TEAMMATES:

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ICP11 – Report

Programming Tools:

GitHub, VS Code

Source Code:

Pavan – 16234822
https://github.com/JVSPAVAN/WebMobile-2022Spring/tree/main/Mobile/ICP11

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. And create a mobile application which converts the text into Speech.

Task:

Creating an Android application using React-native.

Steps done to achieve the above task:

1. Create a boiler plate react-native application.
2. Integrate the '*Text to Speech*' package into the application.
3. Create a main activity screen to display the text field and button.

Description:

A boiler plate application is created in a directory using the command ***'expo init speech'***. Expo is used to create the react-native application so that it will be easy to launch the application in the mobile phone.

From the expo module or package, 'Text to Speech' library is imported. Using the following command the library is installed.

'npm install expo-speech'

Then the library imported into the main screen that is 'App.js'.

'import * as Speech from 'expo-speech';'

```
import * as Speech from 'expo-speech';
export default function App() {
  const [text, setText] = useState("");
  const speak = () => {
    Speech.speak(text);
  };
```

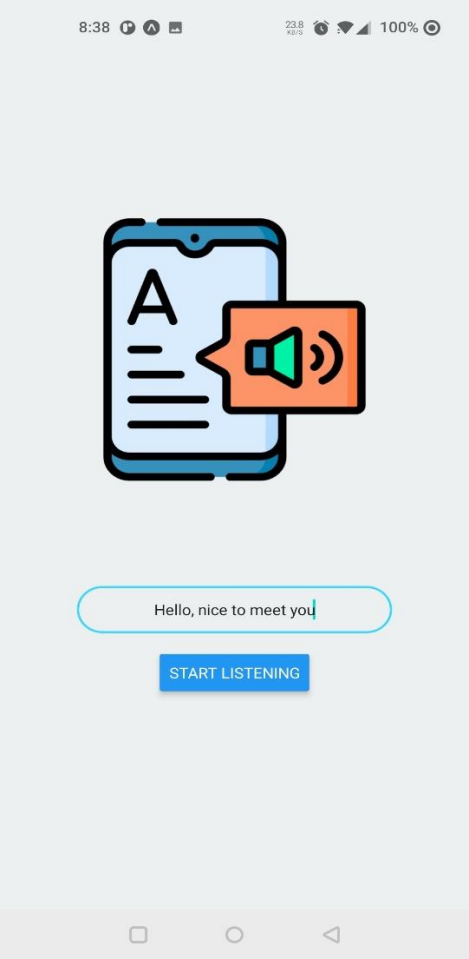
Then the UI is developed as per the requirements. A Text View is used to enter the text which the used is expecting to convert into speech. And a Button is used to tap so the input text will be converted into speech.

```
return (
    <View style={styles.container}>
      <StatusBar style="auto" />
      <Image style={styles.image} source={require("./assets/5256064.png")} />
      <View style={styles.inputView}>
        <TextInput
          style={styles.TextInput}
          placeholder="Text"
          placeholderTextColor="#003f5c"
          value={text}
          onChangeText={(text) => setText(text)}
        />
      </View>
      <Button title="Start listening" onPress={speak} />
    </View>
  );
```

When the user inputs text as ‘Hello, nice to meet you.’, then the voice is output from the mobile speaker.

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

Screenshots:



Conclusion:

A React-native application is developed to convert the input text into audio output.