

PRAKTIKUM MINGGU 7

REDUX

1. Buat project dengan cara **'create-react-app redux'** kemudian enter

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  1: cmd  ▾
Microsoft Windows [Version 10.0.18363.720]
(c) 2019 Microsoft Corporation. All rights reserved.

D:\TUGAS\SEMESTER 6\Pemrograman Berbasis Framework\MINGGU 7\PROJECT>create-react-app redux
```

Instalasi sudah selesai

```
run `npm audit fix` to fix them, or `npm audit` for details

Created git commit.

Success! Created redux at D:\TUGAS\SEMESTER 6\Pemrograman Berbasis Framework\MINGGU 7\PROJECT\redux
Inside that directory, you can run several commands:

  npm start
    Starts the development server.

  npm run build
    Bundles the app into static files for production.

  npm test
    Starts the test runner.

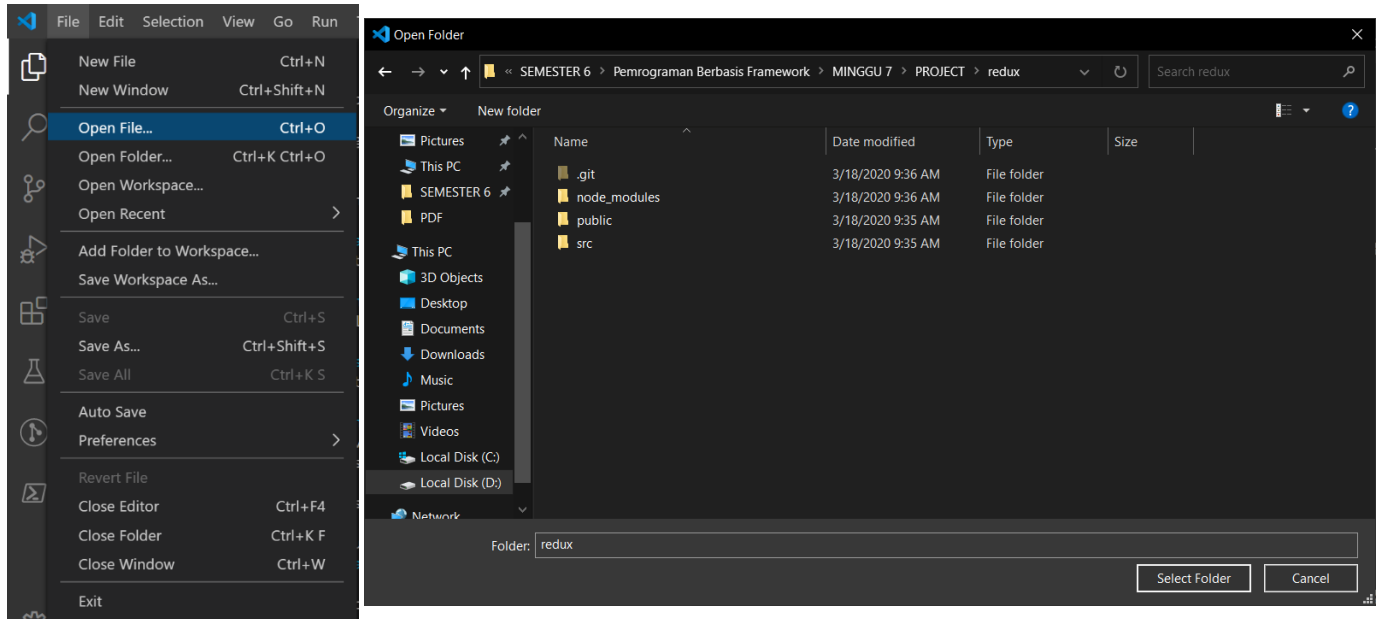
  npm run eject
    Removes this tool and copies build dependencies, configuration files
    and scripts into the app directory. If you do this, you can't go back!

We suggest that you begin by typing:

  cd redux
  npm start

Happy hacking!
```

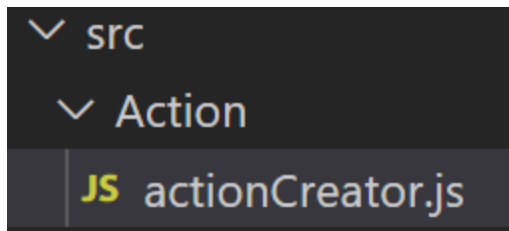
2. Kemudian untuk memudahkan pengerjaan praktikum, open folder ‘**redux**’



3. Install redux dengan cara ‘**npm install react-redux**’ kemudian enter

```
D:\TUGAS\SEMESTER 6\Pemrograman Berbasis Framework\MINGGU 7\PROJECT\redux>npm install react-redux
npm WARN eslint-config-react-app@5.2.0 requires a peer of eslint-plugin-flowtype@3.x but none is installed. You must install peer dependencies yourself.
npm WARN tsutils@3.17.1 requires a peer of typescript@>=2.8.0 || >= 3.2.0-dev || >= 3.3.0-dev || >= 3.4.0-dev || >= 3.5.0-dev || >= 3.6.0-dev || >= 3.6.0-beta || >= 3.7.0-dev || >= 3.7.0-beta but none is installed. You must install peer dependencies yourself.
npm WARN react-redux@7.2.0 requires a peer of redux@^2.0.0 || ^3.0.0 || ^4.0.0-0 but none is installed. You must install peer dependencies yourself.
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.1.2 (node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.2: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.11 (node_modules\webpack-dev-server\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.11: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.11 (node_modules\watchpack\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.11: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.11 (node_modules\jest-haste-map\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.11: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
```

4. Buat folder bernama **'Action'** di dalam folder src, kemudian di dalam folder Action, buat file bernama **'actionCreator.js'**



5. Ketikkan code berikut pada file actionCreator.js

```
import {
  ADD_TODO,
  REMOVE_TODO,
  TOGGLE_TODO,
  SET_VISIBILITY_FILTER
} from "../actionsTypes";

let TodoId = 2;

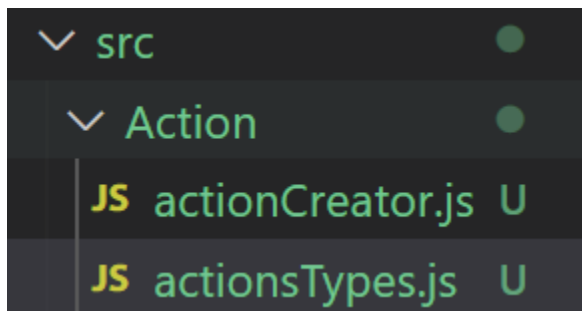
export const addTodo = text => ({ type: ADD_TODO, id: TodoId++, text });

export const deleteTodo = id => ({ type: REMOVE_TODO, id: id });

export const toggleTodo = id => ({ type: TOGGLE_TODO, id: id });

export const setVisibilityFilter = filter => ({
  type: SET_VISIBILITY_FILTER,
  filter
});
```

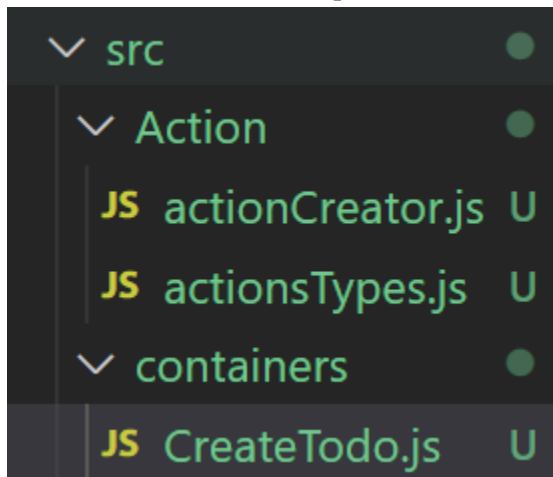
6. Buat file **'actionsTypes.js'** pada folder Action



7. Ketikkan code berikut pada file actionsTypes.js

```
export const ADD_TODO = "ADD_TODO";
export const TOGGLE_TODO = "TOGGLE_TODO";
export const REMOVE_TODO = "REMOVE_TODO";
export const SHOW_ALL = "SHOW_ALL";
export const SHOW_COMPLETED = "SHOW_COMPLETED";
export const SHOW_ACTIVE = "SHOW_ACTIVE";
export const SET_VISIBILITY_FILTER = "SET_VISIBILITY_FILTER";
```

8. Buat folder **'containers'** pada di dalam folder src, kemudian buat file dengan nama **'CreateTodo.js'**



9. Ketikkan code berikut

```
import React, { Component } from "react";
import { connect } from "react-redux";
import { addTodo } from "../Action/actionCreator";
import { bindActionCreators } from "redux";

class CreateTodo extends Component {
  constructor(props) {
    super(props);
    this.state = {
      todotext: ""
    };
    this.onChangeTodoText = this.onChangeTodoText.bind(this);
  }

  onChangeTodoText(e) {
    this.setState({
      todotext: e.target.value
    });
  }
}
```

```

}

render() {
  return (
    <div className="form-group row">
      <div className="col-sm-10">
        <input
          onChange={this.onChangeTodoText}
          value={this.state.todoText}
          type="text"
          className="form-control"
          id="inputEmail3"
          placeholder="add todo here"
        />
        <button
          type="button"
          onClick={() => this.setState({ todoText: "" })}
          style={{ marginTop: "25px", marginRight: "15px" }}
          className="btn btn-danger"
        >
          Cancel
        </button>
        <button
          type="button"
          onClick={() => {
            this.props.addToDo(this.state.todoText);
            this.setState({ todoText: "" });
          }}
          style={{ marginTop: "25px" }}
          className="btn btn-success"
        >
          Add Todo
        </button>
      </div>
    </div>
  );
}
}

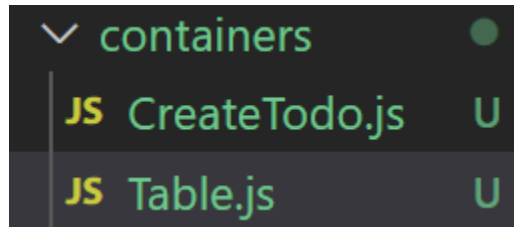
const mapDispatchToProps = dispatch => {
  return bindActionCreators(
    {
      addToDo
    },
    dispatch
  )
}

```

```
);
};

export default connect(null, mapDispatchToProps)(CreateTodo);
```

10. Buat file 'Table.js' di dalam folder containers



11. Ketikkan code berikut

```
import React, { Component } from "react";
import { connect } from "react-redux";
import {
  deleteTodo,
  toggleTodo,
  setVisibilityFilter
} from "../Action/actionCreator";
import { SHOW_ALL, SHOW_COMPLETED, SHOW_ACTIVE } from "../Action/actionsTypes";
import { bindActionCreators } from "redux";

class Table extends Component {
  render() {
    return (
      <div className="col-lg-10 offset-lg-1 col-md-10 col-sm-12 col-xs-12">
        <nav style={{ marginTop: "60px" }}>
          <ol className="breadcrumb">
            <li
              className={
                "breadcrumb-item " +
                (this.props.visibilityFilter === SHOW_ALL ? "active" : "")
              }
              onClick={() => this.props.setVisibilityFilter(SHOW_ALL)}
            >
              All
            </li>
            <li
              className={
                "breadcrumb-item " +

```

```

        (this.props.visibilityFilter === SHOW_COMPLETED ? "active" : "")
      }
      onClick={() => this.props.setVisibilityFilter(SHOW_COMPLETED)}
    >
      Completed
    </li>
    <li
      className={
        "breadcrumb-item " +
        (this.props.visibilityFilter === SHOW_ACTIVE ? "active" : "")
      }
      onClick={() => this.props.setVisibilityFilter(SHOW_ACTIVE)}
    >
      Active
    </li>
  </ol>
</nav>
{this.props.todos.length !== 0 ? (
  <table
    style={{ marginTop: "60px" }}
    className="table table-hover table-dark"
  >
    <thead>
      <tr>
        <th scope="col">Todos</th>
        <th scope="col">Actions</th>
      </tr>
    </thead>
    <tbody>
      {this.props.todos.map(todo => (
        <tr key={todo.id}>
          <td
            style={{
              textDecoration: todo.completed ? "line-through" : "none"
            }}
          >
            {todo.text} {todo.completed === true ? "(completed)" : ""}
          </td>
          <td>
            <span
              className="fas fa-minus-circle"
              onClick={() => this.props.deleteTodo(todo.id)}
              style={{
                color: "white",
                fontSize: "20pt",

```

```

        marginRight: "20px"
      }}
    />
    <span
      className="fas fa-check-circle"
      onClick={() => this.props.toggleTodo(todo.id)}
      style={{ color: "white", fontSize: "20pt" }}
    />
  </td>
</tr>
)}}
</tbody>
</table>
) : (
  <div
    style={{ marginTop: "50px" }}
    className="col-lg-10 col-md-10 col-xs-12 col-sm-12 offset-lg-1"
  >
    <div className="alert alert-danger" role="alert">
      Todo List is empty or Filter results show no results
    </div>
  </div>
  <div>
    </div>
  </div>
  </div>
);
}
}

const getVisibleTodos = (todos, filter) => {
  switch (filter) {
    case SHOW_ALL:
      return todos;
    case SHOW_COMPLETED:
      return todos.filter(t => t.completed);
    case SHOW_ACTIVE:
      return todos.filter(t => !t.completed);
    default:
      throw new Error("Unknown filter: " + filter);
  }
};

const mapStateToProps = state => {
  return {
    todos: getVisibleTodos(state.todos, state.visibilityFilter),
    visibilityFilter: state.visibilityFilter
  }
};

```



```

    };
  };

  const mapDispatchToProps = dispatch => {
    return bindActionCreators(
      {
        deleteTodo,
        toggleTodo,
        setVisibilityFilter
      },
      dispatch
    );
  };

  export default connect(mapStateToProps, mapDispatchToProps)(Table);

```

12. Edit file **'index.js'** yang ada di dalam folder src seperti berikut

```

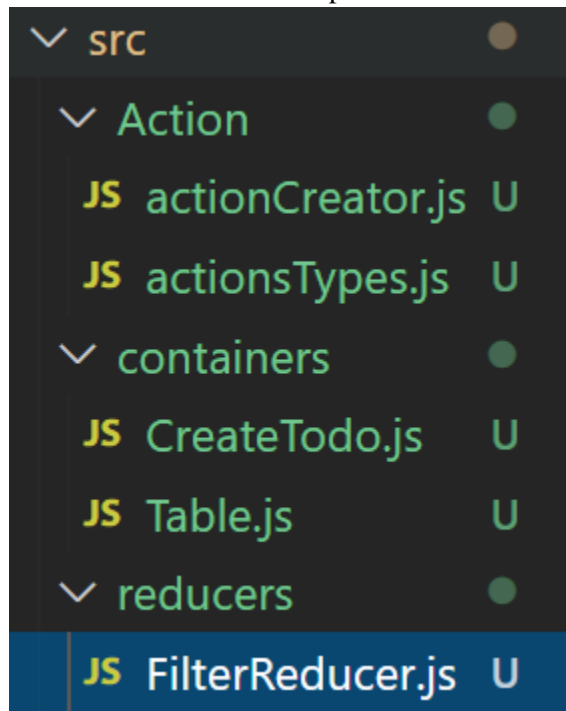
import React from "react";
import ReactDOM from "react-dom";
import { Provider } from "react-redux";
import { createStore, compose } from "redux";
import MainReducer from "../reducers/MainReducer";
import App from "../App";
import registerServiceWorker from "../serviceWorker";

const store = compose(
  window.devToolsExtension ? window.devToolsExtension() : f => f
)(createStore)(MainReducer);

ReactDOM.render(
  <Provider store={store}>
    <App />
  </Provider>,
  document.getElementById("root")
);
registerServiceWorker();

```

13. Buat folder **'reducers'** pada didalam folder src, kemudian buat file **'FilterReducers.js'**



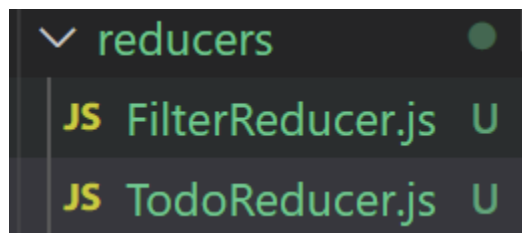
14. Kemudian ketikkan code berikut

```
import { SHOW_ALL, SET_VISIBILITY_FILTER } from "../actions/actionsTypes";

const visibilityFilter = (state = SHOW_ALL, action) => {
  switch (action.type) {
    case SET_VISIBILITY_FILTER:
      return action.filter;
    default:
      return state;
  }
};

export default visibilityFilter;
```

15. Buat file **'TodoReducer.js'** di dalam folder reducers



16. Ketikkan code berikut

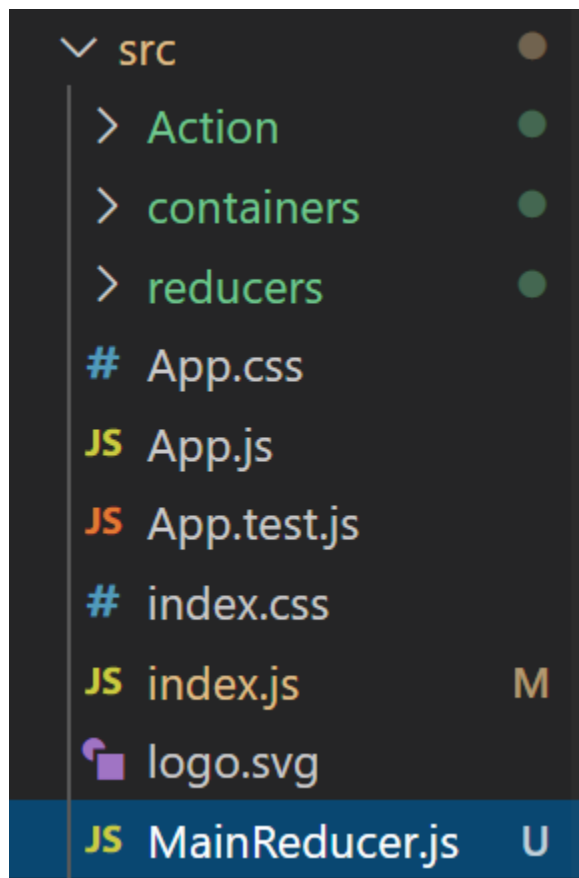
```
import { ADD_TODO, REMOVE_TODO, TOGGLE_TODO } from "../actions/actionsTypes";

const INITIAL_DATA = [];

const TodoReducer = (state = INITIAL_DATA, action) => {
  switch (action.type) {
    case ADD_TODO:
      return [...state, { id: action.id, text: action.text, completed: false }];
    case TOGGLE_TODO:
      return state.map(todo =>
        todo.id === action.id ? { ...todo, completed: !todo.completed } : todo
      );
    case REMOVE_TODO:
      const numIndex = parseInt(action.id);
      return state.filter(todo => todo.id !== numIndex);
    default:
      return state;
  }
};

export default TodoReducer;
```

17. Buat file **'MainReducer.js'** pada folder src



18. Ketikkan code berikut

```
import { combineReducers } from "redux";
import todos from "../TodoReducer";
import visibilityFilter from "../FilterReducer";

export default combineReducers({ todos, visibilityFilter });
```

19. Edit file app.js seperti berikut

```
import React, { Component } from 'react'
import CreateTodo from '../containers/CreateTodo'
import Table from '../containers/Table'

class App extends Component {
  render() {
    return (
      <div className="App">
```

```

    <div className="container" style={{ marginTop: "80px"}} >
      <div className="row">
        <div className="col-lg-10 offset-lg-2 col-md-10 col-sm-12 col-xs-12">
          <CreateTodo />
        </div>
        <Table />
      </div>
    </div>
  </div>
);
}
}

export default App;

```

20. Untuk tema css yang menarik, copy-paste link ini pada file **'index.html'**

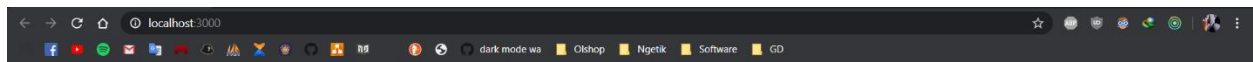
```

<link
  rel="stylesheet"
  href="https://use.fontawesome.com/releases/v5.1.0/css/all.css"
  integrity="sha384-
lKuwvrZot6UHsBSfcMv0kWWlCMgc0TaWr+30HWe3a41taBwTZhyTEggF5tJv8tbt"
  crossorigin="anonymous"
/>
<link
  rel="stylesheet"
  href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.
css"
  integrity="sha384-
WskhaSGFgHYWDcbwN70/dfYBj47jz9qbsMIId/iRN3ewGhXQFZCSftd1LZCfmhktB"
  crossorigin="anonymous"
/>

<style>
  .breadcrumb-item.active {
    color: #dc3545;
  }
</style>

```

21. Hasil



add todo here

Cancel Add Todo



All / Completed / Active

Todo List is empty or Filter results show no results

add todo here

Cancel Add Todo

All / Completed / Active

Todos	Actions
Mengerjakan tugas PBF	 

Jika tombol centang di klik

Cancel

Add Todo

All / Completed / Active

Todos	Actions
Mengerjakan tugas PBF (completed)	<div><div></div><div></div></div>

Pada tab all, semua todo akan muncul

Cancel

Add Todo

All / Completed / Active

Todos	Actions
Mengerjakan tugas PBF (completed)	<div><div></div><div></div></div>
Project a	<div><div></div><div></div></div>
Project b	<div><div></div><div></div></div>
Project c	<div><div></div><div></div></div>

Pada tab complete, akan muncul project yang sudah di klik tombol centang

Cancel

Add Todo

All / Completed / Active

Todos	Actions
Mengerjakan tugas PBF (completed)	<div><div></div><div></div></div>

Project yang sedang aktif akan muncul di tab Active

Cancel

Add Todo

All / Completed / Active

Todos	Actions
Project a	<div><div></div><div></div></div>
Project b	<div><div></div><div></div></div>
Project c	<div><div></div><div></div></div>