

# Task 1 – React Application

## Prerequisites

- Knowledge of React JS, HTML, CSS, Bootstrap and , javascript.
- Knowledge of installing npm packages (both local & global).
- Knowledge of creating React applications using Create React App.
- Knowledge of fetching JSON data from a REST API endpoint.
- A knowledge of Github.
- Code Editor as Visual Studio Code.

## Problem Statement:

Build a single page that displays the profile of 10 users (the data is obtained from an open API ). Each user's profile contains an avatar picture, name, email, phone, address, website and company name. Beneath the profile are 3 action buttons to like, edit and delete. Upon clicking the edit button , a modal window should pop up and display information about the edited profile and the user should be allowed to edit the information. Upon clicking the like button , the button should be toggled. Upon clicking delete, a confirmation popup should display and upon confirmation, should delete the card.

## API endpoint for users data

The schema of the data received in the response is: // Array of 10 users

```
[ {  
  id, // The user's id  
  username,  
  name,  
  email,  
  phone,  
  website,  
  address: {  
    street, // Address line 1  
    suite, // Address line 2  
    city,  
    zipcode  },  
  company: {  
    name, // The name of company where the user works  
  } } }
```

## API endpoint for users' avatar pictures

You will be using Avatars by DiceBear(<https://avatars.dicebear.com/>). They provide a free HTTP API to create unique avatar images based on any string we send as a query parameter. Each string generates a unique image. You will use the username to generate a unique avatar for each user.

The url for the GET endpoint is:

[https://avatars.dicebear.com/v2/avataaars/{{username}}.svg?options\[mood\]\[\]=happy](https://avatars.dicebear.com/v2/avataaars/{{username}}.svg?options[mood][]=happy)

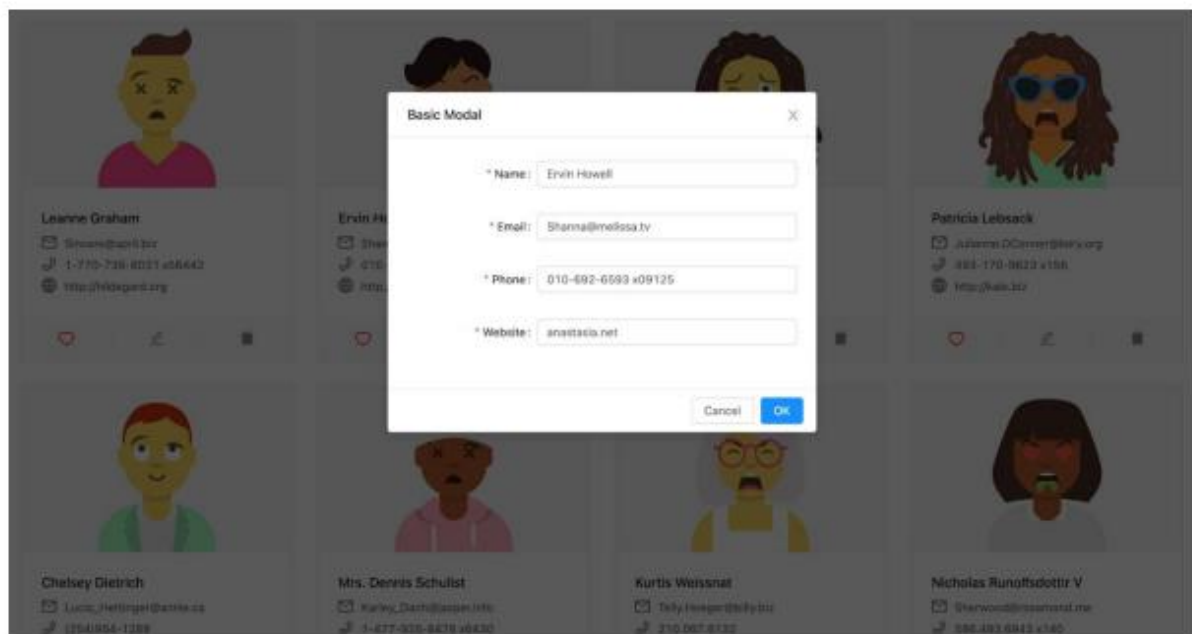
The {{username}} in the URL is the placeholder for the user's username. It should be dynamically replaced by the username received from the users API endpoint.

For example, if the username for one of the users is psamd then the URL for the avatar for this user will be:

[https://avatars.dicebear.com/v2/avataaars/psamd.svg?options\[mood\]\[\]=happy](https://avatars.dicebear.com/v2/avataaars/psamd.svg?options[mood][]=happy)

## Loading Indicator

Upon opening the app a loading indicator is displayed until the data is fetched from the API and is ready to be displayed.



## What is required

The Ability to create new react projects using Create React App

- Understanding of JSX
- Passing props to components
- Understanding of stateful and stateless Components
- Basic understanding of state management and component lifecycle methods
- Fetching data from an API endpoint
- Conditional rendering
- Working with lists
- Code structuring and packaging
- Ability of the applicant to learn a new React UI library and use its components in their app
- Handling events and working with forms
- Lifting State Up
- Show the loading icon before loading the data from api
- Feel free to use UI frameworks such as bootstrap/ mui/custom css/tailwind css.
- Use context to manage state

## Submission:

- You are expected to finish the case study within a period of 3 days.
- Upload to Github and share the URL.
- Date of Submission: **21<sup>st</sup> Feb 2023, Tuesday**