Laporan Praktikum Minggu-5
Mata Kuliah Pemrograman Berbasis Framework
“MODUL 6: Redux”

Nama Penyusun:

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JURUSAN TEKNOLOGI INFORMASI
PROGRAM STUDI D-IV TEKNIK INFORMATIKA
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PRAKTIKUM

- Buat Folder dalam src yaitu Action
- Beri nama actionCreator.js

```
import {
    ADD_TODO,
    REMOVE_TODO,
    TOGGLE_TODO,
    SET_VISIBILITY_FILTER,
  } from "./actionTypes";

  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,
  });
```

- Masih dalam Folder Action buatlah file actionsTypes.js

```
export const ADD_TODO = 'ADD_TODO';
export const TOGGLE_TODO = 'TOGGLE_TODO';
export const REMOVE_TODO = 'REMOVE_TODO';
export const SHOW_ALL = 'SHOW_ALL';
export const SHOW_COMPLETED = 'SHOW_COMPLETED';
export const SHOW_ACTIVE = 'SHOW_ACTIVE';
export const SET_VISIBILITY_FILTER = 'SET_VISIBILITY_FILTER';
```

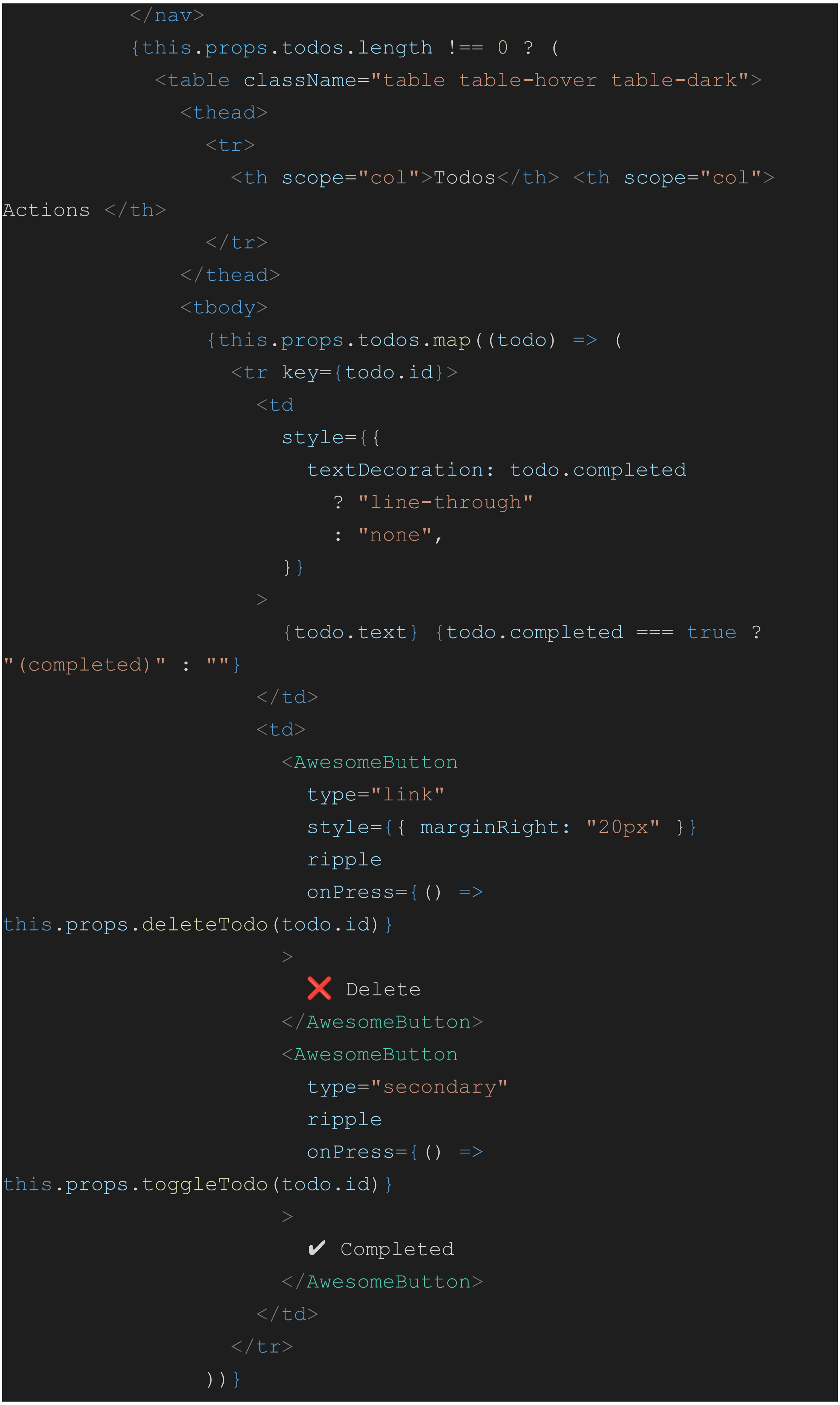
- Kemudian dalam folder src buatlah folder dengan nama containers dan buatlah file dengan judul CreateTodo

```
import React, { Component } from "react";
import { connect } from "react-redux";
import { addTodo } from "../actions/actionCreator";
import { bindActionCreators } from "redux";
import { AwesomeButton } from "react-awesome-button";

class CreateTodo extends Component {
  constructor(props) {
    super(props);
    this.state = {
      todotext: "",
    };
    this.onChangeTodoText = this.onChangeTodoText.bind(this);
  }

  onChangeTodoText(e) {
    this.setState({
      todotext: e.target.value,
    });
  }

  render() {
    return (
      <div className="container">
        <div className="form-group row">
          <div className="col-sm-10">
            <div className="input-group mt-5">
              <span className="input-group-text">📋 Add todo 
here</span>
              <input
                type="text"
                onChange={this.onChangeTodoText}
                value={this.state.todotext}
                className="form-control"
                aria-label="Add todo here"
              />
            </div>
            <AwesomeButton
              type="link"
              style={{ marginTop: "25px", marginRight: "15px" }}
              ripple
              onPress={() => this.setState({ todotext: "" })}
            >
              ⚠ Cancel
            </AwesomeButton>
            <AwesomeButton
              type="primary"
              style={{ marginTop: "25px" }}
              ripple
              onPress={() => {
                this.props.addTodo(this.state.todotext);
                this.setState({ todotext: "" });
              }}
            >
              ☑ Add Todo
            </AwesomeButton>
          </div>
        </div>
      </div>
    );
  }
}

const mapDispatchToProps = (dispatch) => {
  return bindActionCreators(
    {
      addTodo,
    },
    dispatch
  );
};

export default connect(null, mapDispatchToProps)(CreateTodo);
```

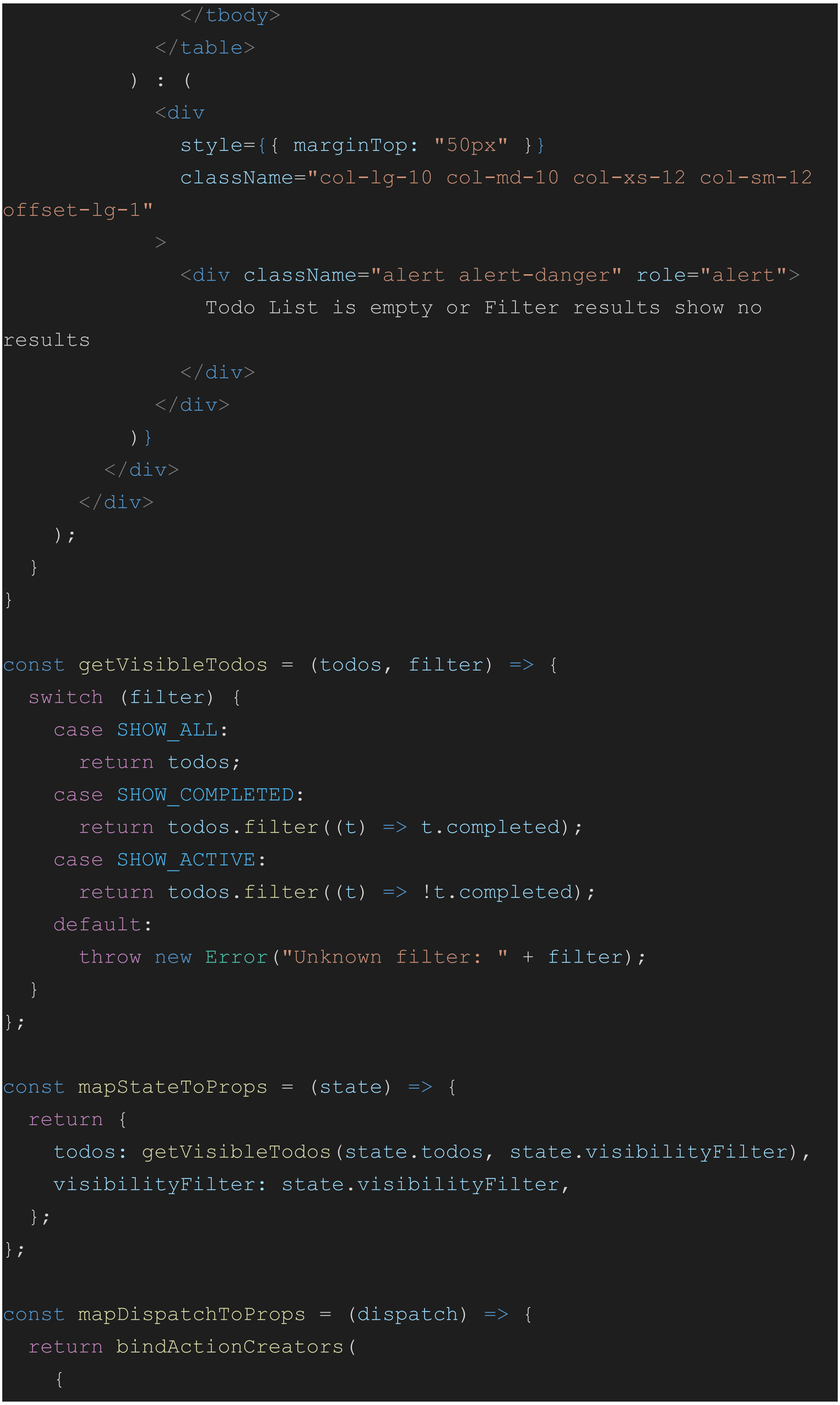
- Masih dalam folder containers buatlah file dengan judul Table.js

```
import React, { Component } from "react";
import { connect } from "react-redux";
import {
  deleteTodo,
  toggleTodo,
  setVisibilityFilter,
} from "../actions/actionCreator";
import { SHOW_ALL, SHOW_COMPLETED, SHOW_ACTIVE } from
"../actions/actionTypes";
import { bindActionCreators } from "redux";
import { AwesomeButton } from "react-awesome-button";
```

```
class Table extends Component {
  render() {
    return (
      <div className="container">
        <div className="col-lg-10 offset-lg-1 col-md-10 col-sm-12
col-xs-12">
          <nav className="mt-5">
            <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 className="table table-hover table-dark">
              <thead>
                <tr>
                  <th scope="col">Todos</th> <th scope="col">
Actions </th>
                </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>
                      <AwesomeButton
                        type="link"
                        style={{ marginRight: "20px" }}
                        ripple
                        onPress={() =>
this.props.deleteTodo(todo.id)}
                      >
                        ❌ Delete
                      </AwesomeButton>
                      <AwesomeButton
                        type="secondary"
                        ripple
                        onPress={() =>
this.props.toggleTodo(todo.id)}
                      >
                        ✔ Completed
                      </AwesomeButton>
                    </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>
      </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);
```

- Edit index.js dengan source code berikut ini

```
import React from 'react';
import ReactDOM from 'react-dom';
import './index.css';
import App from './App';
import reportWebVitals from './reportWebVitals';
import { Provider } from 'react-redux'
import { createStore, applyMiddleware, compose } from 'redux'
import MainReducer from './reducers/MainReducer'
import CreateTodo from "./containers/CreateTodo";
import Table from "./containers/Table";
import "bootstrap/dist/css/bootstrap.min.css";
import "react-awesome-button/src/styles/styles.scss";
import "react-awesome-button/src/styles/themes/theme-c137";

const store = compose(window.devToolsExtension ?
window.devToolsExtension() : f =>f)
(createStore)(MainReducer)

ReactDOM.render(
  <Provider store={store}>
    <Table />
    <CreateTodo />
  </Provider>,
  document.getElementById('root')
);

// If you want to start measuring performance in your app, pass a
function
// to log results (for example: reportWebVitals(console.log))
// or send to an analytics endpoint. Learn more:
https://bit.ly/CRA-vitals
```

```
reportWebVitals();
```

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

```
import { SHOW_ALL, SET_VISIBILITY_FILTER } from
"../actions/actionTypes";

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

export default visibilityFilter;
```

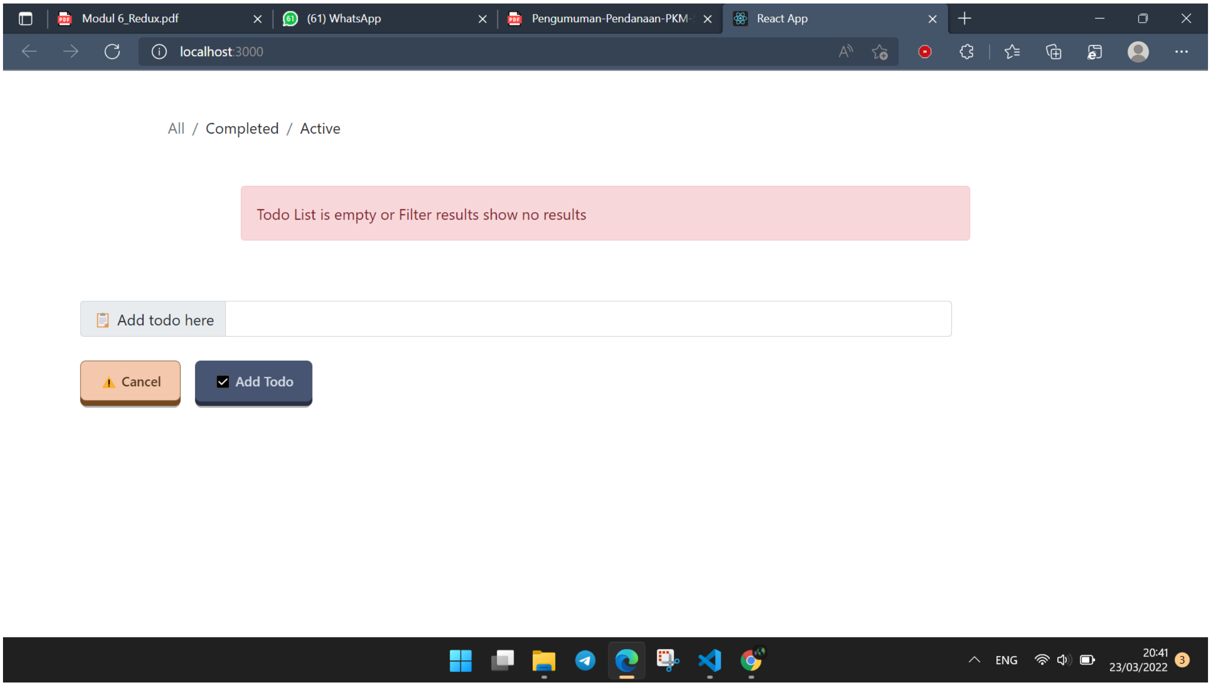
- Masih di dalam folder reducers buatlah file dengan nama TodoReducer.js

```
import { ADD_TODO, REMOVE_TODO, TOGGLE_TODO } from
"../actions/actionTypes";

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;
```

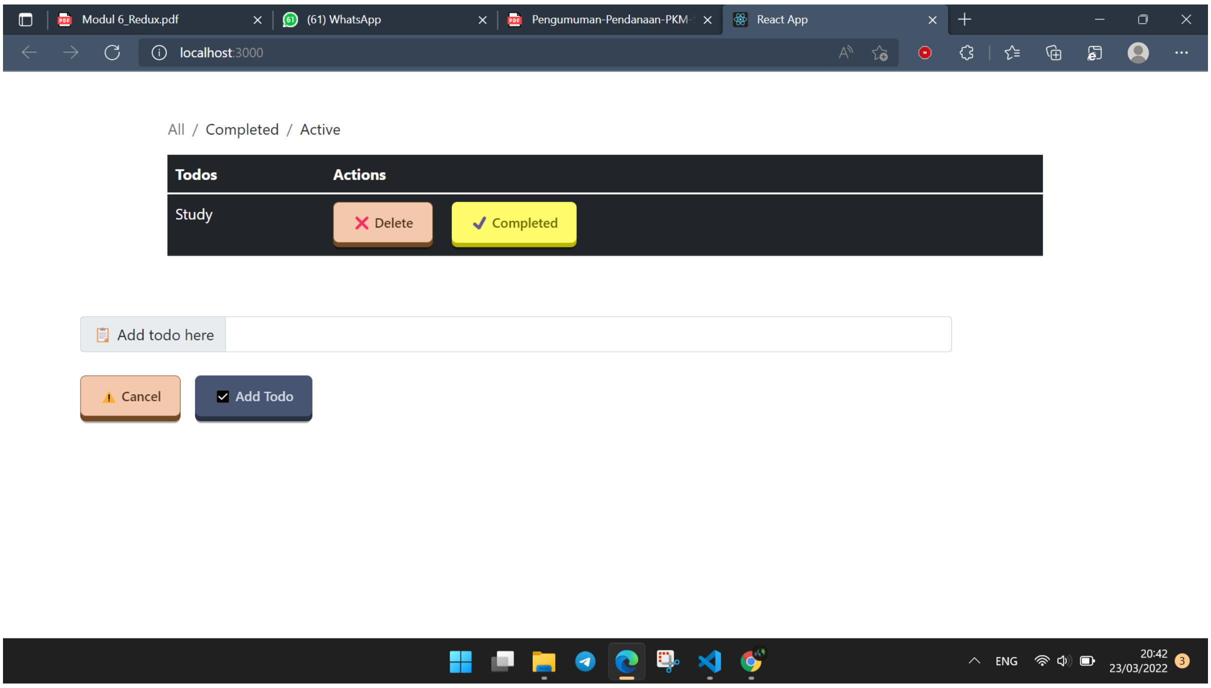
- Buat file dengan nama MainReducer.js dan simpan

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

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

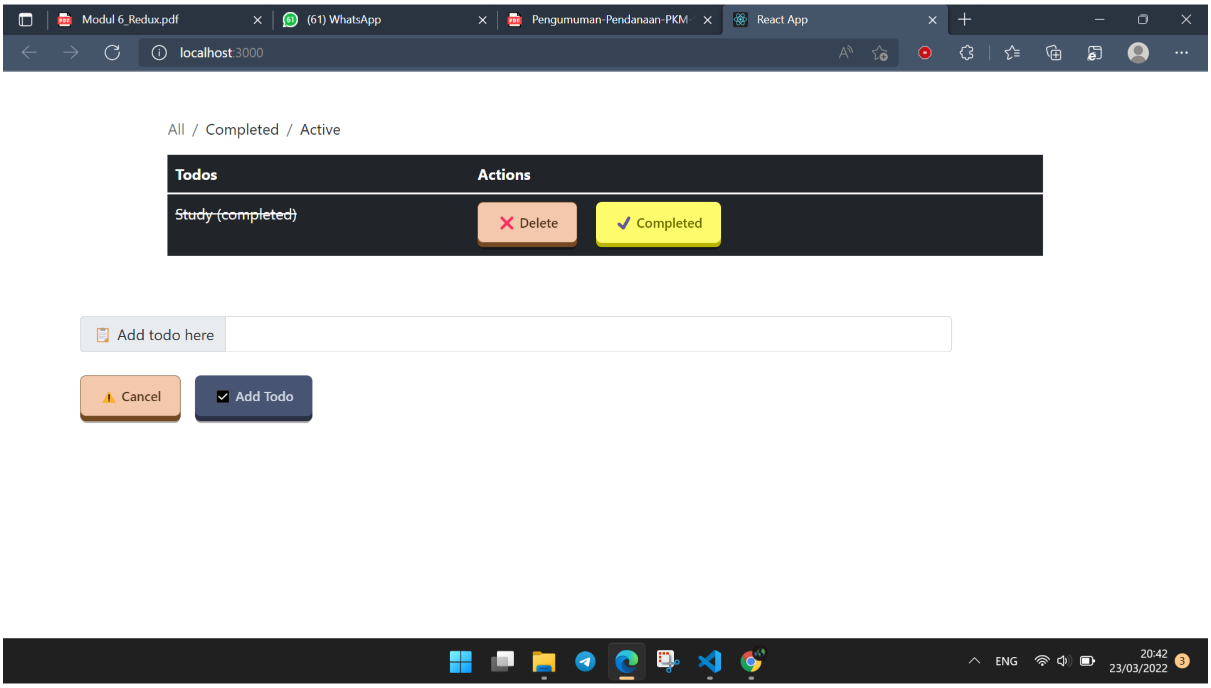
- Running semua program dengan npm start dan lihat hasilnya dan laporkan dalam laporan



Todo List is empty or Filter results show no results



Todos	Actions
Study	✕ Delete ✓ Completed



Todos	Actions
~~Study (completed)~~	✕ Delete ✓ Completed

GITHUB : https://github.com/khosyrobbin/Pemograman-Berbasis-Framework/tree/master/pertemuan%206/redux