

# System Design Solution

In the project, the main code to build the application has been placed on /src folder. Since front end has components to build page and state management to organize state, this project divided becomes 3 main folders. Outside of /src folder, the environment configurations are route and redux configuration. The components have been built by styled components library to make the component looks similar with the design and state management by redux.

## Components

- Labels  
This component is used to create form title, for input label, message label.
- Buttons  
This component is used to create button to submit and move to another route.
- Forms  
This component is used to provide form field including input text type and select.
- Layouts  
This component is used to provide flex layout both Horizontal and Vertical orientation.

## Pages

- Overview  
This page is contained from many components. In this page there are 5 components are involved, following as CreateCompany, CreateOffice, Company, FormArea, and CompanyList. All of components are indexed with index.js to address on router.
- Offices  
This page is contained from many components. In this page there are 2 components are involved, following as Office and OfficeList. All of components are indexed with index.js to address on router.

## State Management

- Reducer  
This file has been placed within state\_management folder. The react provider on entry point(index.js) has addressed this reducer.
- Dispatch  
Since this project is functional component, useDispatch is the hooks to send action to reducer. The goal of dispatch are Create and Delete both company and office.
- Selector  
Since this project is functional component, useSelector is the hooks to get value of state in redux. The goal of dispatch are Get and Filter both company and office list.