7.text to speech

File name: textto

speech

Activitymain.xml

<?*xml version*="1.0" *encoding*="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout *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">  
  
 <LinearLayout  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:background*="#4CAF50"  
 *android:orientation*="vertical"  
 *tools:layout\_editor\_absoluteX*="92dp"  
 *tools:layout\_editor\_absoluteY*="105dp">  
  
 <TextView  
 *android:id*="@+id/textView"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="48dp"  
 *android:layout\_gravity*="center"  
 *android:background*="#8AE18D"  
 *android:gravity*="center"  
 *android:text*="TEXT TO SPEECH APPLICATION"  
 *android:textColor*="#131212"  
 *android:textSize*="20sp"  
 *android:textStyle*="bold" />  
  
 <EditText  
 *android:id*="@+id/ID1"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="60sp"  
 *android:layout\_marginTop*="60dp"  
 *android:background*="#83CA85"  
 *android:ems*="10"  
 *android:inputType*="textPersonName" />  
  
 <Button  
 *android:id*="@+id/button2"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="wrap\_content"  
 *android:layout\_marginTop*="60dp"  
 *android:text*="CONVERT TEXT TO SPEECH" />  
  
 </LinearLayout>  
</androidx.constraintlayout.widget.ConstraintLayout>

Java file:

*package* com.example.texttospeech;  
  
*import* androidx.appcompat.app.AppCompatActivity;  
  
*import* android.media.AudioManager;  
*import* android.os.Build;  
*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 mTts;  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 EditText ed1=(EditText) findViewById(R.id.*ID1*);  
 Button b1=(Button) findViewById(R.id.*button2*);  
 mTts = *new* TextToSpeech(getApplicationContext(), *new* TextToSpeech.OnInitListener() {  
 @Override  
 *public void* onInit(*int* status) {  
 *if*(status==TextToSpeech.*SUCCESS*)  
 {  
 *int* result=mTts.setLanguage(Locale.*US*);  
 *if*(result==TextToSpeech.*LANG\_MISSING\_DATA* || result==TextToSpeech.*LANG\_NOT\_SUPPORTED*)  
 {  
 Toast.*makeText*(getApplicationContext(),"LANGUAGE NOT SUPPORTED",Toast.*LENGTH\_SHORT*).show();  
 }*else*{  
 b1.setOnClickListener(*new* View.OnClickListener() {  
 @Override  
 *public void* onClick(View v) {  
 String SpeakText=ed1.getText().toString();  
 speak\_text(SpeakText);  
 }  
 });  
 }  
 }*else* {  
 Toast.*makeText*(getApplicationContext(), "INIT FAILED", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 });  
  
 }  
 *void* speak\_text(String str)  
 {  
 Bundle bundle=*new* Bundle();  
 bundle.putInt(TextToSpeech.Engine.*KEY\_PARAM\_STREAM*, AudioManager.*STREAM\_MUSIC*);  
 *if*(Build.VERSION.*SDK\_INT*>=Build.VERSION\_CODES.*LOLLIPOP*){  
 mTts.speak(str,TextToSpeech.*QUEUE\_FLUSH*,bundle,*null*);  
 Toast.*makeText*(*this*, "str", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 @Override  
 *protected void* onDestroy(){  
 *super*.onDestroy();  
 mTts.stop();  
 mTts.shutdown();  
 }  
}