#### **READYMADE BASIC REACT APP:**

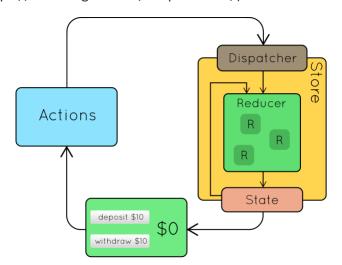
https://github.com/facebook/create-react-app

#### READYMADE BOILER PLATE WITH THE BASIC REACT APP with REDUX:

https://github.com/codewithbernard/react-redux-boilerplate

#### START YOUR FIRST REACT AND REDUX APP with API CALL:

Check Image about Redux (https://bumbu.github.io/simple-redux/)



#### **BASIC STEPS TO FOLLOW – TOTAL 8 Steps:**

- 1. install the normal Redux packages + thunk (dispatcher) & axios axiosthrough npm
  - a. To Install React App:
    - npx create-react-app my-app
  - b. Redux, Thung & axios:
    - npm install --save redux react-redux redux-thunk
    - npm install --save axios
    - You might need a chrome plugin called:
       "ExtensionAllow-Control-Allow-Origin" for out of domain ajax calls.
- 2. Create Folders in the Src folder aka root folder:
  - **a. actions** Folder (The folder where you call the APIs in our example)
    - This folder must have a file called 'index.js' this is the file where you will make the API call and check your self-defined data types by calling the 'types.js' file (this file only returns a name against an alias check file ).
  - **b.** reducers Folder (The folder where you perform actions on APIs in our example)
    - This folder must have a file called 'index.js' this is the record/collection of all reducers.
  - **c. components** Folder (For normal react components not used in our example)

#### 3. Make basic changes into your Root folder's Index.js file (the root folder version)

// BASICS OF NPM: To add npm package run npm install --save <package\_name>

```
// Default - No change
        import React from "react";
// Default - No change
        import ReactDOM from "react-dom";
// Default - No change
        import App from "./App";
// Default - No change
        import registerServiceWorker from "./registerServiceWorker";
// NEW:Call the Provider Object using 'react-redux'
import { Provider } from "react-redux";
// NEW:Check the redux diagram-we need to create a store & apply middlewear
import { createStore, applyMiddleware } from "redux";
// NEW:calling directory will automatically look for index.js & this is a file which imports other reducers and merge them.
Mainly in our example it is "DataReducer.JS"
import reducers from "./reducers";
// NEW:calling reduxThunk [Dispatcher Part]
import reduxThunk from "redux-thunk";
// NEW:Finally initiating the store and passing reducers plus middlewear as reduxThunk – because it's a dispatcher.
const store = createStore(reducers, applyMiddleware(reduxThunk));
// Default - No change
ReactDOM.render(
// NEW:Wrap the lone <App /> tag with <Provider store={store}> passing the store as attribute.
 <Pre><Provider store={store}>
  <App />
 </Provider>,
// Default - No change
 document.getElementById("root")
// Default - No change
);
// Default - No change
registerServiceWorker();
```

#### **Actions folder changes:**

4. FILE: **index.js** is to be created inside the **actions folder**. This is the file where you will call your main APIs using **axios** Here is a sample of the file code with details:

```
// Calling a typical alias/object self-defined data type from types.js inside actions folder.
import { FETCH_DATA } from "./types";
// Calling a axios using axios – for calling unhosted external API – here you will require the help from that chrome plug-in for
calling external API as it allow you to do that.
// Common import for both shortcut or longcut code.
    import axios from "axios";
// Shortcut of the code – If you find this difficult to understand. I have a longcut version under this.
    export const fetchData = () => async dispatch => {
      const res = await axios.get("https://swapi.co/api/people");
      dispatch({
       type: FETCH_DATA,
       payload: res.data.results
     });
    };
// Longcut of the code – If you find shortcut difficult to understand.
    export const fetchData = () => {
      return async dispatch => {
       const res = await axios.get("https://swapi.co/api/people");
       console.log(res);
      };
     };
```

5. FILE: types.js is to be created inside the actions folder. This is the file where for creating aliases for self-defined data types, returning a const variable only. Here is a sample of the file code with details:

// Plain strings for types

```
// Plain strings for types

export const FETCH_DATA = "FETCH_DATA";
```

### **Reducers folder changes:**

6. FILE: dataReducer.js is to be created inside the reducers folder. Here is a sample of the file code with details:

```
// Calling a typical alias/object self-defined data type from types.js inside actions folder.
import { FETCH_DATA } from "../actions/types";

// state is passed as an array although it should be obj along with 'action'.

// we expect returned state to be an Array obj – hence.
export default (state = [], action) => {
    switch (action.type) {
        case FETCH_DATA:
        return action.payload;
        default:
        return state;
    }
};
```

7. FILE: **index.js** is to be created inside the **reducers folder**.

This is the file where you will combine all your reducers, but we have only one in our example "dataReducer.js"

Here is a sample of the file code with details:

// Calling reducers, you have just created. So that you don't need to call them individually, but we have only one here 'dataReducer.js'

```
import dataReducer from "./dataReducer";
```

```
// For combining all reducers by using redux, you need to import the object first by using redux.
import { combineReducers } from "redux";

export default combineReducers({
    // Assigning the key value and returning it back after combining.
    data: dataReducer
});
```

## Others:

# 8. Run application

Write using terminal npm start inside the "react-redux-boilerplate" folder