**Text-to-Speech Application**

**Activity\_main.xml**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:padding="20dp">  
  
 <EditText  
 android:id="@+id/inputText"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter text to speak"  
 android:padding="10dp"  
 android:textSize="18sp" />  
  
 <Button  
 android:id="@+id/speakButton"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Speak"  
 android:layout\_marginLeft="135dp"  
 android:layout\_below="@id/inputText"  
 android:layout\_marginTop="20dp"  
 android:padding="10dp" />  
</LinearLayout>

**MainActivity.java**

package com.example.texttospeech;  
  
import androidx.appcompat.app.AppCompatActivity;  
import android.os.Bundle;  
import android.speech.tts.TextToSpeech;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
import java.util.Locale;  
  
public class MainActivity extends AppCompatActivity {  
 EditText inputText;  
 Button speakButton;  
 TextToSpeech textToSpeech;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 inputText = findViewById(R.id.*inputText*);  
 speakButton = findViewById(R.id.*speakButton*);  
  
 textToSpeech = new TextToSpeech(MainActivity.this, status -> {  
 if (status == TextToSpeech.*SUCCESS*) {  
 int langResult = textToSpeech.setLanguage(Locale.*US*);  
  
 if (langResult == TextToSpeech.*LANG\_MISSING\_DATA* || langResult == TextToSpeech.*LANG\_NOT\_SUPPORTED*) {  
 Toast.*makeText*(getApplicationContext(), "Language not supported", Toast.*LENGTH\_SHORT*).show();  
 }  
 } else {  
 Toast.*makeText*(getApplicationContext(), "TTS Initialization failed!", Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
  
 speakButton.setOnClickListener(v -> {  
 String text = inputText.getText().toString();  
 if (!text.isEmpty()) {  
 textToSpeech.speak(text, TextToSpeech.*QUEUE\_FLUSH*, null, null);  
 } else {  
 Toast.*makeText*(getApplicationContext(), "Please enter text", Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
 }  
  
 @Override  
 protected void onDestroy() {  
 if (textToSpeech != null) {  
 textToSpeech.stop();  
 textToSpeech.shutdown();  
 }  
 super.onDestroy();  
 }  
}

**Output**

