

LAPORAN PRAKTIKUM
PEMROGRAMAN BERBASIS FRAMEWORK

Pertemuan Minggu-6

Modul 6 – Redux



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Praktikum

Langkah Praktikum

Langkah	Keterangan
1	<p>Buat project baru setelah itu lakukan instalasi react (<i>npm install</i>), kita perlu menambahkan install library independent yang dibutuhkan dengan menambahkan syntax <i>npm install --save redux react-redux</i></p> <pre>PS C:\Users\ASUS\Pemrograman-Framework\minggu6> npx create-react-app redux-dina Creating a new React app in C:\Users\ASUS\Pemrograman-Framework\minggu6\redux-dina. Installing packages. This might take a couple of minutes. Installing react, react-dom, and react-scripts with cra-template... > core-js@2.6.12 postinstall C:\Users\ASUS\Pemrograman-Framework\minggu6\redux-dina\node_modules\babel-runtime\node_modules\core-js > node -e "try{require('./postinstall')}catch(e){}" > core-js@3.9.1 postinstall C:\Users\ASUS\Pemrograman-Framework\minggu6\redux-dina\node_modules\core-js > node -e "try{require('./postinstall')}catch(e){}" > core-js-pure@3.9.1 postinstall C:\Users\ASUS\Pemrograman-Framework\minggu6\redux-dina\node_modules\core-js-pure > node -e "try{require('./postinstall')}catch(e){}" > ejs@2.7.4 postinstall C:\Users\ASUS\Pemrograman-Framework\minggu6\redux-dina\node_modules\ejs > node ./postinstall.js + react-scripts@4.0.3 + cra-template@1.1.2 + react-dom@17.0.1 + react@17.0.1 added 1919 packages from 731 contributors and audited 1922 packages in 280.108s 133 packages are looking for funding run `npm fund` for details found 0 vulnerabilities</pre> <pre>PS C:\Users\ASUS\Pemrograman-Framework\minggu6\redux-dina> npm install --save redux react-redux npm WARN tsutils@3.21.0 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 optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.3.2 (node_modules\fsevents): npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"}) npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.13 (node_modules\webpack-dev-server\node_modules\fsevents): npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.13: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"}) npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.13 (node_modules\watchpack-chokidar2\node_modules\fsevents): npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.13: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"}) + react-redux@7.2.2 + redux@4.0.5 added 4 packages from 3 contributors and audited 1954 packages in 21.34s 133 packages are looking for funding run `npm fund` for details found 0 vulnerabilities PS C:\Users\ASUS\Pemrograman-Framework\minggu6\redux-dina> </pre>
2	Kemudian Buat Folder dalam src yaitu actions

	
3	<p>Beri nama actionCreator.js</p> <pre> redux-dina > src > actions > JS actionCreator.js > toggleTodo > type 1 import { ADD_TODO, REMOVE_TODO, TOGGLE_TODO, SET_VISIBILITY_FILTER } from 2 './actionsTypes' 3 let TodoId = 2 4 export const addTodo = text => ({ 5 type: ADD_TODO, 6 id: TodoId++, 7 text 8 }) 9 export const deleteTodo = (id) => ({ 10 type: REMOVE_TODO, 11 id: id 12 }) 13 export const toggleTodo = (id) => ({ 14 type: TOGGLE_TODO, 15 id: id 16 }) 17 export const setVisibilityFilter = filter => ({ 18 type: SET_VISIBILITY_FILTER, 19 filter 20 }) </pre>
4	<p>Masih dalam Folder actions buatlah file actionsTypes.js</p> <pre> redux-dina > src > actions > JS actionsTypes.js > SET_VISIBILITY_FILTER 1 export const ADD_TODO = 'ADD_TODO' 2 export const TOGGLE_TODO = 'TOGGLE_TODO' 3 export const REMOVE_TODO = 'REMOVE_TODO' 4 export const SHOW_ALL = 'SHOW_ALL' 5 export const SHOW_COMPLETED = 'SHOW_COMPLETED' 6 export const SHOW_ACTIVE = 'SHOW_ACTIVE' 7 export const SET_VISIBILITY_FILTER = 'SET_VISIBILITY_FILTER' </pre>
5	<p>Kemudian dalam folder src buatlah folder dengan nama containers dan buatlah file dengan judul CreateTodo.js</p>

```

redux-dina > src > containers > JS CreateTodo.js > CreateTodo > render
1 import React, { Component } from 'react'
2 import { connect } from 'react-redux'
3 import { addTodo } from '../actions/actionCreator'
4 import { bindActionCreators } from 'redux'
5 class CreateTodo extends Component {
6   constructor(props) {
7     super(props)
8     this.state = {
9       todotext: '',
10     }
11     this.onChangeTodoText = this.onChangeTodoText.bind(this)
12   }
13   onChangeTodoText(e) {
14     this.setState({
15       todotext: e.target.value
16     })
17   }
18   render() {
19     return (
20       <div className="form-group row">
21         <div className="col-sm-10">
22           <input onChange={this.onChangeTodoText} value={this.state.todotext}
23             type="text" className="form-control" id="inputEmail3" placeholder="add todo here" />
24           <button type="button" onClick={() => this.setState({ todotext: '' })}
25             style={{ marginTop: "25px", marginRight: "15px" }} className="btn btn-danger">Cancel</button>
26           <button type="button" onClick={() => {
27             this.props.addTodo(this.state.todotext); this.setState({ todotext: '' })
28           }}
29             style={{ marginTop: "25px" }} className="btn btn-success">Add Todo</button>
30         </div>
31       </div>
32     );
33   }
34 }
35 const mapDispatchToProps = (dispatch) => {
36   return bindActionCreators({
37     addTodo
38   }, dispatch)
39 }
40 export default connect(null, mapDispatchToProps)(CreateTodo)
41

```

Masih dalam folder containers buatlah file dengan judul Table.js

```

redux-dina > src > containers > JS Table.js > Table > render
1 import React, { Component } from "react";
2 import { connect } from "react-redux";
3 import {
4   deleteTodo,
5   toggleTodo,
6   setVisibilityFilter
7 } from "../actions/actionCreator";
8 import { SHOW_ALL, SHOW_COMPLETED, SHOW_ACTIVE } from "../actions/actionsTypes";
9 import { bindActionCreators } from "redux";
10 class Table extends Component {
11   render() {
12     return (
13       <div className="col-lg-10 offset-lg-1 col-md-10 col-sm-12 col-xs-12">
14         <nav style={{ marginTop: "60px" }}>
15           <ol className="breadcrumb">
16             <li
17               className={"breadcrumb-item " + (this.props.visibilityFilter === SHOW_ALL ?
18                 'active' : '')}
19               onClick={() => this.props.setVisibilityFilter(SHOW_ALL)}
20             >
21               All
22             </li>
23             <li
24               className={"breadcrumb-item " + (this.props.visibilityFilter ===
25                 SHOW_COMPLETED ? 'active' : '')}
26               onClick={() => this.props.setVisibilityFilter(SHOW_COMPLETED)}
27             >
28               Completed
29             </li>
30             <li

```

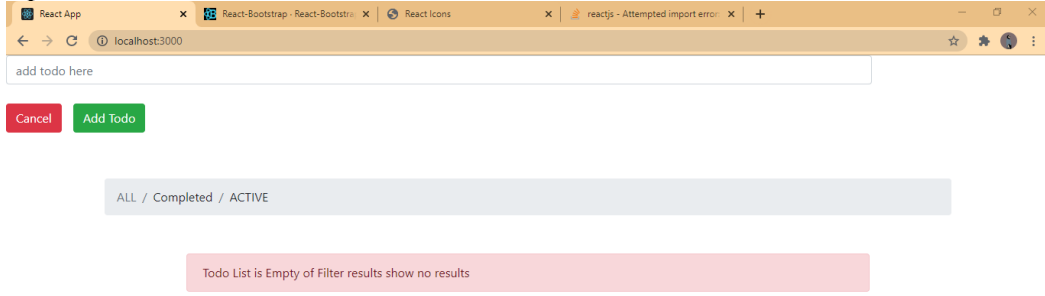
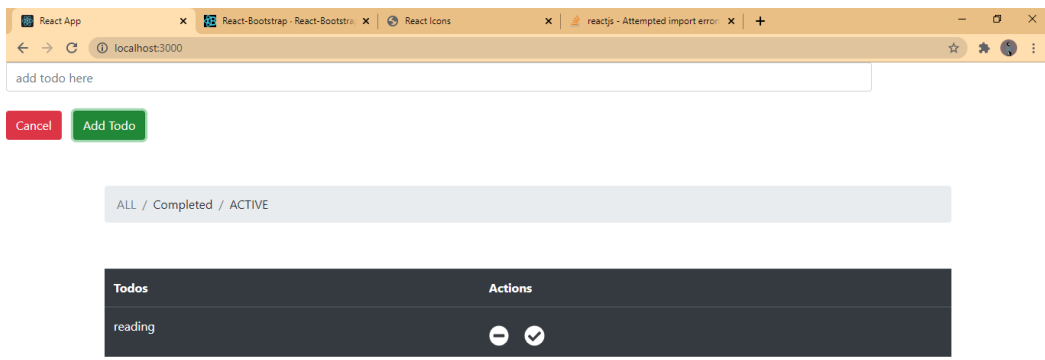
```

31         className={"breadcrumb-item " + (this.props.visibilityFilter === SHOW_ACTIVE ?
32         'active' : '')}
33         onClick={() => this.props.setVisibilityFilter(SHOW_ACTIVE)}
34     >
35         Active
36     </li>
37 </ol>
38 </nav>
39 {this.props.todos.length !== 0 ? (
40     <table
41         style={{ marginTop: "60px" }}
42         className="table table-hover table-dark"
43     >
44         <thead>
45             <tr>
46                 <th scope="col">Todos</th>
47                 <th scope="col">Actions</th>
48             </tr>
49         </thead>
50         <tbody>
51             {this.props.todos.map(todo => (
52                 <tr key={todo.id}> <td
53                     style={{
54                         textDecoration: todo.completed ? "line-through" : "none"
55                     }}
56                 >
57                     {todo.text} {todo.completed === true ? "(completed)" : ""}
58                 </td>
59                 <td>
60                     <span
61                         className="fas fa-minus-circle"
62                         onClick={() => this.props.deleteTodo(todo.id)}
63                         style={{
64                             color: "white",
65                             fontSize: "20pt",
66                             marginRight: "20px"
67                         }}
68                     />
69                     <span
70                         className="fas fa-check-circle"
71                         onClick={() => this.props.toggleTodo(todo.id)}
72                         style={{ color: "white", fontSize: "20pt" }}
73                     />
74                 </td>
75             </tr>
76             </tbody>
77         </table>
78     ) : (
79         <div
80             style={{ marginTop: "50px" }}
81             className="col-lg-10 col-md-10 col-xs-12 col-sm-12 offset-lg-1"
82         >
83             <div className="alert alert-danger" role="alert">
84                 Todo List is empty or Filter results show no results
85             </div>
86         </div>
87     )}{" "}

```

	<pre> 89 </div> 90); 91 } 92 } 93 const getVisibleTodos = (todos, filter) => { 94 switch (filter) { 95 case SHOW_ALL: 96 return todos; 97 case SHOW_COMPLETED: 98 return todos.filter(t => t.completed); 99 case SHOW_ACTIVE: 100 return todos.filter(t => !t.completed); 101 default: 102 throw new Error("Unknown filter: " + filter); 103 } 104 }; const mapStateToProps = state => { 105 return { 106 todos: getVisibleTodos(state.todos, state.visibilityFilter), 107 visibilityFilter: state.visibilityFilter 108 }; 109 }; 110 const mapDispatchToProps = dispatch => { 111 return bindActionCreators(112 { 113 deleteTodo, 114 toggleTodo, 115 setVisibilityFilter 116 }, 117 dispatch 118); 119 }; 120 export default connect(mapStateToProps, mapDispatchToProps)(Table); 121 </pre>
7	<p>Edit index.js dengan source code berikut ini</p> <pre> redux-dina > src > JS index.js > ... 1 import React from "react"; 2 import ReactDOM from "react-dom"; 3 import { Provider } from "react-redux"; 4 import { createStore, applyMiddleware, compose } from "redux"; 5 import MainReducer from "../reducers/MainReducer"; 6 import Table from "../containers/Table"; 7 import registerServiceWorker from "../registerServiceWorker"; 8 import CreateTodo from "../containers/CreateTodo"; 9 10 const store = compose(window.devToolsExtension ? window.devToolsExtension() : f => 11 f)(createStore)(MainReducer) 12 13 ReactDOM.render(14 <Provider store={store}> 15 <CreateTodo /> 16 <Table /> 17 </Provider>, 18 document.getElementById('root')); 19 20 registerServiceWorker(); </pre>
8	<p>Buat folder dalam src dengan nama reducers dan beri nama file FilterReducer.js dan ketikkan program dibawah ini :</p>

	<pre> redux-dina > src > reducers > JS FilterReducer.js > [🔍] visibilityFilter 1 import { 2 SHOW_ALL, 3 SET_VISIBILITY_FILTER 4 } from "../actions/actionTypes"; 5 const visibilityFilter = (state = SHOW_ALL, action) => { 6 switch (action.type) { 7 case SET_VISIBILITY_FILTER: 8 return action.filter; 9 default: 10 return state; 11 } 12 }; 13 export default visibilityFilter; </pre>
9	<p>Masih didalam folder reducers buatlah file dengan nama TodoReducer.js</p> <pre> redux-dina > src > reducers > JS TodoReducer.js > [🔍] TodoReducer 1 // if you want to show initial data :) 2 // const INITIAL_DATA = [3 // { 4 // id: 0, 5 // text: 'Walk the Dog', 6 // }, 7 // { 8 // id: 1, 9 // text: 'learn Redux', 10 // }, 11 //] 12 import { ADD_TODO, REMOVE_TODO, TOGGLE_TODO } from '../actions/actionTypes' 13 const INITIAL_DATA = [] 14 const TodoReducer = (state = INITIAL_DATA, action) => { 15 switch (action.type) { 16 case ADD_TODO: 17 return [18 ...state, { 19 id: action.id, 20 text: action.text, 21 completed: false, 22 } 23] 24 case TOGGLE_TODO: 25 return state.map(todo => 26 (todo.id === action.id) 27 ? { ...todo, completed: !todo.completed } 28 : todo 29) 30 case REMOVE_TODO: const numIndex = parseInt(action.id) 31 return state.filter(todo => todo.id !== numIndex); 32 default: 33 return state 34 } 35 } 36 export default TodoReducer </pre>
10	<p>Buat file dengan nama MainReducer.js dan simpan</p>

	<pre> redux-dina > src > reducers > JS MainReducer.js > ... 1 import { combineReducers } from 'redux' 2 import todos from './TodoReducer' 3 import visibilityFilter from './FilterReducer' 4 export default combineReducers({ 5 todos, 6 visibilityFilter 7 }) 8 </pre>
11	<p>Running semua program dengan npm start dan liat hasilnya dan laporkan didalam laporan</p>  

Link Github:

<https://github.com/dinariskyas/PemrogramanFramework2021/tree/master/minggu6/redux-dina>

Link Youtube :

<https://youtu.be/z7eYLXeH6vc>