Android speechtotext() with push-to-talk flowchart

```
public class MainActivity extends Activity
            │
private final int SPEECH_RECOGNITION_CODE = 1
            │
private TextView txtOutput
            │
private ImageButton btnMicrophone
            │
@Override
protected void onCreate(Bundle savedInstanceState)
            │
super.onCreate(savedInstanceState)
            │
setContentView(R.layout.activity_main)
            │
txtOutput = (TextView) findViewById(R.id.txt_output)
            │
btnMicrophone = (ImageButton) findViewById(R.id.btn_mic)
            │
btnMicrophone.setOnClickListener(new View.OnClickListener())
            │
@Override
public void onClick(View v)
            │
startSpeechToText()
            │
      )
```

Start speech to text intent. This opens up Google Speech Recognition API dialog box to listen the speech input.

```
private void startSpeechToText()
            │
Intent intent = new Intent(RecognizerIntent.ACTION_RECOGNIZE_SPEECH)
            │
intent.putExtra(RecognizerIntent.EXTRA_LANGUAGE, Locale.getDefault())
            │
intent.putExtra(RecognizerIntent.EXTRA_LANGUAGE_MODEL,
RecognizerIntent.LANGUAGE_MODEL_FREE_FORM)
            │
intent.putExtra(RecognizerIntent.EXTRA_PROMPT,
"Speak something...")
            │
startActivityForResult(intent, SPEECH_RECOGNITION_CODE)
```

ActivityNotFoundException a

```
Toast.makeText(getApplicationContext(),
"Sorry! Speech recognition is not supported in this device.",
Toast.LENGTH_SHORT).show()
```

Callback for speech recognition activity

```
@Override
protected void onActivityResult(int requestCode, int resultCode, Intent data)
            │
super.onActivityResult(requestCode, resultCode, data)
            │
        requestCode
```

SPEECH_RECOGNITION_CODE

```
resultCode == RESULT_OK && null != data
```

True

```
ArrayList<String> result = data
.getStringArrayListExtra(RecognizerIntent.EXTRA_RESULTS)
            │
String text = result.get(0)
            │
txtOutput.setText(text)
```