**PRACTICAL:12**

**AIM:Create an application to handle support voice interaction.**

**Source Code:**

**Program: activity\_main.xml**

|  |
| --- |
| <?xml version="1.0" encoding="utf-8"?>  <android.support.constraint.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="com.example.prac12.MainActivity">  <TextView  android:id="@+id/textView"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_marginTop="168dp"  android:text="Wait till Question PopUP!!"  android:textSize="24sp"  app:layout\_constraintHorizontal\_bias="0.501"  app:layout\_constraintLeft\_toLeftOf="parent"  app:layout\_constraintRight\_toRightOf="parent"  app:layout\_constraintTop\_toTopOf="parent" />  <TextView  android:id="@+id/textView1"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_marginBottom="8dp"  android:layout\_marginEnd="8dp"  android:layout\_marginStart="8dp"  android:layout\_marginTop="8dp"  android:text="Speak your answer"  android:textSize="24sp"  app:layout\_constraintBottom\_toBottomOf="parent"  app:layout\_constraintEnd\_toEndOf="parent"  app:layout\_constraintHorizontal\_bias="0.501"  app:layout\_constraintStart\_toStartOf="parent"  app:layout\_constraintTop\_toBottomOf="@+id/textView"  app:layout\_constraintVertical\_bias="0.171" />  </android.support.constraint.ConstraintLayout> |

**Program: MainActivity.java**

package com.example.prac12;

import android.content.Intent;

import android.speech.RecognizerIntent;

import android.speech.tts.TextToSpeech;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.widget.TextView;

import java.util.List;

import java.util.Locale;

public class MainActivity extends AppCompatActivity {

private TextToSpeech t1;

private final int REQUEST\_SPEECH\_RECOGNIZER = 3000;

private TextView question, answer;

private final String mQuestion = "Who is the owner of this phone?";

private String mAnswer = "";

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

question = (TextView) findViewById(R.id.textView);

answer = (TextView) findViewById(R.id.textView1);

t1=new TextToSpeech(getApplicationContext(), new TextToSpeech.OnInitListener() {

@Override

public void onInit(int status) {

if(status != TextToSpeech.ERROR) {

t1.setLanguage(Locale.UK);

}

}

});

startSpeechRecognizer();

}

private void startSpeechRecognizer() {

Intent intent = new Intent

(RecognizerIntent.ACTION\_RECOGNIZE\_SPEECH);

intent.putExtra(RecognizerIntent.EXTRA\_LANGUAGE\_MODEL,

RecognizerIntent.LANGUAGE\_MODEL\_FREE\_FORM);

intent.putExtra(RecognizerIntent.EXTRA\_PROMPT, mQuestion);

startActivityForResult(intent, REQUEST\_SPEECH\_RECOGNIZER);

}

@Override

protected void onActivityResult(int requestCode, int resultCode,

Intent data) {

super.onActivityResult(requestCode, resultCode, data);

if (requestCode == REQUEST\_SPEECH\_RECOGNIZER) {

if (resultCode == RESULT\_OK) {

List<String> results = data.getStringArrayListExtra

(RecognizerIntent.EXTRA\_RESULTS);

mAnswer = results.get(0);

question.setText(mQuestion);

answer.setText(mAnswer);

if (mAnswer.toUpperCase().indexOf("SMIT") > -1) {

t1.speak("Great You are correct", TextToSpeech.QUEUE\_FLUSH, null, "adfvsfgbrsgh");

}

else {

t1.speak("Wrong answer submit this phone to my owner Smit", TextToSpeech.QUEUE\_FLUSH, null, "adfvsfgbrsgh");

}

}

}

}

@Override

public void onPause(){

if(t1 !=null){

t1.stop();

t1.shutdown();

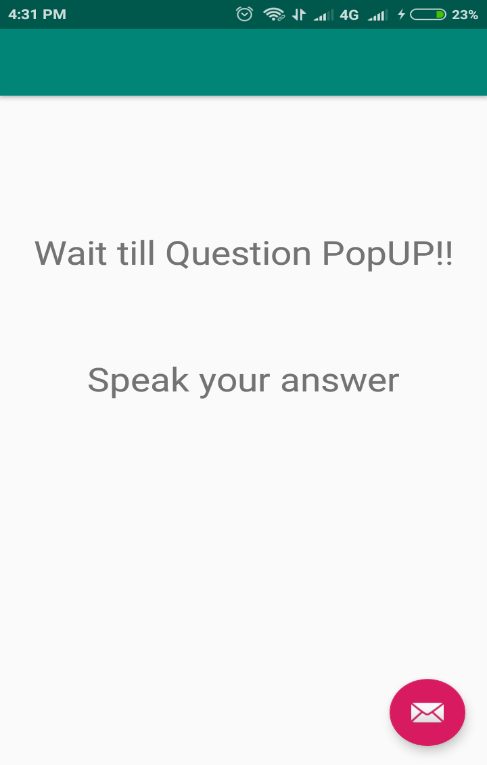
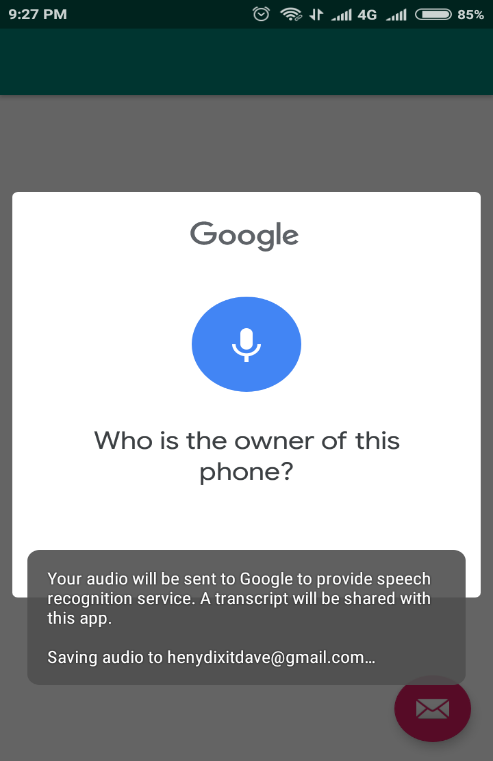
}

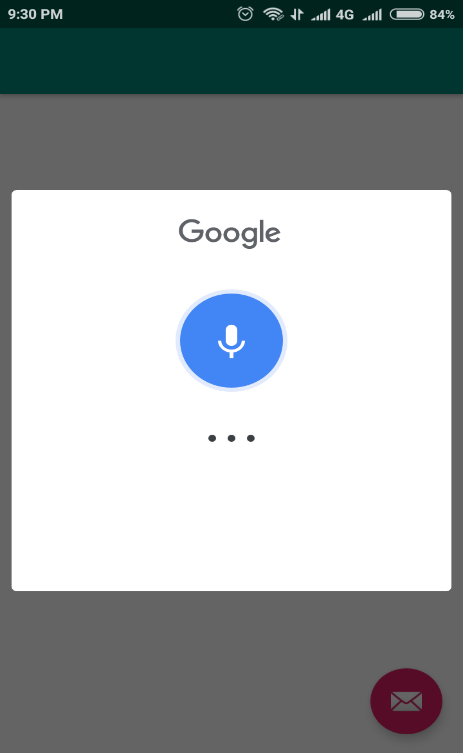
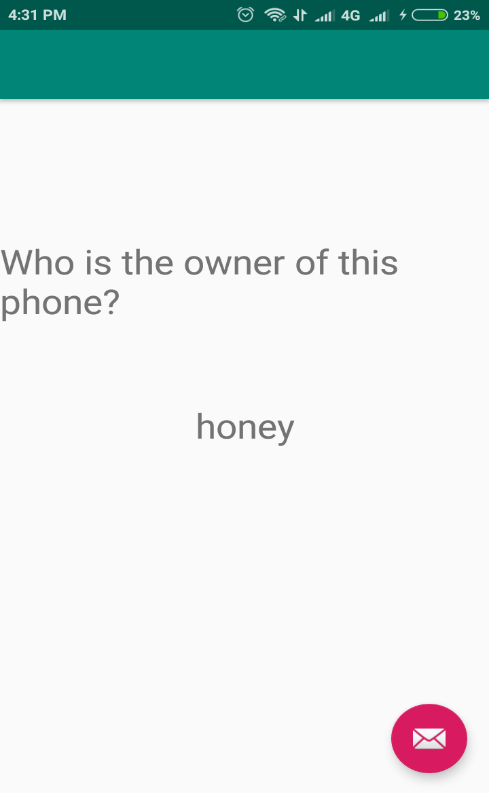
super.onPause();

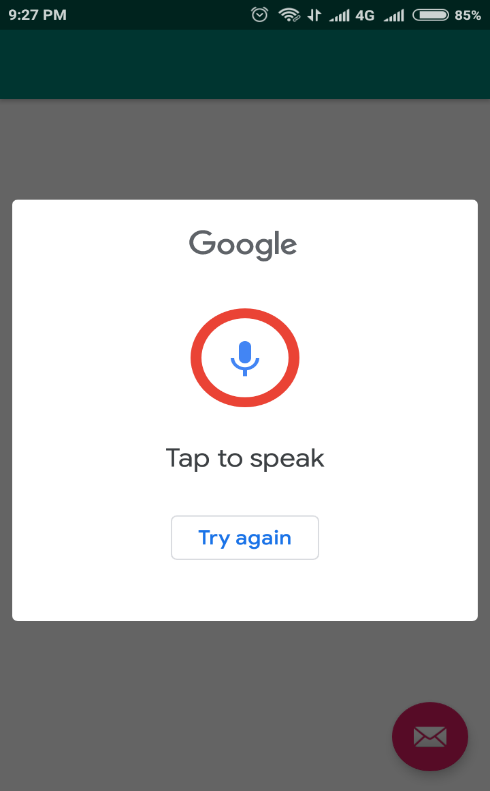
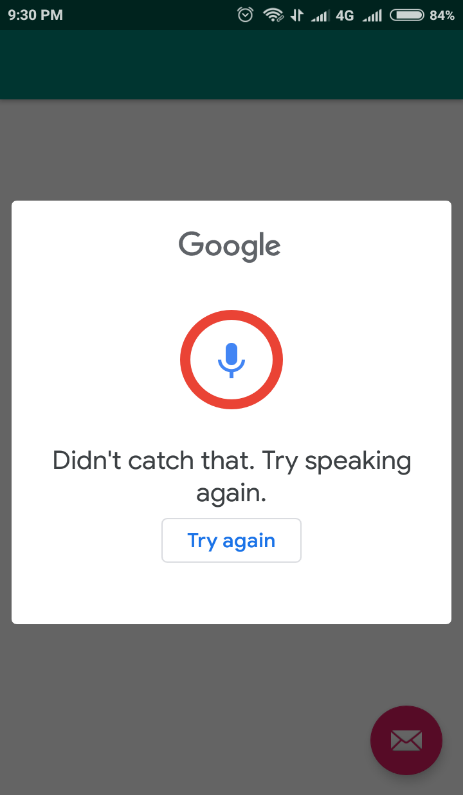
}

}

**Output:**

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