

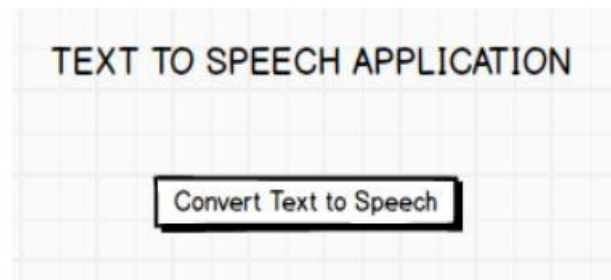


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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MOBILE APPLICATION DEVELOPMENT LABORATORY(6RCSL02)

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Program 7

**Develop a simple application with one Edit Text so that the user can write some text in it.
Create a button called “Convert Text to Speech” that converts the user input text into voice.**



FrontEnd - UI Code:

In activity main.xml

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

    <TextView
        android:layout_width="match_parent"
        android:layout_height="65dp"
        android:layout_alignParentTop="true"
        android:layout_marginTop="19dp"
        android:gravity="center"
        android:text="TEXT TO SPEECH APPLICATION"
        android:textAlignment="center"
        android:textSize="27sp"/>

    <EditText
        android:id="@+id/text"
        android:layout_width="378dp"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_marginStart="19dp"
        android:layout_marginLeft="19dp"
        android:layout_marginTop="166dp"
        android:ems="10"
        android:inputType="textPersonName" />

    <Button
```

```
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginEnd="94dp"
    android:layout_marginRight="94dp"
    android:text="Convert Text To Speech" />
```

```
</RelativeLayout>
```

BackEnd - Java Code:

In MainActivity.java

```
package com.example.texttospeech_1si19cs090;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.speech.tts.TextToSpeech;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import java.util.Locale;

public class MainActivity extends AppCompatActivity {
    TextToSpeech tts;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        EditText text=(EditText)findViewById(R.id.text);
        Button button=(Button)findViewById(R.id.button);

        tts = new TextToSpeech(getApplicationContext(), new TextToSpeech.OnInitListener() {
            @Override
            public void onInit(int i) {

                if(i!=TextToSpeech.ERROR){
                    int result=tts.setLanguage(Locale.UK);
                    if (result == TextToSpeech.LANG_MISSING_DATA || result ==
TextToSpeech.LANG_NOT_SUPPORTED) {
                        Toast.makeText(getApplicationContext(), "Language not supported", Toast.LENGTH_SHORT).show();
                    }
                }else {
                    Toast.makeText(getApplicationContext(), "INIT FAILED", Toast.LENGTH_SHORT).show();
                }
            }
        });

        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                tts.speak(text.getText().toString(),TextToSpeech.QUEUE_FLUSH,null);
            }
        });
    }
}
```

Output - Snapshots :

