos: null
5  };
6
7  const reducer = (state = initialState) => {
8    return state;
9  };
10
11 const store = createStore(reducer);
12
13 console.log(store);
14
15 export default store;
```

Import store file

src > JS index.js

```
1  import React from "react";
2  import ReactDOM from "react-dom";
3  import "./index.css";
4  import App from "./App";
5  import store from "./redux/store";
6  import { Provider } from "react-redux";
7
8  ReactDOM.render(
9    <React.StrictMode>
10     <Provider store={store}>
11       <App />
12     </Provider>
13   </React.StrictMode>,
14   document.getElementById("root")
15 );
16
```



Reducer is a function which will conditionally render state …

1. `defaultState`.
2. `reducer` function.

The `defaultState` will contain the fields we want to store. In this example, we want to store only the current user.

The `reducer` function will take in two arguments:

- `state`, which will default to the `defaultState` we defined.
- `action`, which will represent the dispatch that will be sent.

The action itself will represent an object with two keys:

```
{

   action: "SAMPLE",
   payload: data

}
```

A switch statement is beneficial within the reducer function. As the app gets larger, there will be different action types. Based on the action type, an object will be returned.

To break down the object being returned, it will contain the contents of the previous state, changing the value of one key. In this instance, the action, "SET_USER", will change the currentUser value.

Implement Redux in the index.js File

We will import the following into our index.js

```
import {Provider} from 'react-redux';

import {createStore} from 'redux'

import reducer from './reducers/reducer'
```

Map State to Props

Once we establish a connection, let's add state as props to this component. Within the App component, let's create a function called mapStateToProps.

Map Dispatch to Props

change values in state. We set up another function inside the App called mapDispatchToProps.

Similar to mapStateToProps, we return an object but with the key of setUser set to a value of a function that will send a dispatch to the reducer.

Resources:

https://www.youtube.com/watch?v=CVpUuw9XSjY&t=125s

https://hackernoon.com/https-medium-com-heypb-react-redux-workflow-in-4-steps-beginner-friendly-guide-4aea9d56f5bd

https://medium.com/better-programming/redux-setup-for-your-react-app-d003ec03aedf

Which higher order component is necessary to communicate between React and Redux

Attempted - 45 (90%) EASY

☑ connect	44.44%
☐ mapDispatchToProps	35.56%
☐ mapStateToProps	20%

What is the data type that the dispatch method accepts?

Attempted - 47 (94%) EASY

☐ function	29.79%
☑ object	68.09%
☐ string	4.26%