

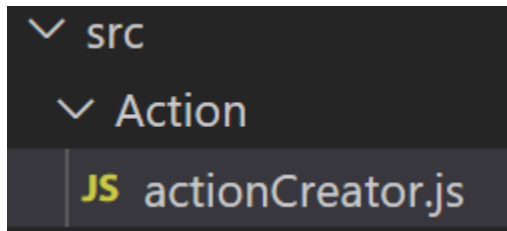
LAPORAN PRAKTIKUM

MINGGU 7 REDUX

1. Install redux dengan cara **'npm install react-redux'** kemudian enter

```
D:\semester 6\minggu7>npm install react-redux
npm WARN rollback Rolling back readable-stream@2.3.6 failed
(this is probably harmless): EPERM: operation not permitted,
lstat 'D:\semester 6\minggu7\node_modules\watchpack\node_modules\fs
events\node_modules'
npm WARN eslint-config-react-app@5.2.0 requires a peer of es
lint-plugin-flowtype@3.x but none is installed. You must ins
tall 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 dep
endencies 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 pl
atform 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 pl
atform for fsevents@1.2.11: wanted {"os":"darwin","arch":"an
y"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2
```

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



3. Ketikkan code berikut pada file actionCreator.js

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

let TodoId = 2;

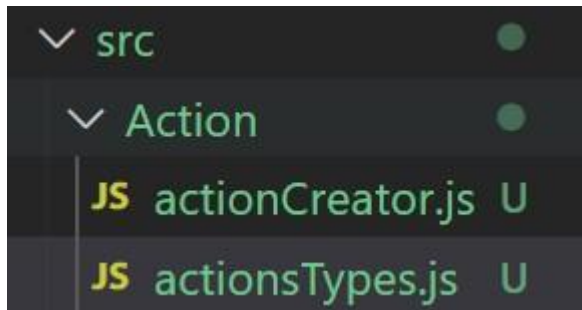
export const addTodo = text => ({ type: ADD_TODO, id: TodoId++, text });

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
});
```

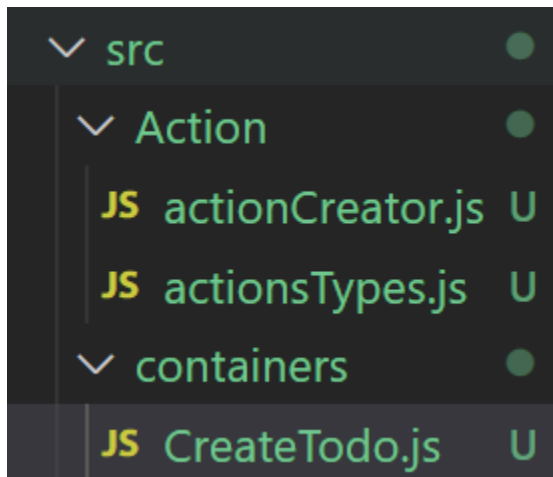
4. Buat file **'actionsTypes.js'** pada folder Action



5. 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";
```

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



7. 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>
  );
}

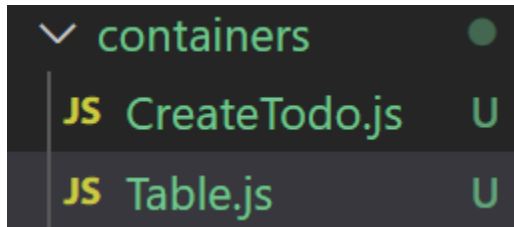
const mapDispatchToProps = dispatch => {
  return bindActionCreators(
    {
      addToDo
    },
    dispatch
  )
}

```

```
);
};

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

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



9. 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>
);
}
}

```

```

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);

```

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

```

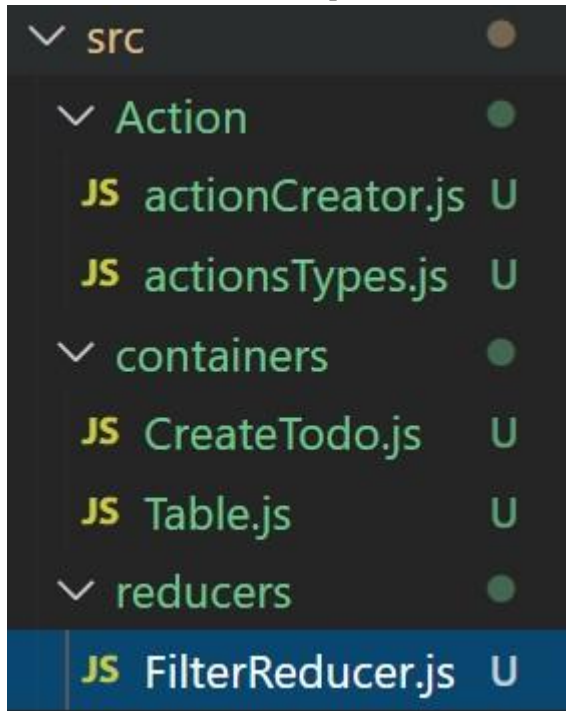
import React from "react";
import ReactDOM from "react-dom";
import { Provider } from "react-redux";
import { createStore, compose } from "redux";
import MainReducer from "../reducers/MainReducer";
import './index.css';
import App from "../App";
import 'bootstrap/dist/css/bootstrap.css';
import * as serviceWorker from '../serviceWorker';
// 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")
);
serviceWorker.unregister();

```


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



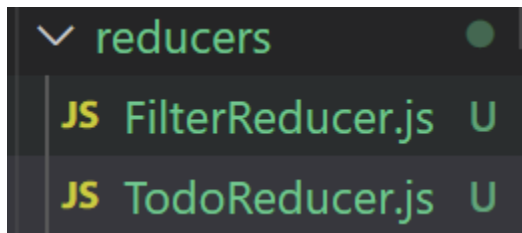
12. Kemudian ketikkan code berikut

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

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

export default visibilityFilter;
```

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



14. Ketikkan code berikut

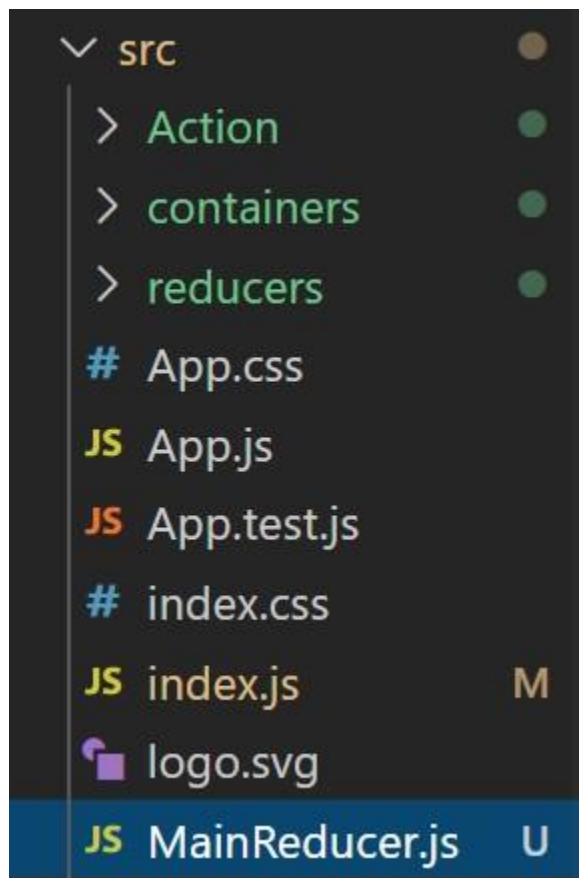
```
import { ADD_TODO, REMOVE_TODO, TOGGLE_TODO } from "../Action/actionTypes";

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;
```

15. Buat file 'MainReducer.js' pada folder src



16. Ketikkan code berikut

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

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

17. Edit file app.js seperti berikut

```
import React, { Component } from 'react'
import CreateTodo from '../containers/CreateTodo'
import Table from '../containers/Table'
import 'bootstrap/dist/css/bootstrap.css';

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>
</div>
);
}
}
export default App;

```

18. 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-
1KuwvrZot6UHsBSfcMv0kWWlCMgc0TaWr+30HWe3a4ltaBwTZhyTEggF5tJv8tbt"
  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>





```

19. Hasil

Cancel

Add Todo

All / Completed / Active

Todos	Actions
Agik (completed)	 
project 1	 
project 2	 