

EX 13

ANDROID MANIFEST

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <uses-permission android:name="android.permission.INTERNET"/>
    <uses-permission android:name="android.permission.RECORD_AUDIO"/>

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Ex13"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN"/>

                <category android:name="android.intent.category.LAUNCHER"/>
            </intent-filter>
        </activity>
    </application>

</manifest>
```

ACTIVITY_MAIN

```
<?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">

    <EditText
        android:id="@+id/editText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Text"
        android:layout_marginTop="16dp" android:layout_marginStart="16dp"
        android:layout_marginEnd="16dp"
        android:layout_marginBottom="16dp"/>

    <Button
        android:id="@+id/button"
        android:layout_width="match_parent"
        android:layout_height="47dp"
        android:text="Speak"
        android:layout_below="@id/editText"
        android:layout_marginTop="57dp"
        android:layout_marginBottom="16dp"
    />

</RelativeLayout>
```

MAIN ACTIVITY

```
package com.example.ex13

import android.os.Bundle
import android.speech.tts.TextToSpeech
import android.widget.Button
import android.widget.EditText
import androidx.appcompat.app.AppCompatActivity
import java.util.*

class MainActivity : AppCompatActivity(), TextToSpeech.OnInitListener {
    private lateinit var textToSpeech: TextToSpeech

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        textToSpeech = TextToSpeech(this, this)

        val editText = findViewById<EditText>(R.id.editText)
        val button = findViewById<Button>(R.id.button)

        button.setOnClickListener {
            val text = editText.text.toString()
            if (text.isNotEmpty()) {
                textToSpeech.speak(text, TextToSpeech.QUEUE_FLUSH, null, "")
            }
        }

        override fun onInit(status: Int) {
            if (status == TextToSpeech.SUCCESS) {
                val result = textToSpeech.setLanguage(Locale.US)
                if (result == TextToSpeech.LANG_MISSING_DATA || result ==
TextToSpeech.LANG_NOT_SUPPORTED) {
                    // Language data is missing or the language is not supported.
                    // Handle error accordingly.
                }
            } else {
                // Initialization failed.
                // Handle error accordingly.
            }
        }

        override fun onDestroy() {
            if (textToSpeech.isSpeaking) {
                textToSpeech.stop()
            }
            textToSpeech.shutdown()
            super.onDestroy()
        }
    }
}
```