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ICP 11 Report: Mobile lesson4

Link: https://github.com/BrahianOsborny/webandmobileCourse/tree/main/Mobile

i.   Introduction.

In this ICP we were required to create a new android studio application, and with the information given in class we must make our android application able to take text and make convert it into speech. To achieve this goal we used android studio and JAVA for the behavior of the app.

ii.   Description.

Here is the explanation of what we did in this ICP. We created an android studio application, in our android studio application We used textView, editText and Button. With this xml features we were able to create a simple UI that would help any user understand our application which basically takes text as an input and gives us audio as output. After that in the mainActivity class we call an onClickListener to the button and inside the onClick we got access to the Text To Speech(TTS) using the following constructor: **tts = new TextToSpeech(MainActivity.this, new TextToSpeech.OnInitListener(),** after this in the speak action along with editText we called to methods, getText() and toString() with these methods we were able to input our text in the UI and get the expected audio output.

iii.   Code snippet.

XML

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textViewTTS"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Text to speech"
        android:layout_marginTop="60dp"
        android:layout_centerHorizontal="true"


    />

    <EditText
        android:id="@+id/editTextTTS"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:hint="Enter your Text"
        android:layout_below="@+id/textViewTTS"
        android:layout_margin="35dp"
        android:layout_centerHorizontal="true"

        />

    <Button
        android:id="@+id/btnTTS"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@id/editTextTTS"
        android:text="Speak"
```

JAVA

```java
package com.example.icp11;

import ...

public class MainActivity extends AppCompatActivity {

    EditText editText;
    Button btn;
    TextToSpeech tts;



    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        editText = findViewById(R.id.editTextTTS);
        btn = findViewById(R.id.btnTTS);

        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                tts = new TextToSpeech( context: MainActivity.this, new TextToSpeech.OnInitListener() {
                    @Override
                    public void onInit(int status) {
                        tts.setLanguage(Locale.ENGLISH);
                        tts.speak(editText.getText().toString(), TextToSpeech.QUEUE_ADD,  params: null);
                    }

                });


            }
        });

    }
```

UI