Laporan

Redux

Waktu Pelaksanaan   : Kamis, 18 Maret 2019 Pukul 12.50 – 18.00

Mata Kuliah   : Pemrograman Berbasis Framework

Tempat   : Gedung Sipil Lantai 7 Ruang LPR 5

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Praktikum

1. Membuat folder baru bernama Action kemudian membuat file baru didalam folder Action bernama actionCreator.js kemudian menuliskan kode segai berikut

```
1  import { ADD_TODO, REMOVE_TODO, TOGGLE_TODO, SET_VISIBILITY_FILTER } from './actionTypes'
2
3  let TodoId = 2
4
5  export const addTodo = text => ({ type: ADD_TODO, id: TodoId++, text })
6
7  export const deleteTodo = (id) => ({ type: REMOVE_TODO, id: id })
8
9  export const toggleTodo = (id) => ({ type: TOGGLE_TODO, id: id })
10
11 export const setVisibilityFilter = filter => ({ type: SET_VISIBILITY_FILTER, filter })
```

2. Kemudian pada folder Action membuat file baru bernama actionTypes.js dan menuliskan kode sebagai berikut

```
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'
```

3. Kemudian pada folder src membuat folder baru bernama Containers, didalam folder containers membuat file baru bernama createTodo.js dan menuliskan kode sebagai berikut

```
1    import React, { Component } from 'react'
2    import { connect } from 'react-redux'
3    import { addTodo } from '../Action/actionCreator'
4    import { bindActionCreators } from 'redux'
5
6    class CreateTodo extends Component {
7        constructor(props) {
8            super(props)
9            this.state = { todotext: '', }
10           this.onChangeTodoText = this.onChangeTodoText.bind(this)
11       }
12
13       onChangeTodoText(e) {
14           this.setState(
15               {
16                   todotext: e.target.value
17               }
18           )
19       }
```

```
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} type="text"
26                           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 btndanger">Cancel</button>
29                       <button type="button" onClick={() => {
30                           this.props.addTodo(this.state.todotext);
31                           this.setState({ todotext: '' })
32                       }}
33                           style={{ marginTop: "25px" }} className="btn btn-success">Add Todo</button>
34                   </div>
35               </div>
36           );
37       }
38   }
39
40   const mapDispatchToProps = (dispatch) => {
41       return bindActionCreators({ addTodo }, dispatch)
42   }
43   export default connect(null, mapDispatchToProps)(CreateTodo)
```

4. Pada folder containers membuat file baru bernama Table.js dan menuliskan kode sebagai berikut

```
1    import React, { Component } from "react";
2    import { connect } from "react-redux";
3    import { deleteTodo, toggleTodo, setVisibilityFilter } from "../Action/actionCreator";
4    import { SHOW_ALL, SHOW_COMPLETED, SHOW_ACTIVE } from "../Action/actionTypes";
5    import { bindActionCreators } from "redux";
```

```jsx
 7 ⊟ class Table extends Component {
 8        render() {
 9            return (<div className="col-lg-10 offset-lg-1 col-md-10 col-sm-12 col-xs-12">
10                <nav style={{ marginTop: "60px" }}>
11                    <ol className="breadcrumb">
12                        <li className={"breadcrumb-item " + (this.props.visibilityFilter === SHOW_ALL ? 'active' : '')}
13                            onClick={() => this.props.setVisibilityFilter(SHOW_ALL)}>All</li>
14                        <li className={"breadcrumb-item " + (this.props.visibilityFilter === SHOW_COMPLETED ? 'active' : '')}
15                            onClick={() => this.props.setVisibilityFilter(SHOW_COMPLETED)}>Completed</li>
16                        <li className={"breadcrumb-item " + (this.props.visibilityFilter === SHOW_ACTIVE ? 'active' : '')}
17                            onClick={() => this.props.setVisibilityFilter(SHOW_ACTIVE)}>Active</li>
18                    </ol>
19                </nav>
20                {this.props.todos.length !== 0 ? (
21                    <table style={{ marginTop: "60px" }} className="table table-hover table-dark">
22                        <thead>
23                            <tr>
24                                <th scope="col">Todos</th>
25                                <th scope="col">Actions</th>
26                            </tr>
27                        </thead>
28                        <tbody>
29                            {this.props.todos.map(todo => (
30                                <tr key={todo.id}>
31                                    <td
32                                        style={{
33                                            textDecoration: todo.completed ? "line-through" : "none"
34                                        }}
35                                    >
36                                        {todo.text} {todo.completed === true ? "(completed)" : ""}
37                                    </td>
38                                    <td>
39                                        <span
40                                            className="fas fa-minus-circle"
41                                            onClick={() => this.props.deleteTodo(todo.id)}
42                                            style={{
43                                                color: "white",
44                                                fontSize: "20pt",
45                                                marginRight: "20px"
46                                            }}
47                                        />
48                                        <span
49                                            className="fas fa-check-circle"
50                                            onClick={() => this.props.toggleTodo(todo.id)}
51                                            style={{
52                                                color: "white",
53                                                fontSize: "20pt"
54                                            }}
55                                        />
56                                    </td>
57                                </tr>
58                            ))}
59                        </tbody>
60                    </table>
61                ) : (
62                    <div
63                        style={{ marginTop: "50px" }}
64                        className="col-lg-10 col-md-10 col-xs-12 col-sm-12 offset-lg-1">
65                        <div
66                            className="alert alert-danger" role="alert">
67                            Todo List is empty or Filter results show no results
68                        </div>
69                    </div>
70                )
71            }
```

```
71              }
72              {" "}
73          </div>
74          );
75      }
76  }
77
78  const getVisibleTodos = (todos, filter) => {
79      switch (filter) {
80          case SHOW_ALL:
81              return todos;
82          case SHOW_COMPLETED:
83              return todos.filter(t => t.completed);
84          case SHOW_ACTIVE:
85              return todos.filter(t => !t.completed);
86          default:
87              throw new Error("Unknown filter: " + filter);
88      }
89  };
```

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

5. Kemudian edit file index.js menjadi seperti berikut

```
1    import React from 'react';
2    import ReactDOM from 'react-dom';
3    import './index.css';
4    import { Provider } from 'react-redux'
5    import { createStore, applyMiddleware, compose } from 'redux'
6    import MainReducer from './Reducers/mainReducer'
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
18   // If you want your app to work offline and load faster, you can change
19   // unregister() to register() below. Note this comes with some pitfalls.
20   // Learn more about service workers: https://bit.ly/CRA-PWA
21   serviceWorker.unregister();
```

6. Kemudian para src membuat folder baru bernama reducers, pada folder reducers membuat file baru bernama filterReducers.js dan menuliskan kode sebagai berikut

```
1    import {
2        SHOW_ALL,
3        SET_VISIBILITY_FILTER
4    } from "../Action/actionTypes";
5
6    const visibilityFilter = (state = SHOW_ALL, action) => {
7        switch (action.type) {
8            case SET_VISIBILITY_FILTER:
9                return action.filter;
10           default:
11               return state;
12       }
13   };
14
15   export default visibilityFilter;
```

7. Kemudian pada folder reducers membuat file baru bernama todoReducers.js dan menuliskan kode sebagai berikut

```
1   import {
2       ADD_TODO,
3       REMOVE_TODO,
4       TOGGLE_TODO
5   } from '../Action/actionTypes'
6
7   const INITIAL_DATA = []
8
9   const TodoReducer = (state = INITIAL_DATA, action) => {
10      switch (action.type) {
11          case ADD_TODO:
12              return [
13                  ...state, {
14                      id: action.id,
15                      text: action.text,
16                      completed: false,
17                  }
18              ]
19          case TOGGLE_TODO:
20              return state.map(todo =>
21                  (todo.id === action.id)
22                      ? { ...todo, completed: !todo.completed }
23                      : todo)
24          case REMOVE_TODO:
25
26              const numIndex = parseInt(action.id)
27              return state.filter(todo => todo.id !== numIndex);
28          default:
29              return state
30      }
31  }
32
33  export default TodoReducer
```
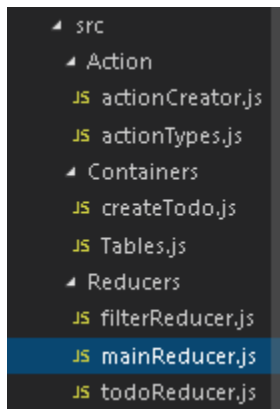
8. Kemudian pada folder container membuat file baru bernama mainReducers.js dan menuliskan kode sebagai berikut.

```
1   import { combineReducers } from 'redux'
2   import todos from './todoReducer'
3   import visibilityFilter from './filterReducer'
4
5   export default combineReducers({
6       todos,
7       visibilityFilter
8   })
```

9. Sehingga susunan folder dan file sebagai berikut

10. Kemudian melakukan run pada package

1. All
2. Completed
3. Active

Todos Actions

Satria

Putra

Sabana