

React Js

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Redux

React State Managment

Create New Project

We will create new project to implement Redux structure

Layout

NavBar

NavBar is a part of layout that controller the top side of site

Footer

Footer is a part of layout that controller the bottom side of site

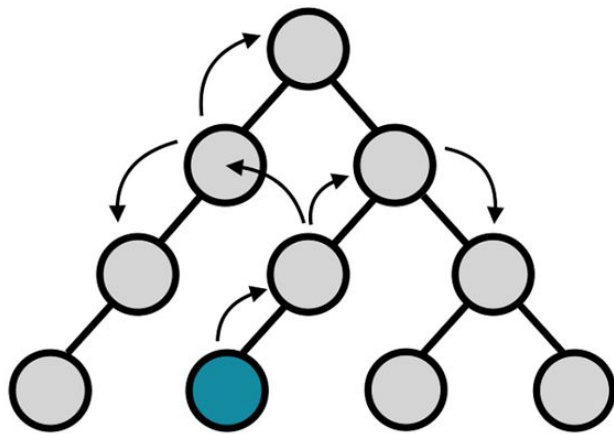
Routing

`npm install react-router-dom`

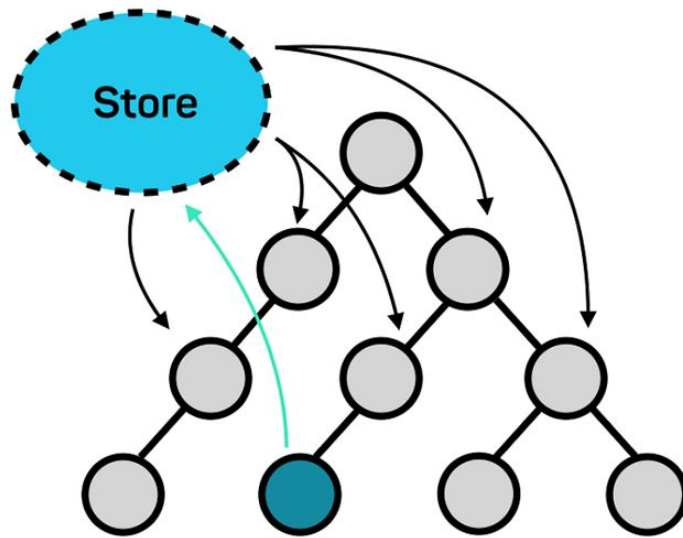
Routing components

1. `<BrowserRouter>`
2. `<Routes>`
3. `<Route>`
4. `<NavLink>`
5. `isActive`

Without Redux



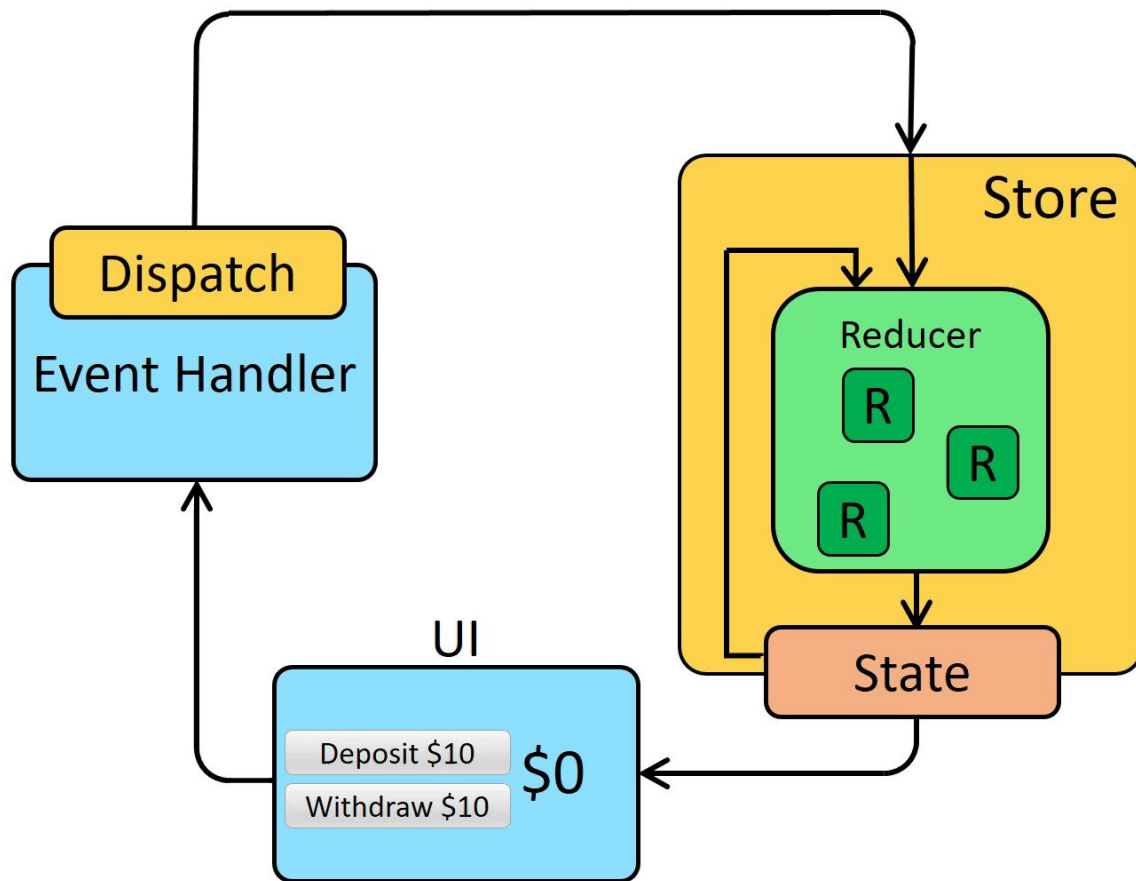
With Redux



Component initiating change

Redux Parts

1. Store
2. Action
3. Reducers



Redux actions

these are objects that should have two properties, one describing the type of action, and one describing what should be changed in the app state.

```
const setUsername = (payload) => {  
  return { type: "LOGIN", payload: payload }  
}
```

Redux reducers

these are functions that implement the behavior of the actions. They change the state of the app, based on the action description and the state change description.

```
export default (state = {}, action) => {  
  switch (action.type) {  
    case type: return { ...state, ...action.payload, };  
    default: return state  
  }  
}
```

Redux Store

The Redux store brings together the state, actions, and reducers that make up your app. The store has several responsibilities:

Without devtools:

```
const store = createStore(reducers , composeEnhancers );  
  
export default store;
```

With devtools

```
const store = createStore(reducers , composeWithDevTools());  
  
export default store;
```

Wrap your app with redux

We will use provider to wrap app with redux .

```
<Provider store={store}>
```

```
<App />
```

```
</Provider>
```

Redux Hooks

1. `useSelector()`
2. `UseDispatch()`

UseSelector()

To read and get different store values

Syntax : `const state = useSelector(state => state)`

UseDispatch()

To Update store values and dispatch actions

Syntax : `const dispatch = useDispatch();`

`dispatch(action())`