MODUL 6
REDUX

PEMROGRAMAN BERBASIS FRAMEWORK

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PRAKTIKUM

No	Keterangan
1	Buat Folder dalam src yaitu Action
2	Beri nama actionCreator
3	Masih dalam Folder Action buatlah file actionsTypes.js

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

```
src > containers > JS CreateTodo.js > class CreateTodo > render > <function>
1   import React, {Component} from 'react'
2   import { connect } from 'react-redux'
3   import { addTodo } from '../actions/actionCreator'
4   import {bindActionCreators} from 'redux'
5
6   class CreateTodo extends Component {
7       constructor(props){
8           super(props)
9           this.state = {
10              todotext: '',
11          }
12          this.onChangeTodoText = this.onChangeTodoText.bind(this)
13      }
14
15      onChangeTodoText(e){
16          this.setState({
17              todotext: e.target.value
18          })
19      }
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} 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={() =>{ this.props.addTodo(this.state.todotext);
30                          this.setState({ todotext: '' }) } } style={{marginTop: "25px"}} className="btn btn-success">Add Todo</button>
31                  </div>
32              </div>
33          );
34      }
35  }
36
37  const mapDispatchToProps = (dispatch) => {
38      return bindActionCreators({
39          addTodo
40      }, dispatch)
41  }
42  export default connect(null, mapDispatchToProps)(CreateTodo)
```

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

```
src > containers > JS Table.js > [@] default
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
11  class Table extends Component {
12      render() {
13          return (
14              <div className="col-lg-10 offset-lg-1 col-md-10 col-sm-12 col-xs-12">
15                  <nav style={{ marginTop: "60px" }}>
16                      <ol className="breadcrumb">
17                          <li className={"breadcrumb-item "+ (this.props.visibilityFilter === SHOW_ALL ? 'active' : '') }
18                          onClick={() => this.props.setVisibilityFilter(SHOW_ALL)}> All </li>
19                          <li className={"breadcrumb-item "+ (this.props.visibilityFilter === SHOW_COMPLETED ? 'active' : '') }
20                          onClick={() => this.props.setVisibilityFilter(SHOW_COMPLETED)}> Completed </li>
21                          <li className={"breadcrumb-item "+ (this.props.visibilityFilter === SHOW_ACTIVE ? 'active' : '') }
22                          onClick={() => this.props.setVisibilityFilter(SHOW_ACTIVE)}>Active</li>
23                      </ol>
24                  </nav>
25                  {this.props.todos.length !== 0 ? (
26                      <table style={{ marginTop: "60px" }} className="table table-hover table-dark">
27                          <thead>
28                              <tr>
29                                  <th scope="col">Todos</th>
30                                  <th scope="col">Actions</th>
```

```jsx
                              </tr>
                          </thead>
                          <tbody>
                              {this.props.todos.map(todo => (
                                  <tr key={todo.id}>
                                      <td style={{ textDecoration: todo.completed ? "line-through" : "none" }}>
                                          {todo.text} {todo.completed === true ? "(completed)" : ""}
                                      </td>
                                      <td>
                                          <span className="fas fa-minus-circle" onClick={() => this.props.deleteTodo(todo.id)}
                                              style={{
                                                  color: "white",
                                                  fontSize: "20pt",
                                                  marginRight: "20px" }}/>
                                          <span className="fas fa-check-circle" onClick={() => this.props.toggleTodo(todo.id)}
                                              style={{ color: "white", fontSize: "20pt" }}/>
                                      </td>
                                  </tr>
                              ))}
                          </tbody>
                      </table>
                  ) : (
                      <div style={{ marginTop: "50px" }} className="col-lg-10 col-md-10 col-xs-12 col-sm-12 offset-lg-1">
                          <div className="alert alert-danger" role="alert"> Todo List is empty or Filter results show no results </div>
                      </div>
                  )}{" "}
              </div>
          );
      }
  }

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	

```jsx
src > JS index.js > ...
import React from 'react';
import ReactDOM from 'react-dom';
import { Provider } from 'react-redux'
import { createStore, applyMiddleware, compose } from 'redux'
import MainReducer from './reducers/MainReducer'
import App from './App';
import registerServiceWorker from './registerServiceWorker';

const store = compose(window.devToolsExtension ? window.devToolsExtension() : f =>
f)(createStore)(MainReducer)
ReactDOM.render(<Provider store={store}>
  <App />
  </Provider>
  , document.getElementById('root'));
registerServiceWorker();
```

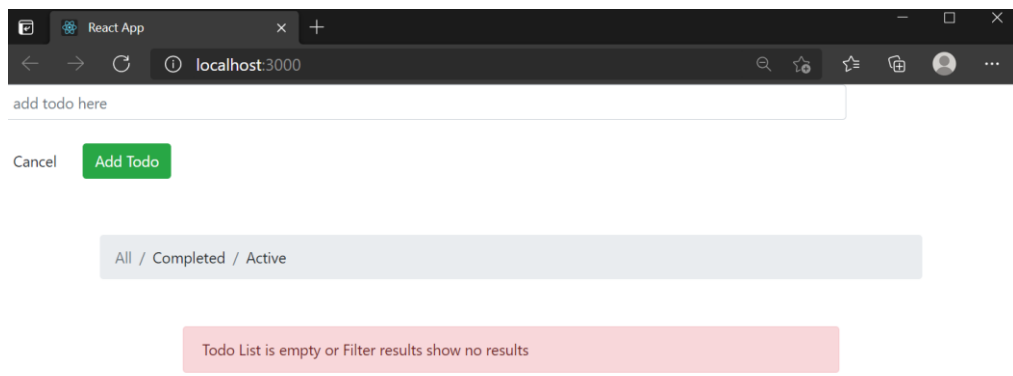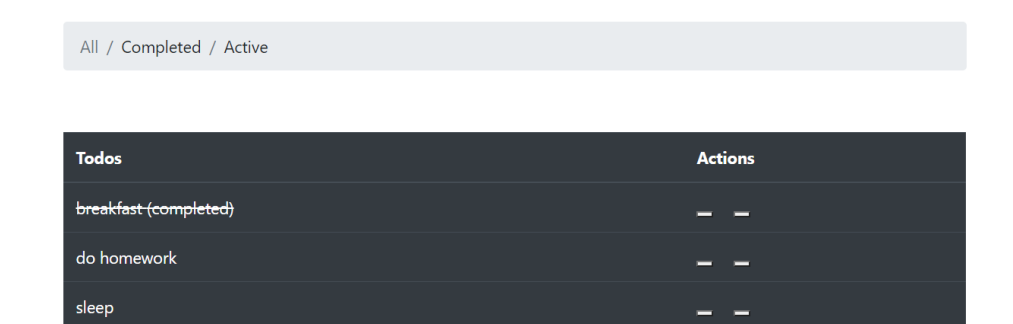| 7	Buat folder dalam src dengan nama reducers dan beri nama file FilterReducer.js dan ketikkan program dibawah ini :

	``
	src > reducers > JS FilterReducer.js > ...
	1 import {
	2 SHOW_ALL,
	3 SET_VISIBILITY_FILTER
	4 } from "../actions/actionsTypes";
	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;
	``
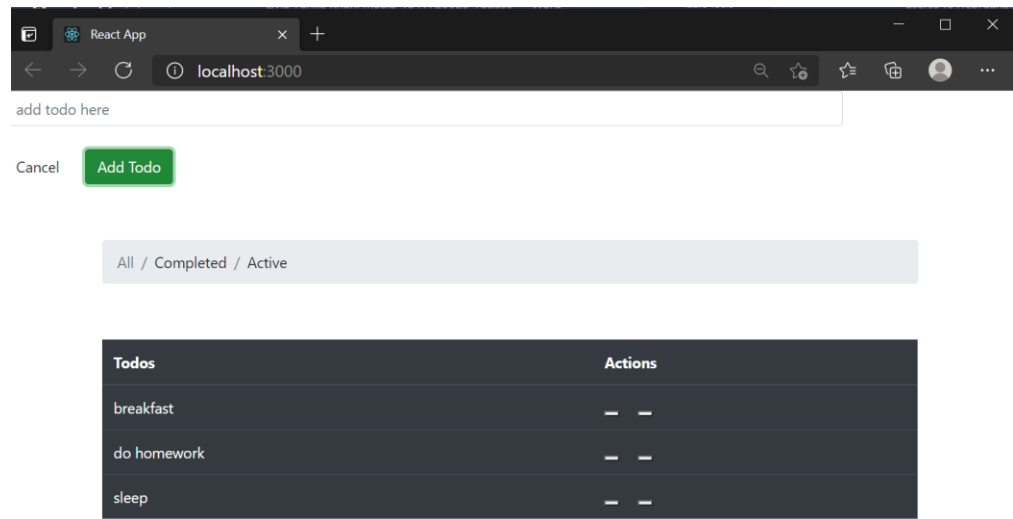
8	Masih didalam folder reducers buatlah file dengan namaTodoReducer.js

	``
	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
	13 import { ADD_TODO, REMOVE_TODO, TOGGLE_TODO} from '../actions/actionsTypes'
	14
	15 const INITIAL_DATA = []
	16
	17 const TodoReducer = (state=INITIAL_DATA, action) => {
	18 switch (action.type){
	19 case ADD_TODO:
	20 return [
	21 ...state,{
	22 id: action.id,
	23 text: action.text,
	24 completed: false,
	25 }
	26]
	27
	28 case TOGGLE_TODO:
	29 return state.map(todo => (todo.id === action.id) ? {...todo, completed: !todo.completed} : todo)
	30
	31 case REMOVE_TODO:
	32
	33 const numIndex = parseInt(action.id)
	34 return state.filter(todo => todo.id !== numIndex);
	35 default:
	36 return state
	37 }
	38 }
	39
	40 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
5    export default combineReducers({
6        todos,
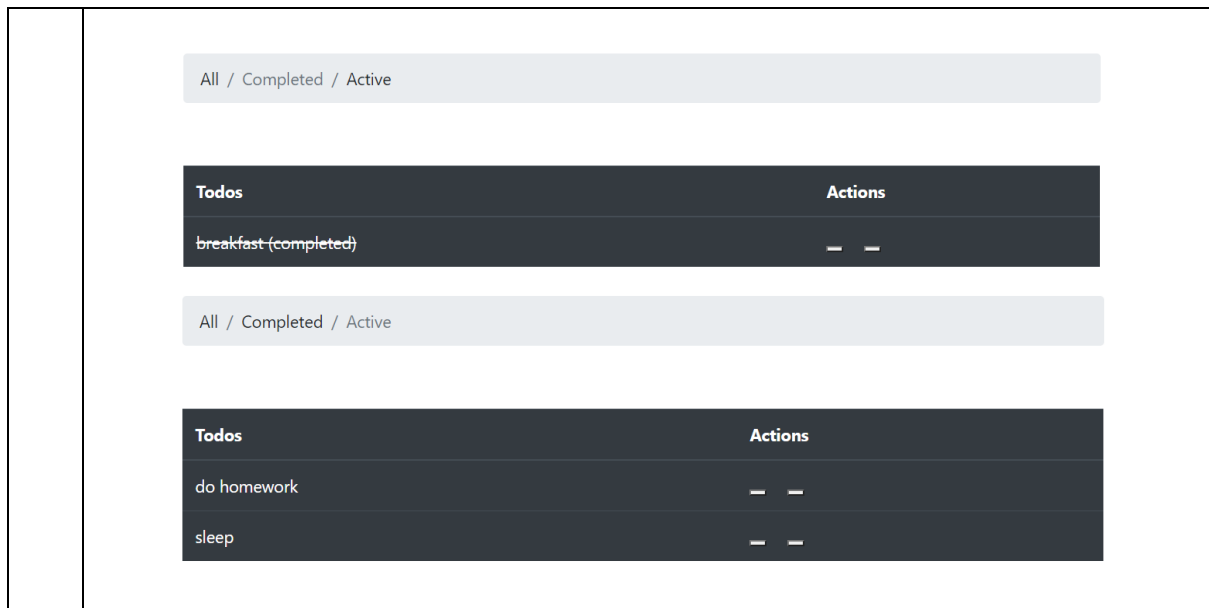7        visibilityFilter
8    })
``` |
| 10 | Running semua program dengan npm start dan liat hasilnya dan laporkan didalam laporan

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Link Github :
https://github.com/liviayurike/Pemrograman-Berbasis-Framework/tree/master/Pertemuan%206/react-redux

Link Youtube :
https://youtu.be/Y1JozM-qnkk