LAPORAN TUGAS MINGGU 7

Disusun sebagai

MATA KULIAH: FRAMEWORK

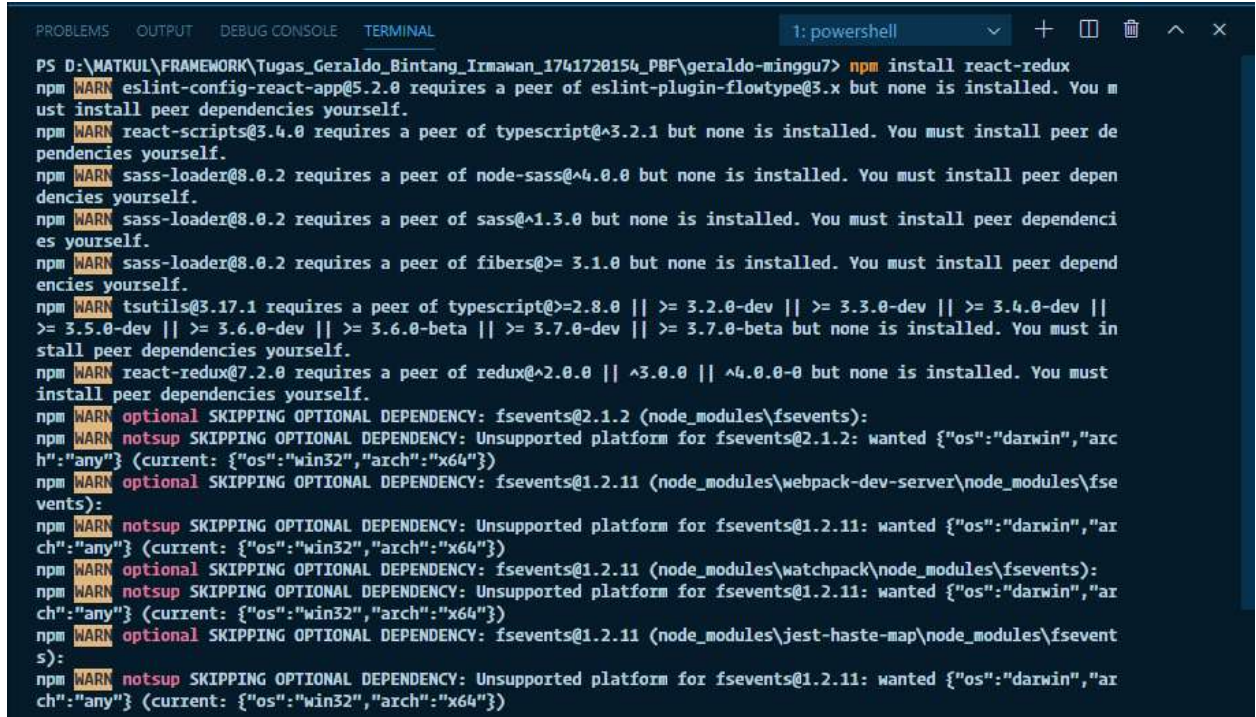Oleh:

Geraldo Bintang I / 1741720154
TI – 3B / 15

PROGRAM STUDI: D-IV TEKNIK INFORMATIKA
JURUSAN: TEKNOLOGI INFORMASI
POLITEKNIK NEGERI MALANG
2020

REDUX
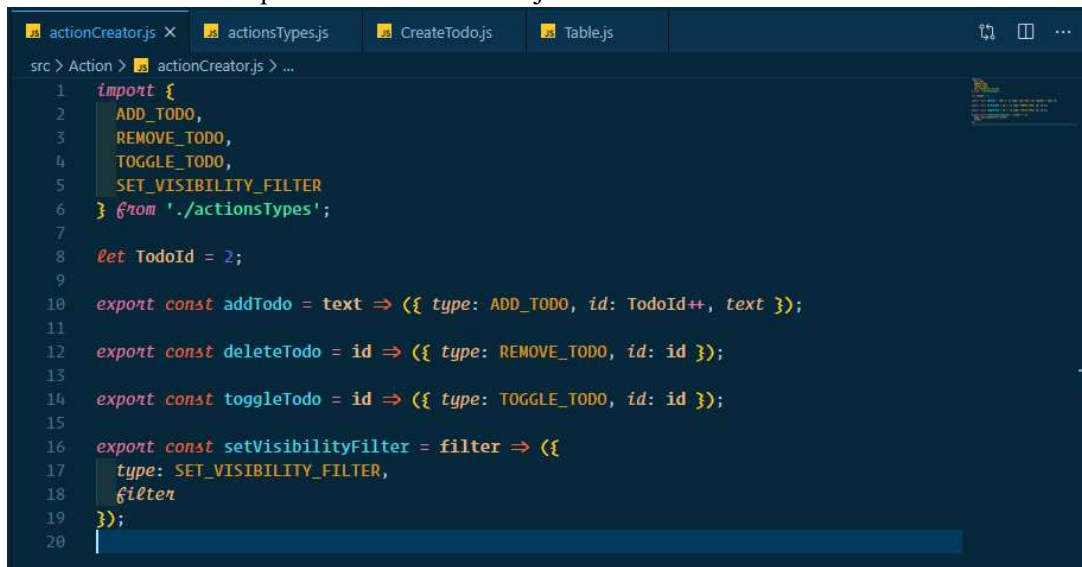
1. Install redux **'npm install react-redux'** enter

2. Buat folder bernama '**Action'** di dalam folder src, kemudian di dalam folder Action, buat file bernama **'actionCreator.js'**

3. Ketikan code berikut pada file 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
});
```

4. Buat file **'actionsTypes.js'** pada folder Action
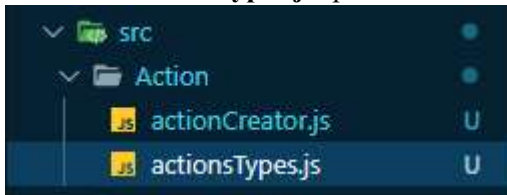
5. Ketikkan code berikut pada file actionsTypes.js

```
src > Action > JS actionsTypes.js > ...
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';
8
```

6. Buat folder **'containers'** pada di dalam folder src, kemudian buat file dengan nama **'CreateTodo.js'**

7. Ketikkan code berikut

```
src > containers > JS CreateTodo.js > ...
1  import React, { Component } from 'react';  8.3K (gzipped: 3.3K)
2  import { connect } from 'react-redux';  13.4K (gzipped: 4.8K)
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   }
```

```
21    render() {
22      return (
23        <div className='form-group row'>
24          <div className='col-sm-10'>
25            <input
26              onChange={this.onChangeTodoText}
27              value={this.state.todotext}
28              type='text'
29              className='form-control'
30              id='inputEmail3'
31              placeholder='add todo here'
32            />
33            <button
34              type='button'
35              onClick={() => this.setState({ todotext: '' })}
36              style={{ marginTop: '25px', marginRight: '15px' }}
37              className='btn btndanger'>
38              Cancel
39            </button>
40            <button
41              type='button'
42              onClick={() => {
43                this.props.addTodo(this.state.todotext);
44                this.setState({ todotext: '' });
45              }}
46              style={{ marginTop: '25px' }}
47              className='btn btn-success'>
48              Add Todo
49            </button>
50          </div>
51        </div>
52      );
53    }
54  }

56  const mapDispatchToProps = dispatch => {
57    return bindActionCreators(
58      {
59        addTodo
60      },
61      dispatch
62    );
63  };
64  export default connect(null, mapDispatchToProps)(CreateTodo);
```
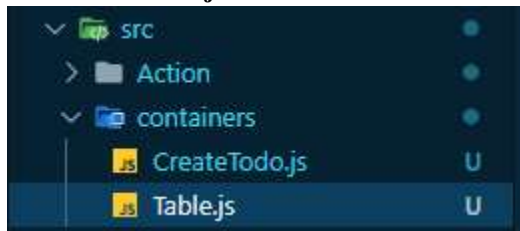
8. Buat file **'Table.js'** di dalam folder containers

9. Ketikkan code berikut

```js
import React, { Component } from 'react';  8.3K (gzipped: 3.3K)
import { connect } from 'react-redux';  13.4K (gzipped: 4.8K)
import {
  deleteTodo,
  toggleTodo,
  setVisibilityFilter
} from '../actions/actionCreator';
import { SHOW_ALL, SHOW_COMPLETED, SHOW_ACTIVE } from '../actions/actionsTypes';
import { bindActionCreators } from 'redux';

class Table extends Component {
  render() {
    return (
      <div className='col-lg-10 offset-lg-1 col-md-10 col-sm-12 col-xs-12'>
        <nav style={{ marginTop: '60px' }}>
          <ol className='breadcrumb'>
            <li
              className={
                'breadcrumb-item ' +
                (this.props.visibilityFilter === SHOW_ALL ? 'active' : '')
              }
              onClick={() => this.props.setVisibilityFilter(SHOW_ALL)}>
              All
            </li>
            <li
              className={
                'breadcrumb-item ' +
                (this.props.visibilityFilter === SHOW_COMPLETED ? 'active' : '')
              }
              onClick={() => this.props.setVisibilityFilter(SHOW_COMPLETED)}>
              Completed
            </li>
            <li
              className={
                'breadcrumb-item ' +
                (this.props.visibilityFilter === SHOW_ACTIVE ? 'active' : '')
              }
              onClick={() => this.props.setVisibilityFilter(SHOW_ACTIVE)}>
              Active
            </li>
          </ol>
        </nav>
        {this.props.todos.length !== 0 ? (
          <table
            style={{ marginTop: '60px' }}
            className='table table-hover table-dark'>
            <thead>
              <tr>
                <th scope='col'>Todos</th> <th scope='col'>Actions</th>
              </tr>
            </thead>
```

```jsx
52              <tbody>
53                {this.props.todos.map(todo => (
54                  <tr key={todo.id}>
55                    <td
56                      style={{
57                        textDecoration: todo.completed ? 'line-through' : 'none'
58                      }}>
59                      {todo.text} {todo.completed === true ? '(completed)' : ''}
60                    </td>
61                    <td>
62                      <span
63                        className='fas fa-minus-circle'
64                        onClick={() => this.props.deleteTodo(todo.id)}
65                        style={{
66                          color: 'white',
67                          fontSize: '20pt',
68                          marginRight: '20px'
69                        }}
70                      />
71                      <span
72                        className='fas fa-check-circle'
73                        onClick={() => this.props.toggleTodo(todo.id)}
74                        style={{ color: 'white', fontSize: '20pt' }}
75                      />
76                    </td>
77                  </tr>
78                ))}
79              </tbody>
80            </table>
81          ) : (
82            <div
83              style={{ marginTop: '50px' }}
84              className='col-lg-10 col-md-10 col-xs-12 col-sm-12 offset-lg-1'>
85              <div className='alert alert-danger' role='alert'>
86                Todo List is empty or Filter results show no results
87              </div>
88            </div>
89          )}
90        </div>
91      );
92    }
93  }
94
95  const getVisibleTodos = (todos, filter) => {
96    switch (filter) {
97      case SHOW_ALL:
98        return todos;
99      case SHOW_COMPLETED:
100        return todos.filter(t => t.completed);
101      case SHOW_ACTIVE:
102        return todos.filter(t => !t.completed);
103      default:
104        throw new Error('Unknown filter: ' + filter);
105    }
106  };
```

```
107
108    const mapStateToProps = state => {
109      return {
110        todos: getVisibleTodos(state.todos, state.visibilityFilter),
111        visibilityFilter: state.visibilityFilter
112      };
113    };
114
115    const mapDispatchToProps = dispatch => {
116      return bindActionCreators(
117        { deleteTodo, toggleTodo, setVisibilityFilter },
118        dispatch
119      );
120    };
121
122    export default connect(mapStateToProps, mapDispatchToProps)(Table);
123
```

10. Edit file **'index.js'** yang ada di dalam folder src seperti berikut

```
src > js index.js > ...
1    import React from 'react';  8.3K (gzipped: 3.3K)
2    import ReactDOM from 'react-dom';  120.9K (gzipped: 38.7K)
3    import { Provider } from 'react-redux';  13.2K (gzipped: 4.7K)
4    import { createStore, compose } from 'redux';
5    import MainReducer from './reducers/MainReducer';
6    import App from './App';
7    import registerServiceWorker from './registerServiceWorker';
8
9    const store = compose(
10     window.devToolsExtension ? window.devToolsExtension() : f => f
11   )(createStore)(MainReducer);
12
13   ReactDOM.render(
14     <Provider store={store}>
15       <App />
16     </Provider>,
17     document.getElementById('root')
18   );
19   registerServiceWorker();
```
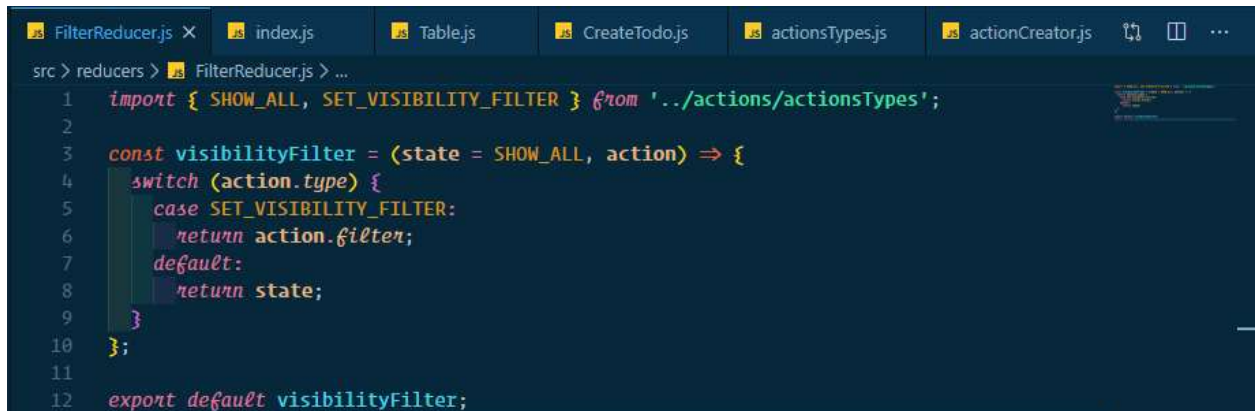
11. Buat folder **'reducers'** pada didalam folder src, kemudian buat file **'FilterReducers.js'**

```
∨ 📑 src
  > 📁 Action                ●
  > 📁 containers            ●
  ∨ 📁 reducers             ●
      js FilterReducer.js    U
```
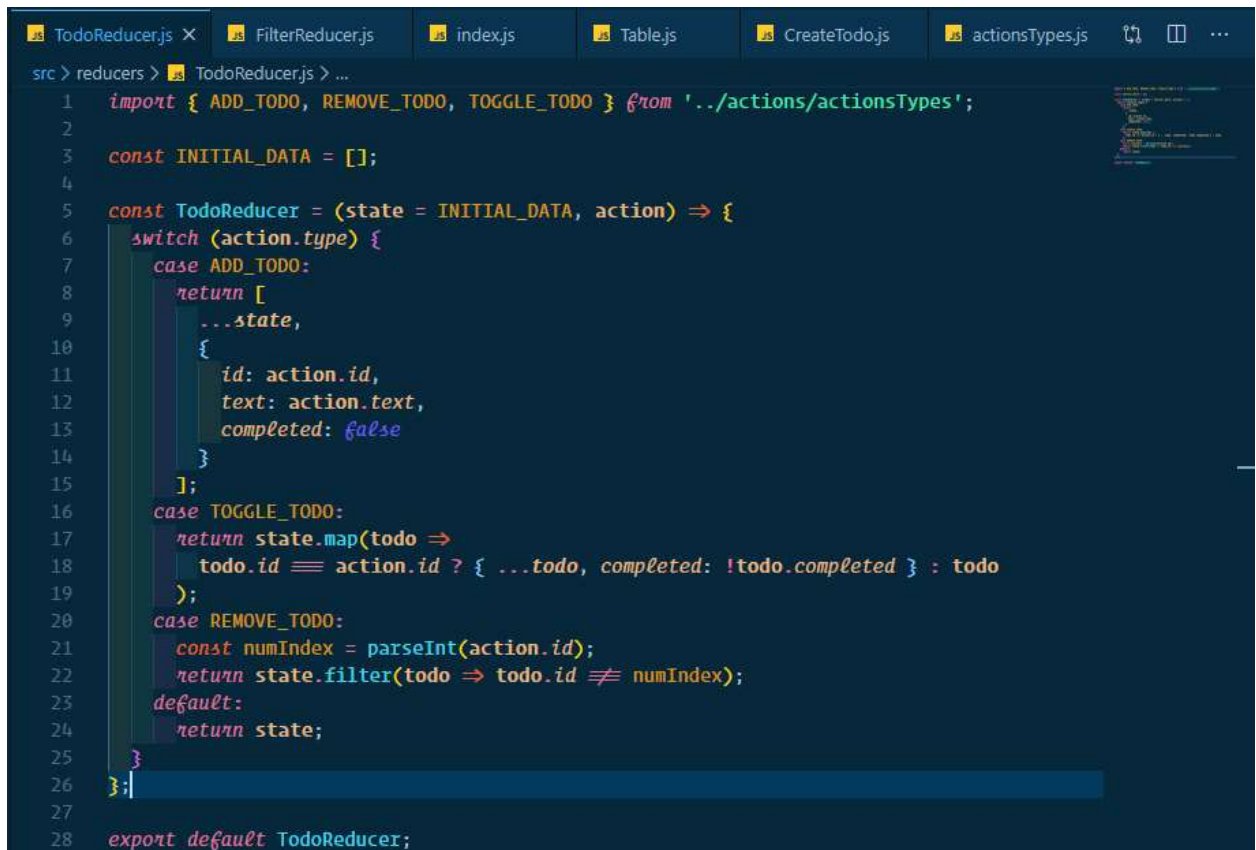
12. Kemudian ketikkan code berikut

```js
import { SHOW_ALL, SET_VISIBILITY_FILTER } from '../actions/actionsTypes';

const visibilityFilter = (state = SHOW_ALL, action) => {
  switch (action.type) {
    case SET_VISIBILITY_FILTER:
      return action.filter;
    default:
      return state;
  }
};

export default visibilityFilter;
```

13. Buat file **'TodoReducer.js'** di dalam folder reducers

```
∨ src
  > Action
  > containers
  ∨ reducers
      FilterReducer.js      U
      TodoReducer.js        U
```

14. Ketikkan code berikut

```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;
```

15. Buat file **'MainReducer.js'** pada folder reducer
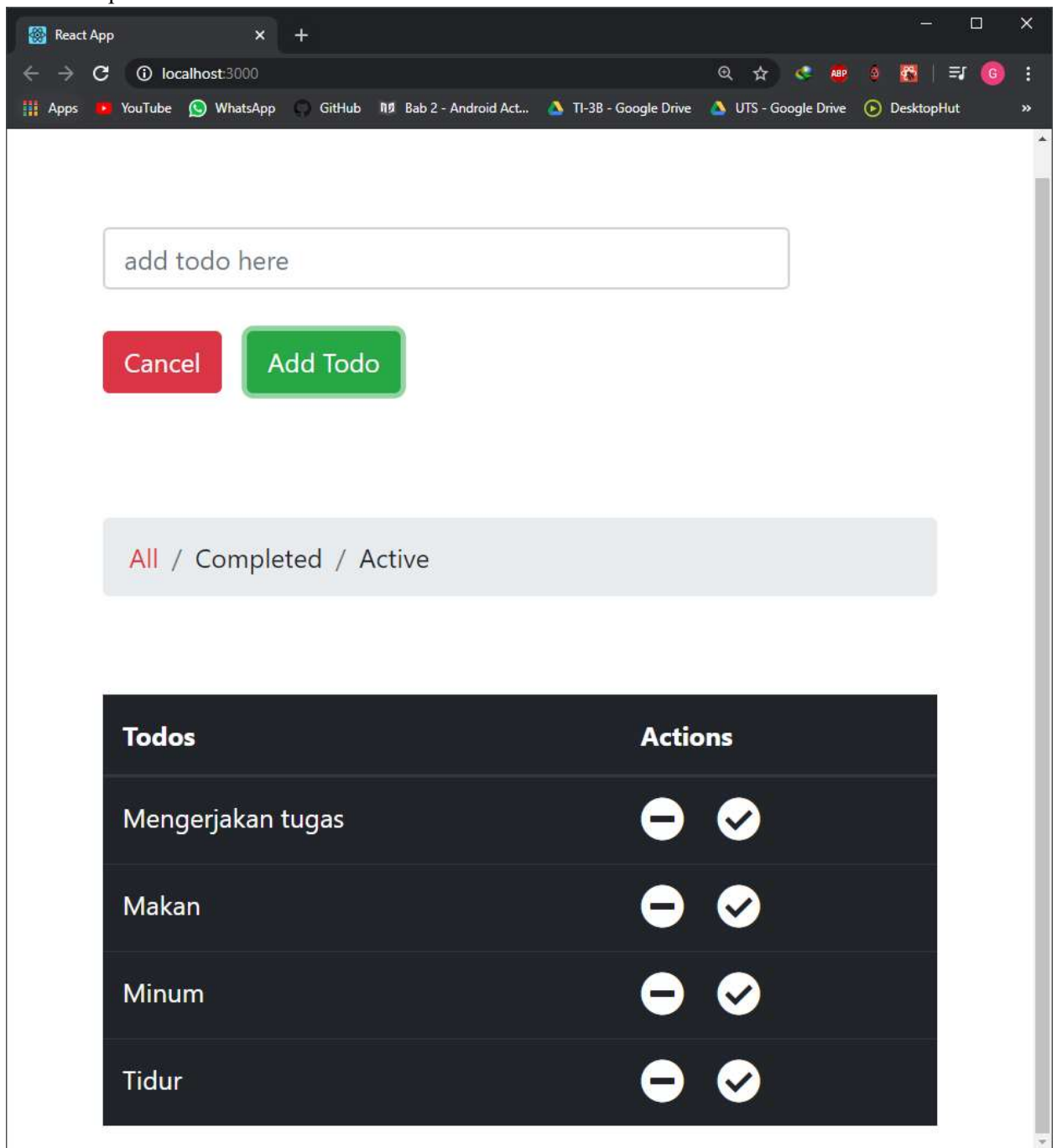

16. Ketikkan code berikut

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

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

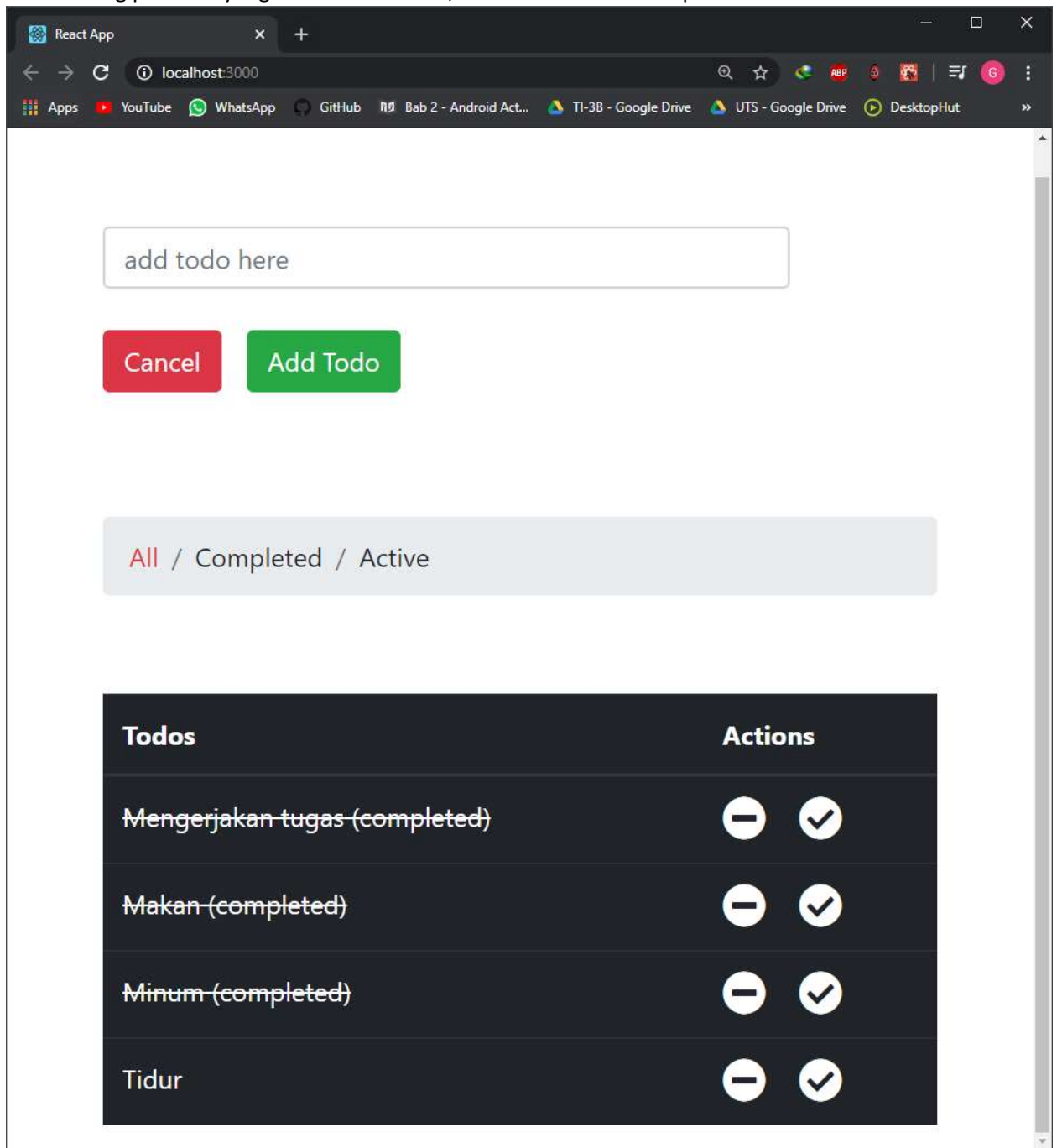17. Edit file app.js seperti berikut

```js
import React, { Component } from 'react';  8.3K (gzipped: 3.3K)
import CreateTodo from './containers/CreateTodo';
import Table from './containers/Table';

class App extends Component {
  render() {
    return (
      <div className='App'>
        <div className='container' style={{ marginTop: '80px' }}>
          <div className='row'>
            <div className='col-lg-10 offset-lg-2 col-md-10 col-sm-12 col-xs-12'>
              <CreateTodo />
            </div>
            <Table />
          </div>
        </div>
      </div>
    );
  }
}

export default App;
```
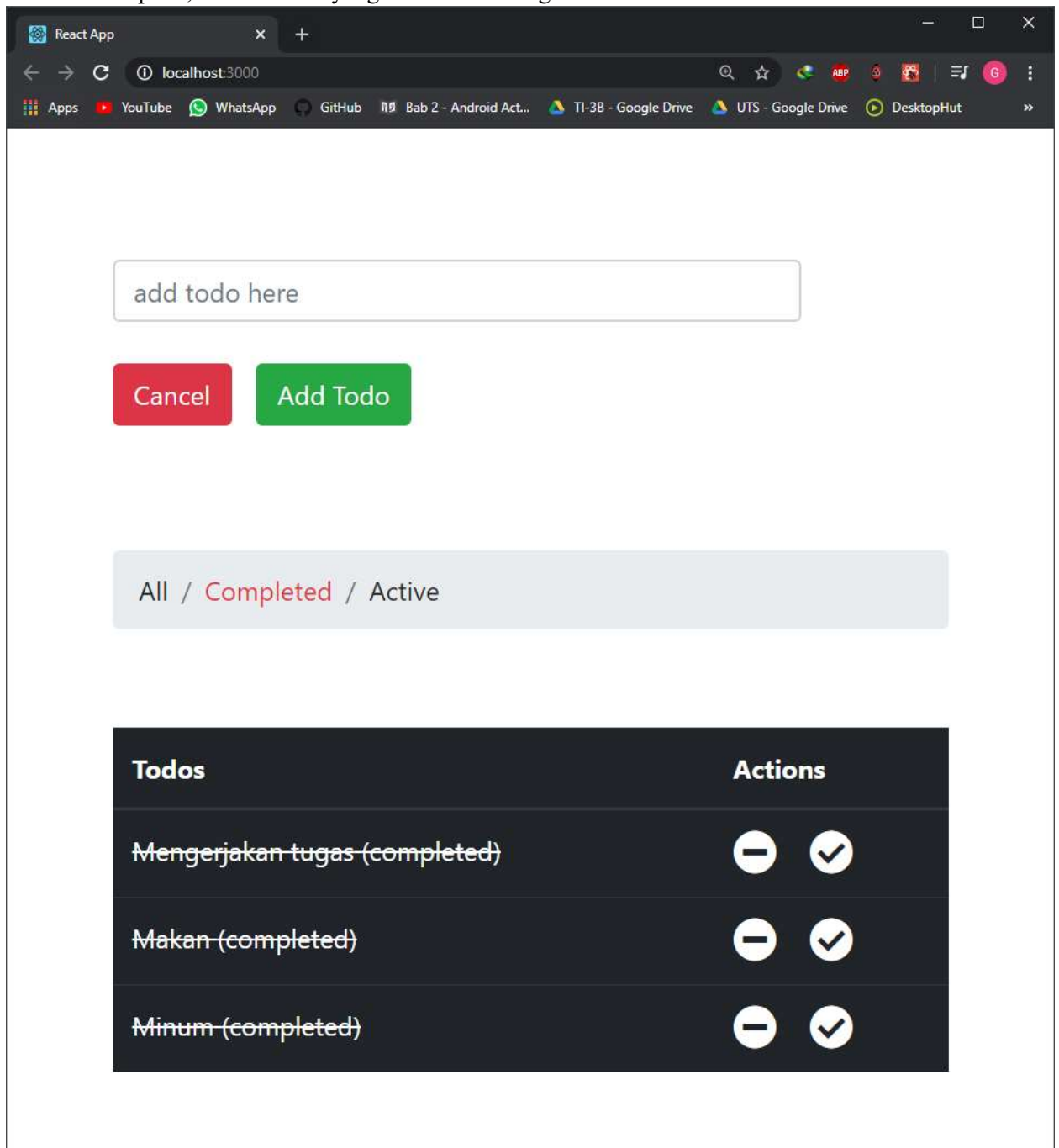
18. Hasil dari praktikum

Klik centang pada hal yang sudah di lakukan , maka akan tercoret seperti di bawah

Pada tab complete, akan muncul yang sudah di centang

Hal yang belum di centang akan muncul di tab Active