

TUGAS INDIVIDU

MODUL 6 : Redux

Disusun sebagai

MATA KULIAH : Pemrograman Framework

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PROGRAM STUDI D-IV T.INFORMATIKA

JURUSAN TEKNOLOGI INFORMASI

POLITEKNIK NEGERI MALANG

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Praktikum

1. Buat Folder dalam src yaitu Action
2. Beri nama actionCreator

```
1 import {
2     ADD_TODO,
3     REMOVE_TODO,
4     TOGGLE_TODO,
5     SET_VISIBILITY_FILTER
6 } from './actionTypes'
7 let TodoId = 2
8 export const addTodo = text => ({
9     type: ADD_TODO,
10    id: TodoId++,
11    text
12 })
13 export const deleteTodo = (id) => ({
14     type: REMOVE_TODO,
15     id: id
16 })
17 export const toggleTodo = (id) => ({
18     type: TOGGLE_TODO,
19     id: id
20 })
21 export const setVisibilityFilter = filter => ({
22     type: SET_VISIBILITY_FILTER,
23     filter
24 })
```

3. Masih dalam Folder Action buatlah file actionTypes.js

```
src > Action > JS actionTypes.js > [e] 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'
```

4. Kemudian dalam folder src buatlah folder dengan nama containers dan buatlah file dengan judul CreateTodo

```
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)
```

5. Masih dalam folder containers buatlah file dengan judul Table.js

```
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/actionTypes";
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     )]}
77   </tbody>
78 </table>
79 ) : (
80   <div
81     style={{ marginTop: "50px" }}
82     className="col-lg-10 col-md-10 col-xs-12 col-sm-12 offset-lg-1"
83   >
84     <div className="alert alert-danger" role="alert">
85       Todo List is empty or Filter results show no results
86     </div>

```

```

86 </div>
87
88 </div>
89 </div>
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```

```

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);

```

6. Edit index.js dengan source code berikut ini

```

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 './index.css';
7 import App from './App';
8 import * as serviceWorker from './serviceWorker';
9
10 const store = compose(window.devToolsExtension ? window.devToolsExtension() : f => f)(createStore)(MainReducer);
11
12 ReactDOM.render(<Provider store={store}>
13   <App />
14 </Provider>
15   , document.getElementById('root'));
16
17 // If you want your app to work offline and load faster, you can change
18 // unregister() to register() below. Note this comes with some pitfalls.
19 // Learn more about service workers: https://bit.ly/CRA-PWA
20 serviceWorker.register();

```

7. Buat folder dalam src dengan nama reducers dan beri nama file FilterReducer.js dan ketikkan program dibawah ini:

```
src > reducers > JS FilterReducer.js > ...
1  import {
2    SHOW_ALL,
3    SET_VISIBILITY_FILTER
4  } from "../Action/actionsTypes";
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;
```

8. Masih dalam folder reducers buatlah file dengan nama TodoReducer.js

```
src > reducers > JS TodoReducer.js > [?] TodoReducer
12  import { ADD_TODO, REMOVE_TODO, TOGGLE_TODO } from '../Action/actionsTypes'
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
```

9. Buat file dengan nama MainReducer.js dan simpan

```
src > reducers > JS MainReducer.js > [⌘] default
1  import { combineReducers } from 'redux'
2  import todos from './TodoReducer'
3  import visibilityFilter from './FilterReducer'
4  export default combineReducers({
5    |   todos,
6    |   visibilityFilter
7  })
```

10. Running semua program dengan npm start dan liat hasilnya dan laporkan didalam laporan

