TEAMMATES:

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ICP8 – Report

Programming Tools:

GitHub, VS Code

Source Code:

Pavan – 16234822
https://github.com/JVSPAVAN/WebMobile-2022Spring/upload/ICP8/Mobile/IPC8

Vamsi – 18230326
https://github.com/VamsiAlapaty/Web-Mobile-Spring2022/tree/ICP8

Priya - 16332852
https://github.com/Privar11/Web_Mobile_Programming_ICP/tree/main/Web_Programming

Objective:

This task concentrates on creating a mobile application in android studio.

Task:

Creating an android application which uses a login screen to validate the user credentials.

Steps done to achieve the above task:

1. Installed Android studio in the machine.
2. Create an android application.
3. Run the app in the AVD manager i.e., in the android emulator.
4. Using the login screen validate the user credentials in the app and navigate to the welcome screen which is the home screen of the application.

React – Native:

React-native is a modern technology used to develop the mobile application. Android studio is also a tool to develop mobile apps. But in android studio we can create only native

android applications. But in react native we can develop both IOS and Android apps. Mobile applications are built on JavaScript language.

Expo is used to run the application the emulator or in the external device connected.

Command is used to run in Android platform.

```
expo start --android
```

Command is used for running in IOS platform.

```
expo start --ios
```

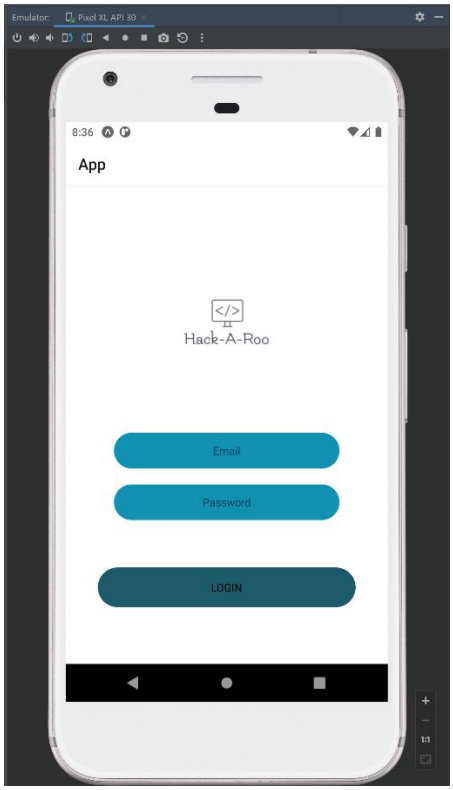
To run the application in the local emulator, android studio provides with an emulator. In the AVD manager, a local device needs to be up and running. And then the application will be displayed in the device.

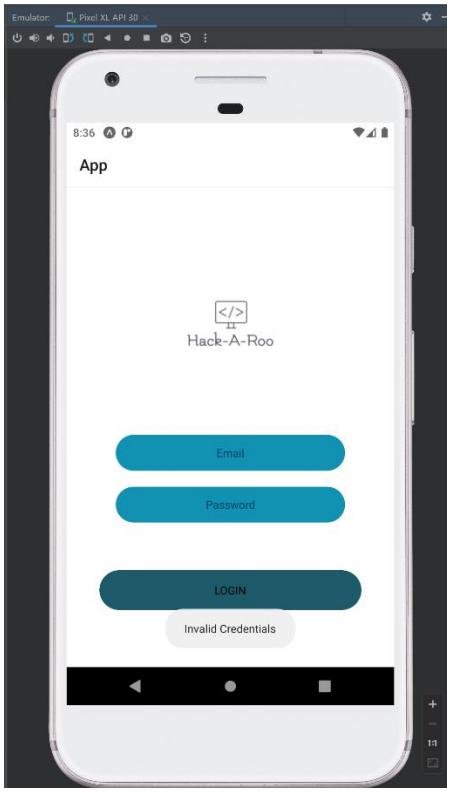
In the *App.js* file the screens needs to be initialized to display the screens in the application.

In the LOGIN screen, the logic for the validation of the user credentials is done. The entered user credentials are stored in the local variables using the *'useState()'* directory of the react-native.

```
14  export default function App({navigation}) {
15    const [email, setEmail] = useState("");
16    const [password, setPassword] = useState("");
17
18    const validation = () => {
19      if(email == 'login' && password == 'password'){
20        setEmail('');
21        setPassword('');
22        navigation.navigate("Home");
23        Toast.show('Logged-in Succesfully', Toast.SHORT);
24      }else{
25        Toast.show('Invalid Credentials', Toast.SHORT);
26      }
27    }
28
```

After the successful validation the user will be navigated into the 'Home screen' using the navigation library imported from the *react-native-navigation*. A Toast message is also displayed. If the user credentials are not matching, then a toast message is displayed saying 'Invalid User Credentials'.





The home screen consists of a welcome message for the user on successful login. And a logout button is provided so that user can be navigate back to the login screen by logging out of the application.