package com.ankur.voice\_boston;

import java.util.ArrayList;

import android.os.Bundle;

import android.app.Activity;

import android.content.Intent;

import android.speech.RecognizerIntent;

import android.speech.tts.TextToSpeech;

import android.view.Menu;

import android.view.View;

import android.view.View.OnClickListener;

//import android.widget.ArrayAdapter;

import android.widget.Button;

import android.widget.ListView;

import android.widget.TextView;

import java.util.Locale;

//import android.os.Bundle;

//import android.app.Activity;

//import android.speech.tts.TextToSpeech;

//import android.view.View;

//import android.view.View.OnClickListener;

//import android.content.DialogInterface.OnClickListener;

//import android.view.Menu;

//import android.widget.Button;

public class Voice extends Activity implements OnClickListener{

ListView lv;

TextView tv,tv1,tv2,tv3,tv4,tv5,tv6,tv7,tv8;

static final int check = 1111;

public static String reslt,outpt=" ";

TextToSpeech tts1;

@Override

public void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.voice);

//lv = (ListView)findViewById(R.id.lvVoiceReturn);

tv = (TextView)findViewById(R.id.tvDisplay);

tv1 = (TextView)findViewById(R.id.tvDisplay1);

tv2 = (TextView)findViewById(R.id.tvDisplay2);

tv3 = (TextView)findViewById(R.id.tvDisplay3);

// tv4 = (TextView)findViewById(R.id.tvDisplay4);

// tv5 = (TextView)findViewById(R.id.tvDisplay5);

// tv6 = (TextView)findViewById(R.id.tvDisplay6);

// tv7 = (TextView)findViewById(R.id.tvDisplay7);

// tv8 = (TextView)findViewById(R.id.tvDisplay8);

Button b = (Button)findViewById(R.id.bVoice);

b.setOnClickListener(this);

tts1= new TextToSpeech(Voice.this, new TextToSpeech.OnInitListener() {

public void onInit(int status) {

// TODO Auto-generated method stub

if(status!= TextToSpeech.ERROR){

tts1.setLanguage(Locale.UK);

}

}

});

}

@Override

protected void onPause() {

// TODO Auto-generated method stub

if(tts1!=null)

{

tts1.stop();

tts1.shutdown();

}

super.onPause();

}

//public static String texts="Hellooooooooooooooooooooooooooooooooooooooooooooooo";

@Override

public boolean onCreateOptionsMenu(Menu menu) {

getMenuInflater().inflate(R.menu.voice, menu);

return true;

}

@Override

protected void onActivityResult(int requestCode, int resultCode, Intent data) {

// TODO Auto-generated method stub

if(requestCode == check && resultCode==RESULT\_OK){

ArrayList results = data.getStringArrayListExtra(RecognizerIntent.EXTRA\_RESULTS) ;

//lv.setAdapter(new ArrayAdapter<String>(this,android.R.layout.simple\_expandable\_list\_item\_1,results));

String str =((String)results.get(0));

tv.setText(str);// added by ankur

//String str = new ExpressionFormatter((String)localArrayList.get(0)).format();

str = new ExpressionFormatter((String)results.get(0)).format();

/\*

String[] a = new String[20];

int ct=0,p=0,c=0;

for(i=0;i<len;i++)

{

if(i==len-1)

{

a[ct++]=str.substring(p,len);

}

else

{

char pos = str.charAt(i);

if(pos==' ')

{c=i;

a[ct++]=str.substring(p,c);

p=c+1;

}

}

}

tv1.setText(a[0]);

tv2.setText(a[1]);

tv3.setText(a[2]);

tv4.setText(a[3]);

tv5.setText(a[4]);

tv6.setText(a[5]);

tv7.setText(a[6]);

tv8.setText(a[7]);\*/

tv1.setText(str);

String reslt1=""; String reslt2=""; String reslt3="";

String reslt5="";

String reslt6="";

String reslt7="";

String reslt8="";

reslt="";

try{

// TODO code application logic here

//the data that will be entered by the user

// String str;

/\* BufferedReader br;

br = new BufferedReader(new InputStreamReader(System.in));

System.out.print("What is your name? ");

str = br.readLine();\*/

//str="73+34";

int len=str.length(),i,ipos=0;

System.out.print(len);

System.out.print("\n");

String sb,sa,it;

for(i=0;i<=len;i++)

{

char cpos = str.charAt(i);

if((cpos=='+') || (cpos=='-') || (cpos=='\*') || (cpos=='/') || (cpos=='^') || (cpos=='@') || (cpos=='&') || (cpos=='%') )

{

ipos=i;

sb=str.substring(0,ipos);

sa=str.substring(ipos+1,len);

if(cpos=='/')

{

double ans1=Double.parseDouble(sb)/Double.parseDouble(sa);

reslt=""+ans1;

tv2.setText("Result Is = ");

tv3.setText((reslt));

outpt=reslt;

tts1.speak(outpt, TextToSpeech.QUEUE\_FLUSH,null);

break;

}

else if(cpos=='-')

{

double ans2=Double.parseDouble(sb)-Double.parseDouble(sa);

reslt=""+ans2;

tv2.setText("Result Is = ");

tv3.setText((reslt));

outpt=reslt;

tts1.speak(outpt, TextToSpeech.QUEUE\_FLUSH,null);

break;

}

else if(cpos=='\*')

{

double ans3=Double.parseDouble(sb)\*Double.parseDouble(sa);

reslt=""+ans3;

tv2.setText("Result Is = ");

tv3.setText((reslt));

outpt=reslt;

tts1.speak(outpt, TextToSpeech.QUEUE\_FLUSH,null);

break;

}

else if(cpos=='+')

{

double ans=Double.parseDouble(sb)+Double.parseDouble(sa);

reslt=""+ans;

tv2.setText("Result Is = ");

tv3.setText((reslt));

outpt=reslt;

tts1.speak(outpt, TextToSpeech.QUEUE\_FLUSH,null);

break;

}

else if(cpos=='^')

{

double ans5=Math.pow(Double.parseDouble(sb) , Double.parseDouble(sa) );

reslt=""+ans5;

tv2.setText("Result Is = ");

tv3.setText((reslt));

outpt=reslt;

tts1.speak(outpt, TextToSpeech.QUEUE\_FLUSH,null);

break;

}

else if(cpos=='@')

{

double ans6=Math.sqrt(Double.parseDouble(sa) );

reslt=""+ans6;

tv2.setText("Result Is = ");

tv3.setText((reslt));

outpt=reslt;

tts1.speak(outpt, TextToSpeech.QUEUE\_FLUSH,null);

break;

}

else if(cpos=='&')

{

double ans7=Math.log(Double.parseDouble(sa));

reslt=""+ans7;

tv2.setText("Result Is = ");

tv3.setText((reslt));

outpt=reslt;

tts1.speak(outpt, TextToSpeech.QUEUE\_FLUSH,null);

break;

}

else if(cpos=='%')

{

double ans8=(Double.parseDouble(sb)\*Double.parseDouble(sa))/100;

reslt=""+ans8;

tv2.setText("Result Is = ");

tv3.setText((reslt));

outpt=reslt;

tts1.speak(outpt, TextToSpeech.QUEUE\_FLUSH,null);

break;

}

}

}

}

catch(Exception e){

// System.out.println(" ");

}

}

// tts1.speak(texts, TextToSpeech.QUEUE\_FLUSH,null);

super.onActivityResult(requestCode, resultCode, data);

}

public void onClick(View arg0) {

// TODO Auto-generated method stub

Intent i =new Intent(RecognizerIntent.ACTION\_RECOGNIZE\_SPEECH);

i.putExtra(RecognizerIntent.EXTRA\_LANGUAGE\_MODEL,RecognizerIntent.LANGUAGE\_MODEL\_FREE\_FORM);

i.putExtra(RecognizerIntent.EXTRA\_PROMPT, "Please Speak");

startActivityForResult(i,check);

tts1.speak(outpt, TextToSpeech.QUEUE\_FLUSH,null);

// tts1.speak(reslt, TextToSpeech.QUEUE\_FLUSH,null);

}

}