

JOBSHEET PEMROGRAMAN BERBASIS FRAMEWORK

React Router



Oleh:

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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 './actionsTypes'
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 })
25
```

3. Masih dalam Folder Action buatlah file actionsTypes.js

```
react-reduks > 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'
```

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

```
react-reduks > src > containers > JS CreateTodo.js > ...
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
23              onChange={this.onChangeTodoText}
24              value={this.state.todotext}
25              type="text"
26              className="form-control"
27              id="inputEmail3"
28              placeholder="add todo here"
29            />
30            <button
31              type="button"
32              onClick={() => this.setState({ todotext: '' })}
33              style={{ marginTop: '25px', marginRight: '15px' }}
34              className="btn btn-danger"
35            >
36              Cancel
37            </button>
38            <button
39              type="button"
40              onClick={() => {
41                this.props.addTodo(this.state.todotext)
42                this.setState({ todotext: '' })
43              }}
44              style={{ marginTop: '25px' }}
45              className="btn btn-success"
46            >
47              Add Todo
48            </button>
49          </div>
50        </div>
51      )
52    }
53  }
54  const mapDispatchToProps = (dispatch) => {
55    return bindActionCreators(
56      {
57        addTodo,
58      },
59      dispatch,
60    )
61  }
62  export default connect(null, mapDispatchToProps)(CreateTodo)
```

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

```
react-reduks > src > containers > JS Table.js > ...
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={
18                 'breadcrumb-item ' +
19                 (this.props.visibilityFilter === SHOW_ALL ? 'active' : '')
20               }
21               onClick={() => this.props.setVisibilityFilter(SHOW_ALL)}
22             >
23               All
24             </li>
25             <li
26               className={
27                 'breadcrumb-item ' +
28                 (this.props.visibilityFilter === SHOW_COMPLETED ? 'active' : '')
29               }
30               onClick={() => this.props.setVisibilityFilter(SHOW_COMPLETED)}
31             >
32               Completed
33             </li>
34             <li
35               className={
36                 'breadcrumb-item ' +
37                 (this.props.visibilityFilter === SHOW_ACTIVE ? 'active' : '')
38             >
```

```

39         onClick={() => this.props.setVisibilityFilter(SHOW_ACTIVE)}
40     >
41         Active
42     </li>
43 </ol>
44 </nav>
45 {this.props.todos.length !== 0 ? (
46     <table
47         style={{ marginTop: '60px' }}
48         className="table table-hover table-dark"
49     >
50         <thead>
51             <tr>
52                 <th scope="col">Todos</th>
53                 <th scope="col">Actions</th>
54             </tr>
55         </thead>
56         <tbody>
57             {this.props.todos.map((todo) => (
58                 <tr key={todo.id}>
59                     <td
60                         style={{
61                             textDecoration: todo.completed ? 'line-through' : 'none',
62                         }}
63                     >
64                         {todo.text} {todo.completed === true ? '(completed)' : ''}
65                     </td>
66                     <td>
67                         <span
68                             className="fas fa-minus-circle"
69                             onClick={() => this.props.deleteTodo(todo.id)}
70                             style={{
71                                 color: 'white',
72                                 fontSize: '20pt',
73                                 marginRight: '20px',
74                             }}
75                     </td>

```

```

76         <span
77             className="fas fa-check-circle"
78             onClick={() => this.props.toggleTodo(todo.id)}
79             style={{ color: 'white', fontSize: '20pt' }}
80         />
81     </td>
82 </tr>
83     )}
84 </tbody>
85 </table>
86 ) : (
87     <div
88         style={{ marginTop: '50px' }}
89         className="col-lg-10 col-md-10 col-xs-12 col-sm-12 offset-lg-1"
90     >
91         <div className="alert alert-danger" role="alert">
92             Todo List is empty or Filter results show no results
93         </div>
94     </div>
95     )}{' '}
96 </div>
97 )
98 }
99 }
100 const getVisibleTodos = (todos, filter) => {
101     switch (filter) {
102         case SHOW_ALL:
103             return todos
104         case SHOW_COMPLETED:
105             return todos.filter((t) => t.completed)
106         case SHOW_ACTIVE:
107             return todos.filter((t) => !t.completed)
108         default:
109             throw new Error('Unknown filter: ' + filter)
110     }
111 }
112 const mapStateToProps = (state) => {
113     return {
114         todos: getVisibleTodos(state.todos, state.visibilityFilter),
115         visibilityFilter: state.visibilityFilter,
116     }
117 }
118 const mapDispatchToProps = (dispatch) => {
119     return bindActionCreators(
120         {
121             deleteTodo,
122             toggleTodo,
123             setVisibilityFilter,
124         },
125         dispatch,
126     )
127 }
128 export default connect(mapStateToProps, mapDispatchToProps)(Table)
129

```

6. Edit index.js dengan source code berikut ini

```
react-reduks > 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 Table from './containers/Table'
8  import CreateTodo from './containers/CreateTodo'
9  import registerServiceWorker from './registerServiceWorker'
10 const store = compose(
11   window.devToolsExtension ? window.devToolsExtension() : (f) => f,
12 )(createStore)(MainReducer)
13 ReactDOM.render(
14   <Provider store={store}>
15     <CreateTodo />
16     <Table />
17   </Provider>,
18   document.getElementById('root'),
19 )
20 registerServiceWorker()
```

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

```
1  import { SHOW_ALL, SET_VISIBILITY_FILTER } from '../actions/actionTypes'
2  const visibilityFilter = (state = SHOW_ALL, action) => {
3    switch (action.type) {
4      case SET_VISIBILITY_FILTER:
5        return action.filter
6      default:
7        return state
8    }
9  }
10 export default visibilityFilter
```

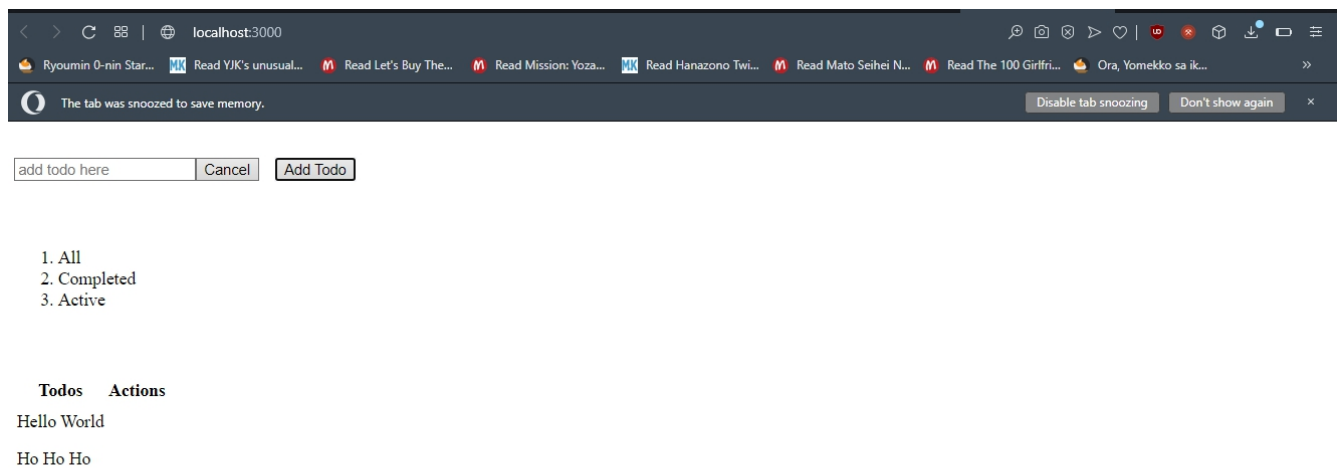
8. Masih didalam folder reducers buatlah file dengan nama TodoReducer.js

```
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         {
20           id: action.id,
21           text: action.text,
22           completed: false,
23         },
24       ]
25     case TOGGLE_TODO:
26       return state.map((todo) =>
27         | todo.id === action.id ? { ...todo, completed: !todo.completed } : todo,
28       )
29     case REMOVE_TODO:
30       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

```
react-reduks > 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  })
```

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



Link Github : <https://github.com/mirzarayhan/react-redux>

Link YT : <https://youtu.be/R4V-CL0ICZw>