TUGAS INDIVIDU

Modul 6

Redux

Disusun sebagai :

MATA KULIAH : PEMROGRAMAN WEB BERBASIS FRAMEWORK

Oleh :

Febri Toriqkhul Khoiri / 1741720171

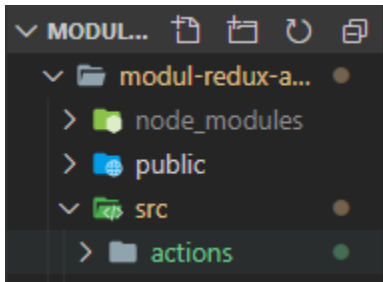**TI 3-A**

PROGRAM STUDI D-IV TEKNIK INFORMATIKA

JURUSAN TEKNOLOGI INFORMASI

POLITEKNIK NEGERI MALANG

2020

PRAKTIKUM
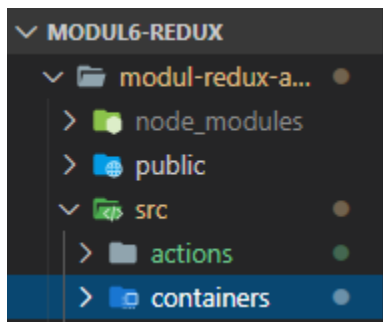
1. Buat folder dalam src dan beri nama **actions**.

2. Kemudian buat file.js dengan nama **actionCreator,js**.


```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
})
```

3. Masih pada folder src, buat file .js dengan nama **actionsTypes.js**.


```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'
```

4. Lalu dalam folder src, buat folder dengan nama **containers** dan buat file dengan nama **CreateTodo.js**.


```js
import React, { Component } from 'react'
import { connect } from 'react-redux'
import { addTodo } from '../actions/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
        })
    }
```

```
20
21       render() {
22           return (
23               <div className="form-group row">
24                   <div className="col-sm-10">
25                       <input onChange={this.onChangeTodoText} value={this.state.todotext}
26                           type="text" className="form-control" id="inputEmail3" placeholder="add todo here" />
27                       <button type="button" onClick={() => this.setState({ todotext: '' })}
28                           style={{ marginTop: "25px", marginRight: "15px" }} className="btn btn- danger">Cancel</button>
29                       <button type="button" onClick={() => { this.props.addTodo(this.state.todotext); this.setState({ todot
30                           style={{ marginTop: "25px" }} className="btn btn-success">Add Todo</button>
31                   </div>
32               </div>
33           );
34       }
35  }
36  const mapDispatchToProps = (dispatch) => {
37      return bindActionCreators({
38          addTodo
39      }, dispatch)
40  }
41  export default connect(null, mapDispatchToProps)(CreateTodo)
42
```

5. Setelah itu, buat lagi file .js dengan nama **Table.js** pada folder **containers**.

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

```jsx
34              </nav>
35              {this.props.todos.length !== 0 ? (
36                  <table
37                      style={{ marginTop: "60px" }} className="table table-hover table-dark"
38                  >
39                      <thead>
40                          <tr>
41                              <th scope="col">Todos</th>
42                              <th scope="col">Actions</th>
43                          </tr>
44                      </thead>
45                      <tbody>
46                          {this.props.todos.map(todo => (
47                              <tr key={todo.id}>
48                                  <td
49                                      style={{
50                                          textDecoration: todo.completed ? "line-through" : "none"
51                                      }}
52                                  >
53                                      {todo.text} {todo.completed === true ? "(completed)" : ""}
54                                  </td>
55                                  <td>
56                                      <span
57                                          className="fas fa-minus-circle"
58                                          onClick={() => this.props.deleteTodo(todo.id)} style={{
59                                              color: "white", fontSize: "20pt", marginRight: "20px"
60                                          }}
61                                      />
62                                      <span
63                                          className="fas fa-check-circle"
64                                          onClick={() => this.props.toggleTodo(todo.id)} style={{ color: "white", fontS
65                                      />
66                                  </td>
67                              </tr>
68                          ))}
69                      </tbody>
70                  </table>
71              ) : (
72                  <div
73                      style={{ marginTop: "50px" }}
74                      className="col-lg-10 col-md-10 col-xs-12 col-sm-12 offset-lg-1"
75                  >
76                      <div className="alert alert-danger" role="alert"> Todo List is empty or Filter results show n
77  </div>
78                  </div>
79              )}{" "}
80          </div>
81      );
82  }
83 }
84
85 const getVisibleTodos = (todos, filter) => {
86     switch (filter) {
87         case SHOW_ALL:
88             return todos;
89         case SHOW_COMPLETED:
90             return todos.filter(t => t.completed); case SHOW_ACTIVE:
91             return todos.filter(t => !t.completed); default:
92             throw new Error("Unknown filter: " + filter);
93     }
94 };
```

```
 95
 96    const mapStateToProps = state => {
 97        return {
 98            todos: getVisibleTodos(state.todos, state.visibilityFilter), visibilityFilter: state.visibilityFilter
 99        };
100    };
101
102    const mapDispatchToProps = dispatch => {
103        return bindActionCreators(
104            {
105                deleteTodo, toggleTodo, setVisibilityFilter
106            },
107            dispatch
108        );
109    };
110
111    export default connect(mapStateToProps, mapDispatchToProps)(Table);
112
```

6. Kemudian edit **Index.js** menjadi seperti berikut.

```
Js index.js  ×

modul-redux-app > 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 App from './App';
 7    import * as serviceWorker from './serviceWorker';
 8
 9    const store = compose(window.devToolsExtension ? window.devToolsExtension() : f => f)(createStore)(MainReducer)
10
11    ReactDOM.render(<Provider store={store}>
12        <App />
13    </Provider>,
14        document.getElementById('root'));
15    serviceWorker.unregister();
16
```

7. Selanjutnya, buat folder baru pada folder src dengan nama **reducers** dan buat file .js dengan nama **FilterReducers.js**.

```
Js FilterReducer.js  ×

modul-redux-app > src > reducers > Js FilterReducer.js > ...
 1    import {
 2        SHOW_ALL,
 3        SET_VISIBILITY_FILTER
 4    } from "../actions/actionsTypes";
 5
 6    const visibilityFilter = (state = SHOW_ALL, action) => {
 7        switch (action.type) {
 8            case SET_VISIBILITY_FILTER:
 9                return action.filter; default:
10                return state;
11        }
12    };
13
14    export default visibilityFilter;
15
```

8. Masih dalam folder **reducers**, buat file baru dengan nama **TodoReducers.js**.

```js
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
```

9. Kemudian buat lagi file dengan nama **MainReducers.js**.

```js
import { combineReducers } from 'redux'
import todos from './TodoReducer'
import visibilityFilter from './FilterReducer'

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

10. Terakhir, running semua program dengan **npm start** dan lihat hasilnya.