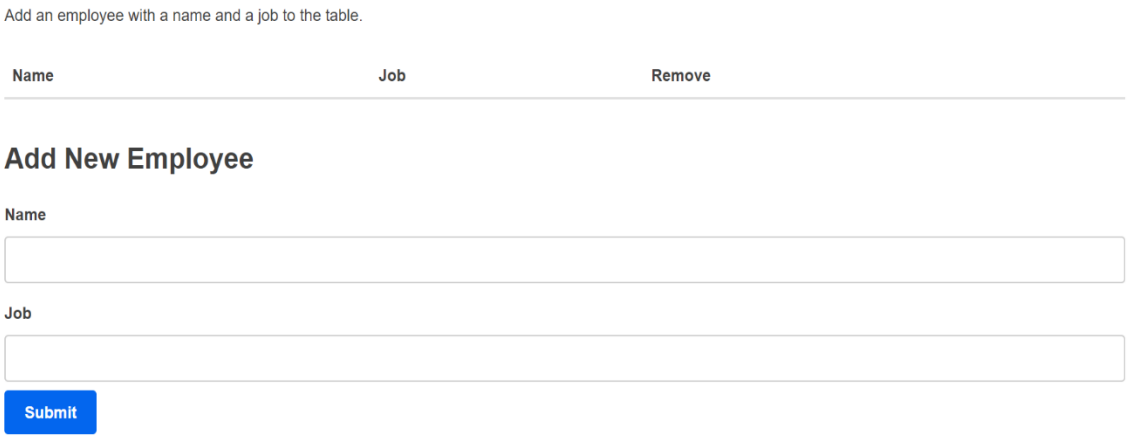
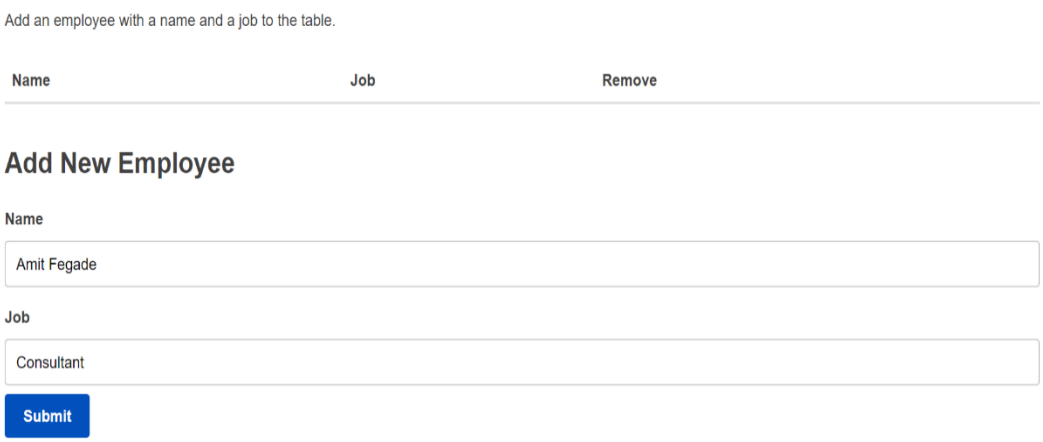
React Assignments: [Write test cases for every component]

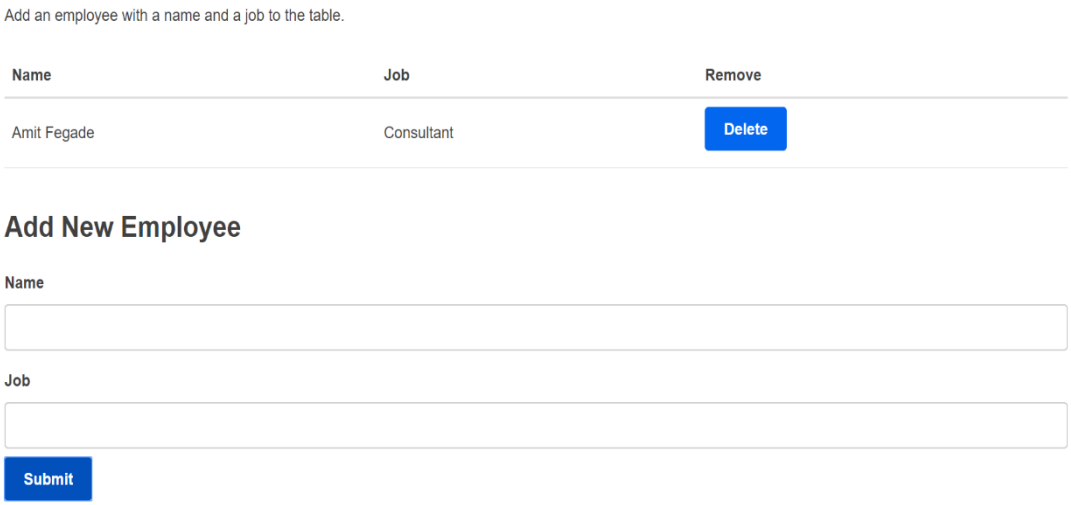
1) Create a simple “Hello World” application in React JS
2) Create a React application that displays the list of employees. Refer the below image.

3) Create a React application with following requirements. Refer the below image.

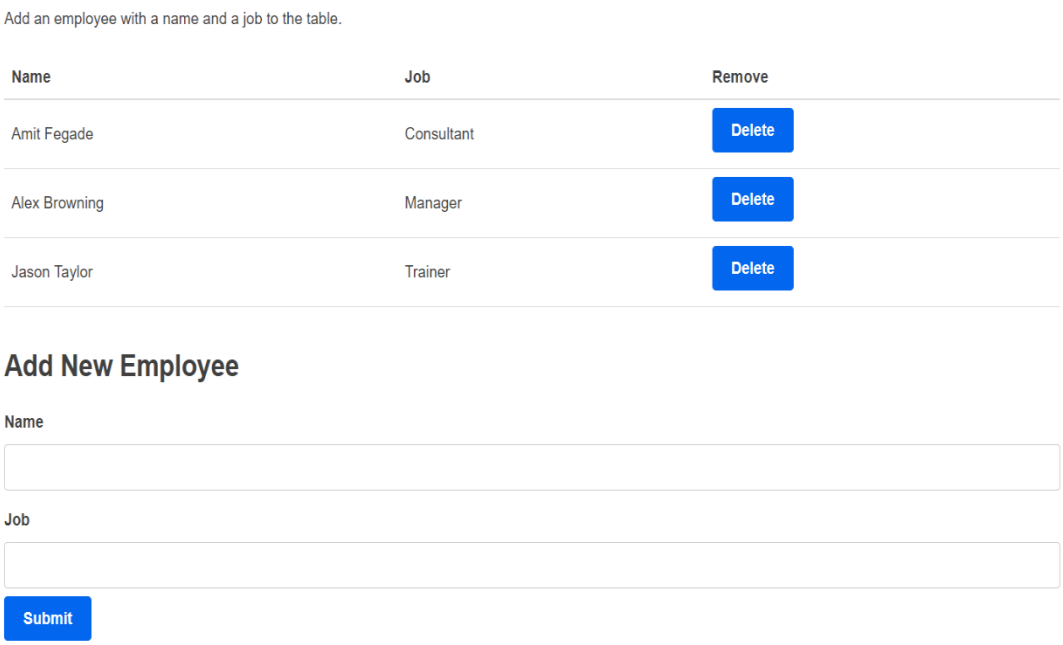


   a. Add new employee. After successful addition of new employee, It will be displayed in the table.

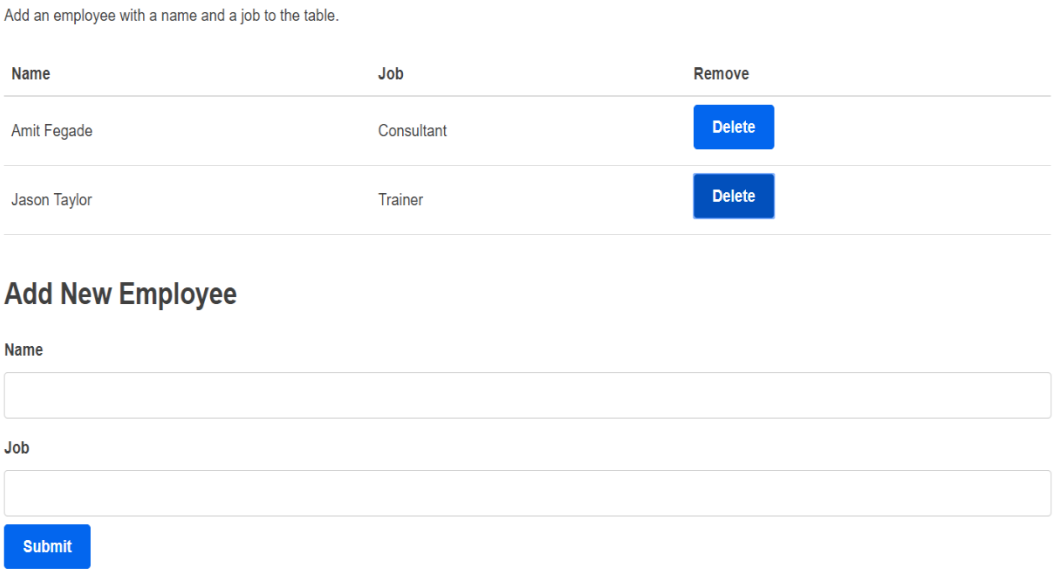




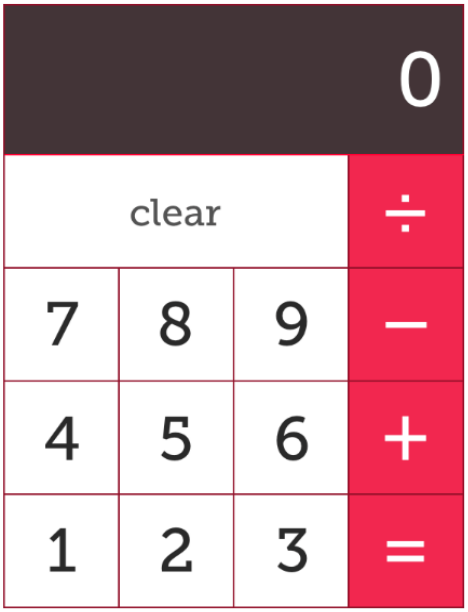
b. Add few more employees.



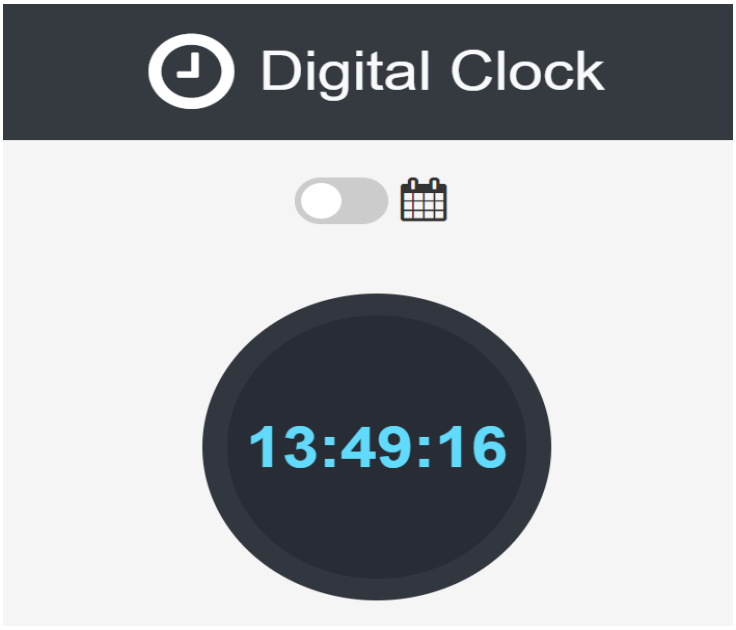
c. If I click on the Delete button, record of that specific employee should be deleted. For example, I delete record of Alex Browning, then list of employees should look like this.



4) Create an application for simple calculator

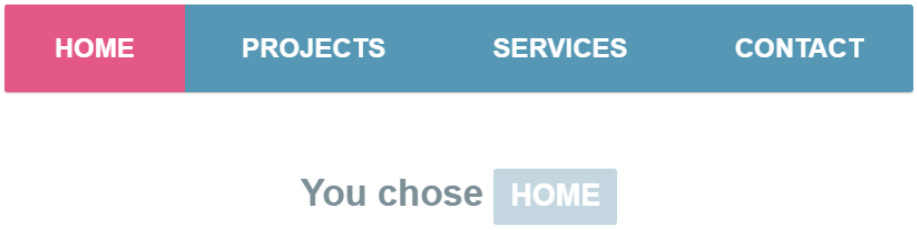


5) Create React application to develop digital clock.

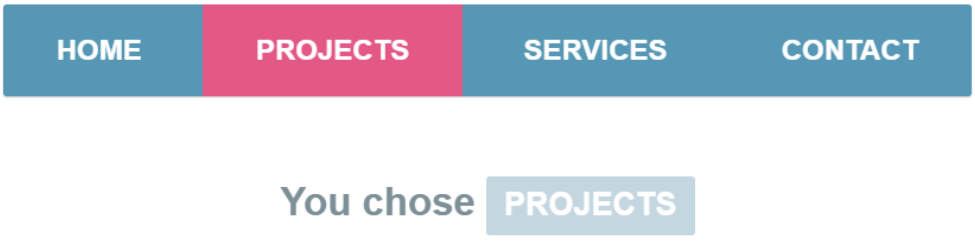


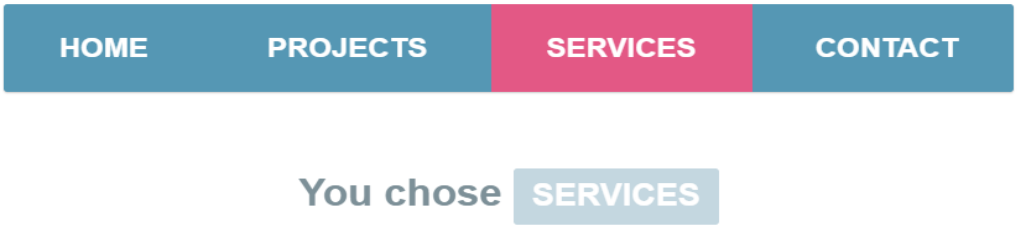
If I toggle the button, it should display the date.

6) Create React application to demonstrate routing. Create a navigation bar with 4 links.



Navigate between the links.



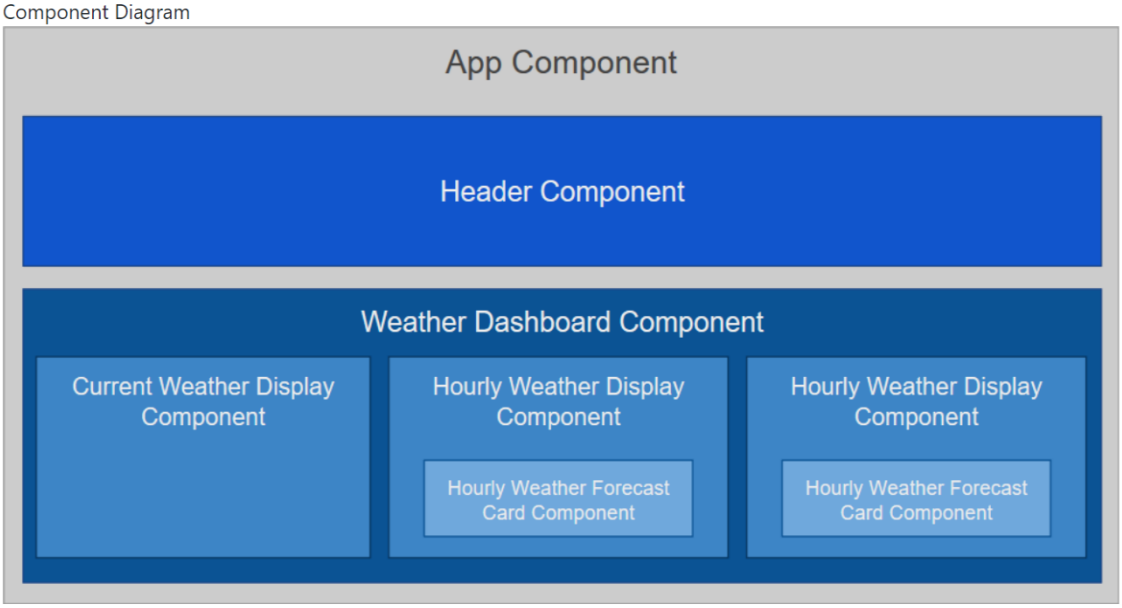


7) Demonstration of consuming services over HTTP.
Design a weather application that displays the current weather, daily forecasts, and hourly forecasts based on your current geolocation.

The weather application is composed of the following components:

- Header - A heading that displays application title
- WeatherDashboard - The primary (root) component that manages state for all underlying components. It is also responsibly for connecting to and retrieving data from a weather and geolocation service.
- CurrentWeatherDisplay - Displays weather information for the current point in time based on current location.
- DailyWeatherDisplay - Displays a 7 day weather forecast in the form of a scrollable carousel.
- DailyWeatherForecastCard - Displays weather summary for a given day
- HourlyWeatherDisplay - Displays a 24 hour weather forecast in the form of a scrollable carousel.
- HourlyWeatherForecastCard - Displays weather summary for a given hour

Component Diagram

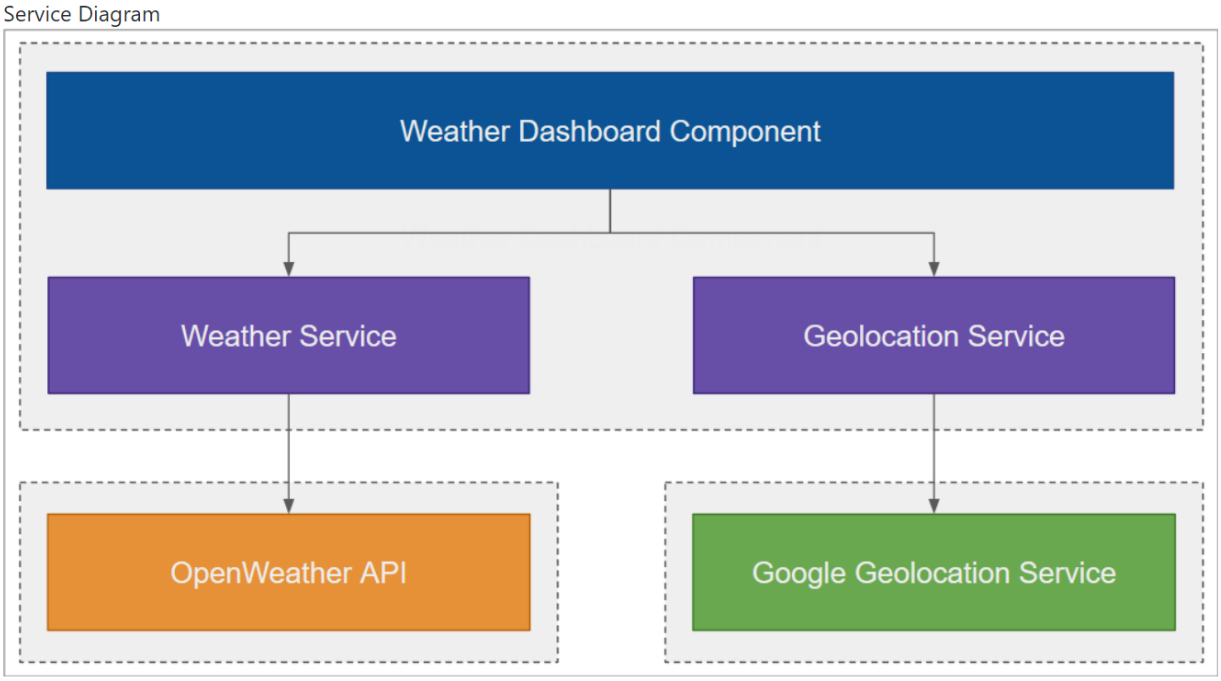


The following services are used to obtain weather and location data:

- WeatherService - A wrapper that is responsible for integrating with the OpenWeather Api. It provides an interface that allows one to obtain current weather, daily forecast, and hourly forecast information.

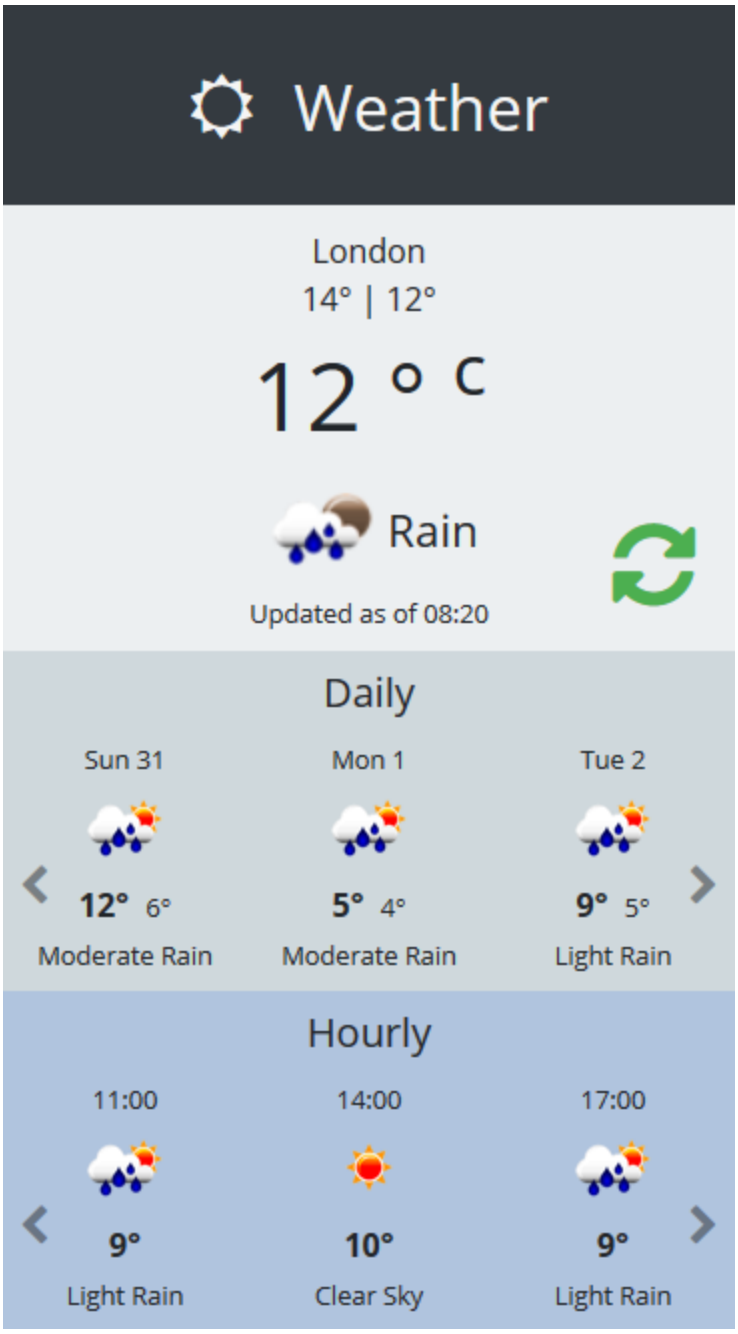
- GeolocationService - A wrapper that is responsible for integrating with the Google Geolocation API. It provide an interface that allows one to obtain the current GPS coordinates. These coordinates are used by the *WeatherService* to obtain weather information.

Service Diagram



Features:

- Display current weather
- Display 7 day weather forecast
- Display 24 hour weather forecast



APIs should be used in project

1) Open whether API : https://openweathermap.org/
2) Google Geolocation API: https://developers.google.com/maps/documentation/geolocation/intro