

TEAMMATES:

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Presentation Two – Report

Programming Tools:

GitHub, VS Code

Video Link:

<https://www.youtube.com/watch?v=s80lYSGqKXU>

Source Code:

Pavan – 16234822

<https://github.com/JVSPAVAN/WebMobile-2022Spring/tree/main/Mobile/Presentation%20-%202>

Vamsi – 18230326

<https://github.com/VamsiAlapaty/Web-Mobile-Spring2022/tree/mobile>

Priya - 16332852

https://github.com/Privar11/Web_Mobile_Programming_ICP/tree/main/Web_Programming

Objective:

This task concentrates on understanding the concept of Android platform. Under 4 ICPs the knowledge of developing a mobile application need to be achieved.

Description:

To gain knowledge on the android platform, the work is distributed into 4 ICPs. Each ICP consists of various functionalities of mobile platform. This is achieved by going one more step further. Instead of using the android studio, React-native platform or architecture is used. Android studio is considered as an old tool to develop the android apps. Where as react-native

can develop the applications in both Android and IOS platforms. This would be easier for the developer to create hybrid mobile applications. Android studio uses java framework to develop mobile applications. React-native uses JavaScript framework.

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.

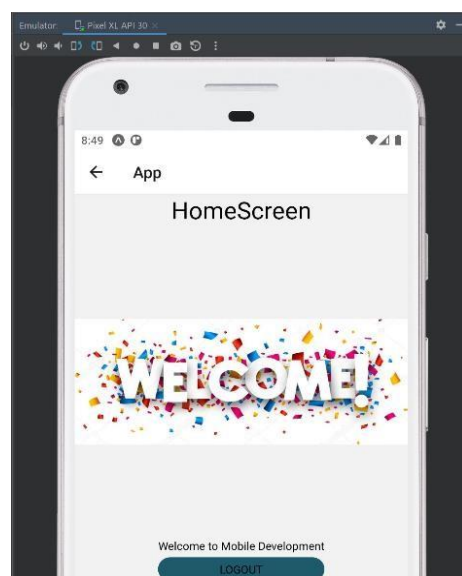
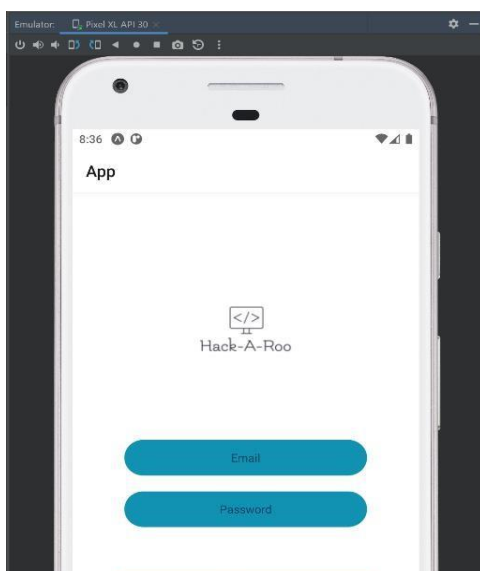
```
expo start --ios
```

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.

Login Application:

Under ICP8, a login application needs to be developed. Login credentials need to be validated and action need to be done based on that. In login screen, entered user credentials are validated by the `'useState()'` function to store the details.

If the credentials are wrong, *'Invalid User Credentials'* is displayed as toast. If the user logs in successfully, the user will be navigated into the home screen. In the home screen a welcome message will be shown and a logout button. By clicking on this logout button, the user is navigated back to login screen.



Pizza Ordering Application:

Under ICP9, a login application needs to be developed. A react-native application is developed which consists of a login screen, an ordering screen, and a summary screen.

After successful login, the user is redirected into ordering screen where all the order options for various variety of pizzas available. After ordering the user can view the order summary in the summary screen by clicking order summary button. Once the order is placed, an email confirmation sent to the user email.

App

It's Just Pizza



Email

Password

LOGIN

← App

Type
Margherita

Quantity
- 2 +

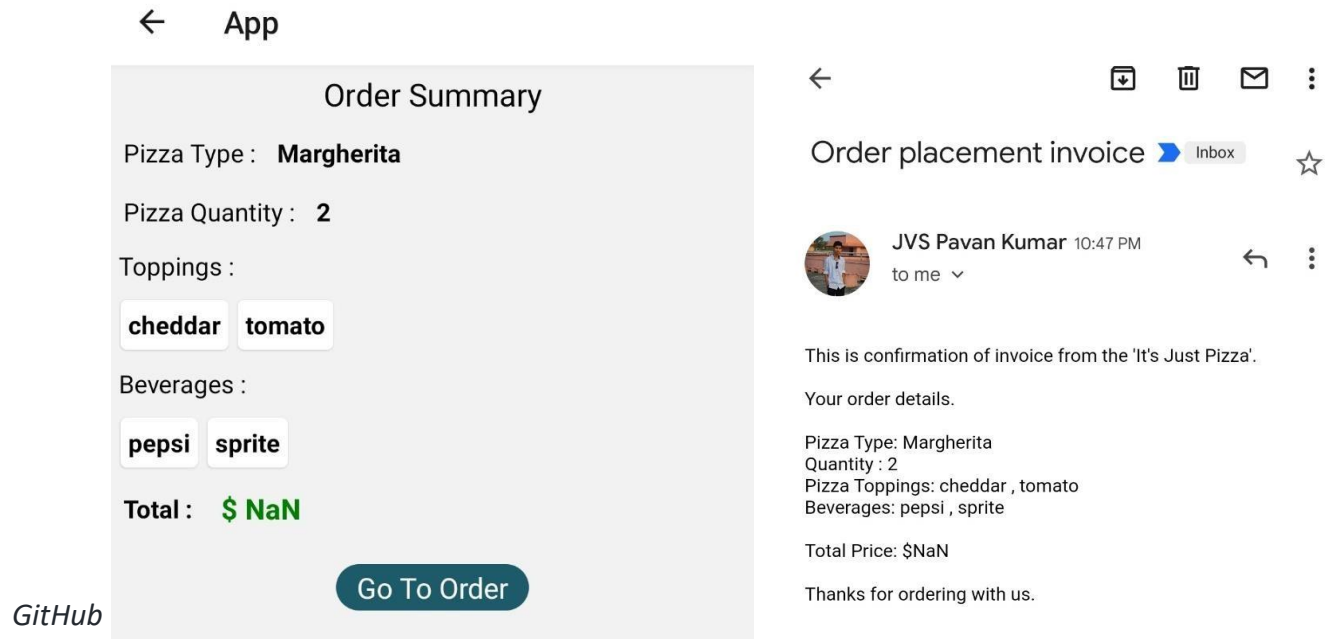
Toppings

- ☐ sausage
- ☐ salami
- ☒ cheddar
- ☒ tomato
- ☐ braised

Beverages

- ☐ fanta \$ 2.45
- ☒ pepsi + \$ 1.45
- ☒ sprite + \$ 2.15
- ☐ water \$ 0.85

Order Summary



Under ICP10, a *GitHub User* application needs to be developed. This application displays the GitHub users in the screen. An API call is made in the application to get the data from the API. On the successful retrieval of data from the API, the user data is displayed on the screen in a 'flatList' format. If the data retrieval is failed, 'data failed' is displayed as toast message.



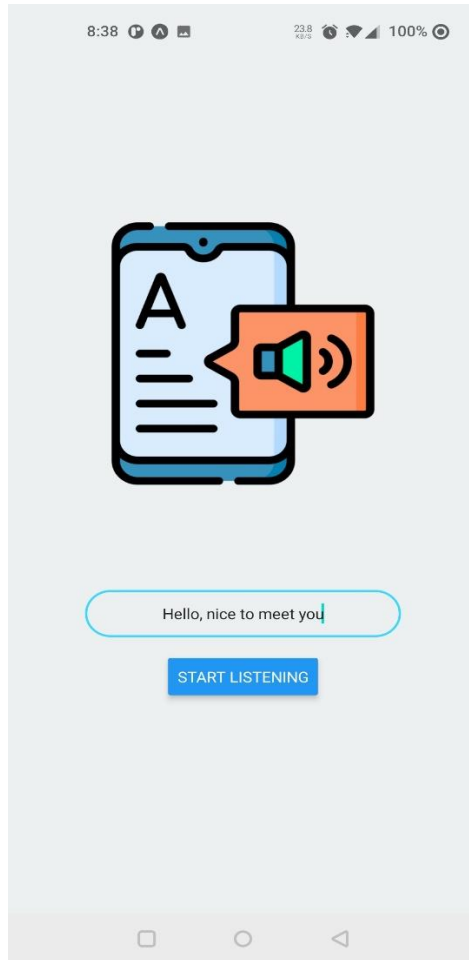
Text to Speech Application:

Under ICP11, a *Text to Speech* application needs to be developed. In this application, the text entered by the user is converted into speech. To achieve this 'Speech' library is used which is obtained from the expo-speech package is used.

Please find the video below to find the working model of the application.



Screenrecorder-2022-04-22-20-57-55-780.mp4



Conclusion:

From all these ICPs, a good amount of knowledge is achieved in developing mobile applications. React-native platform helped to achieve this in more easy way.