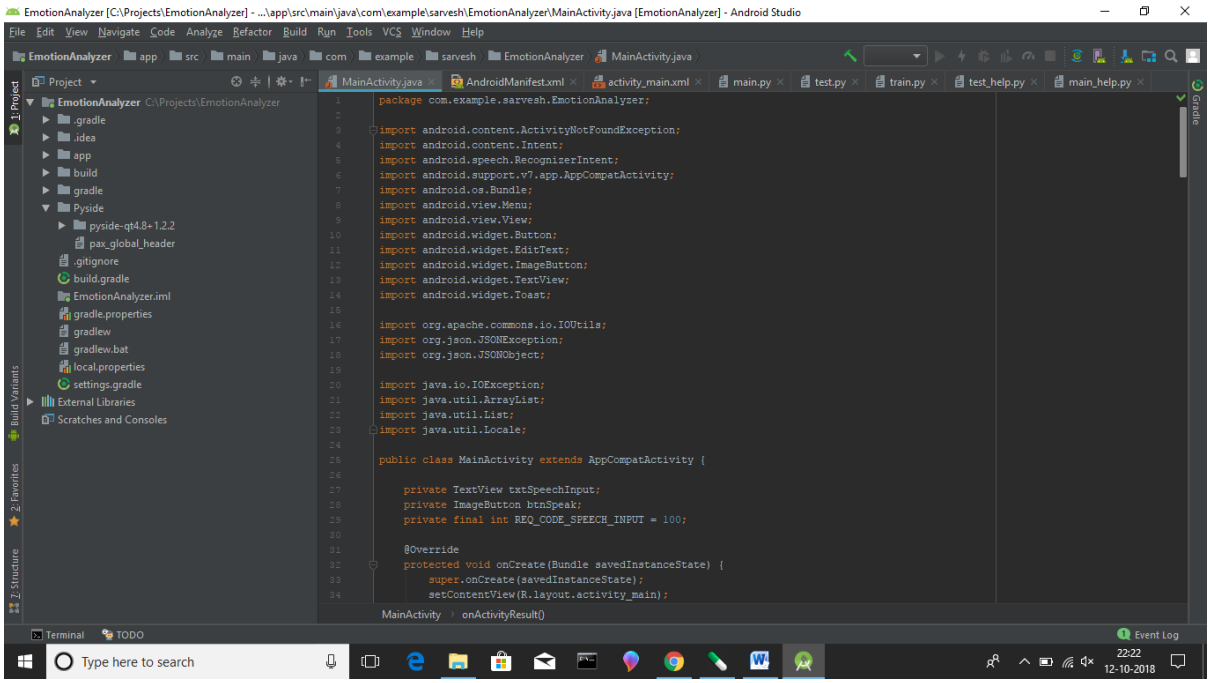
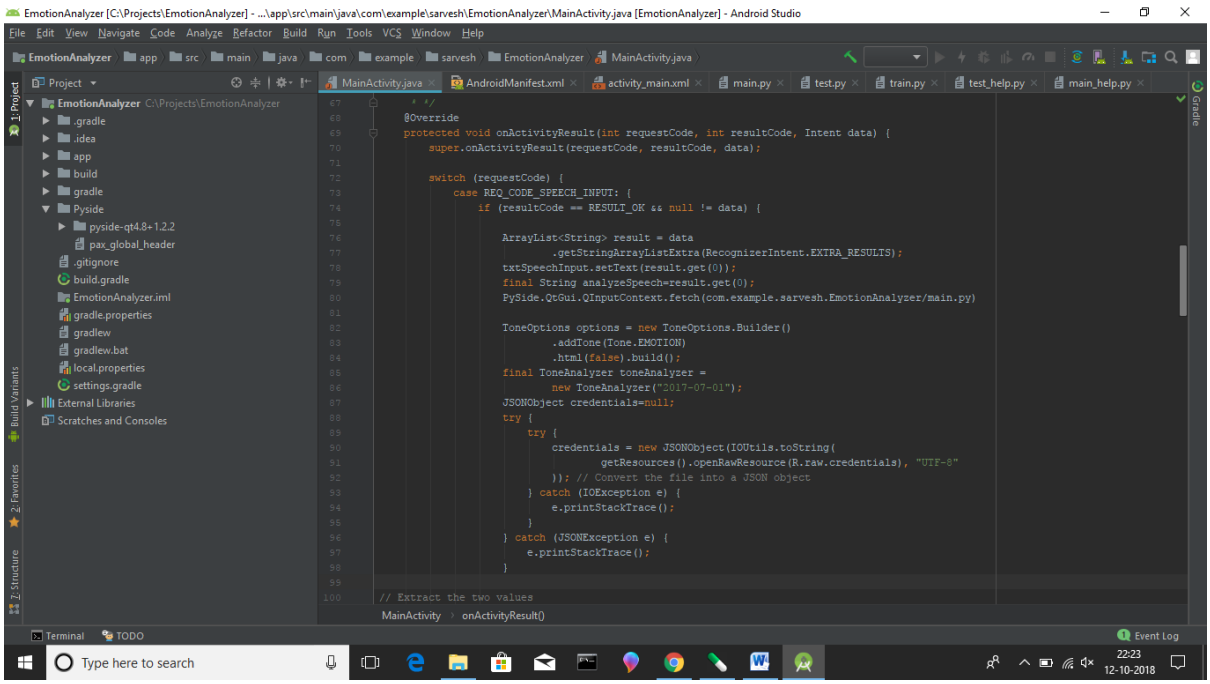
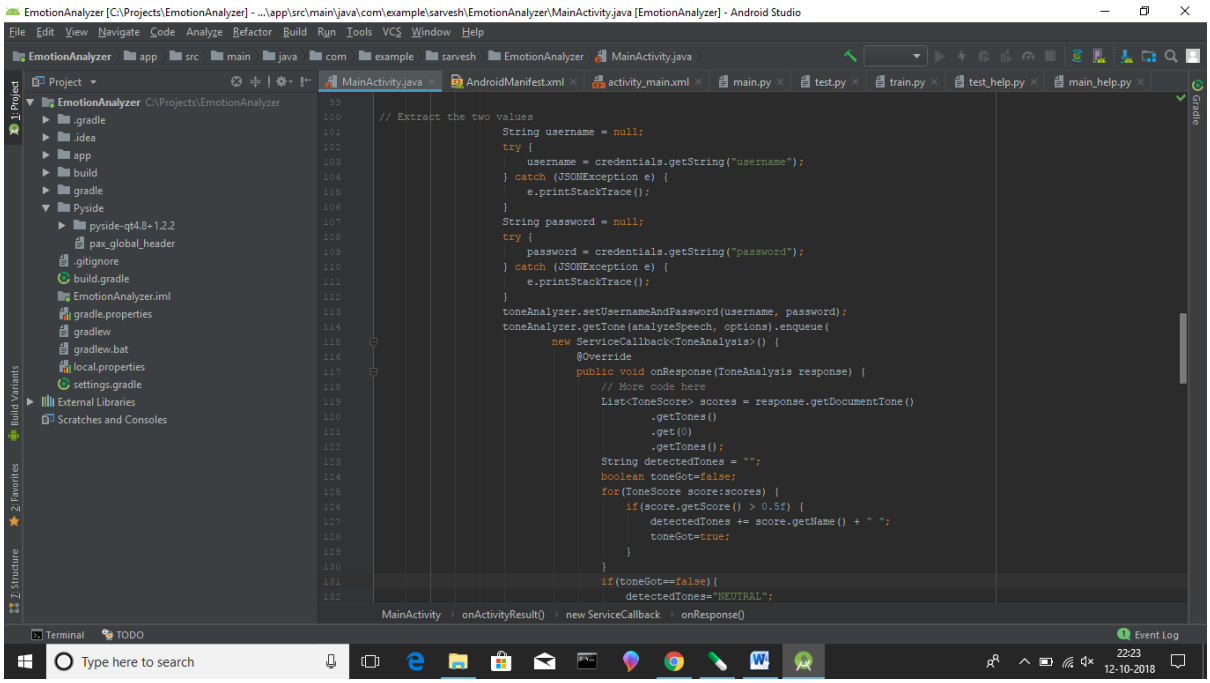
Mini Project

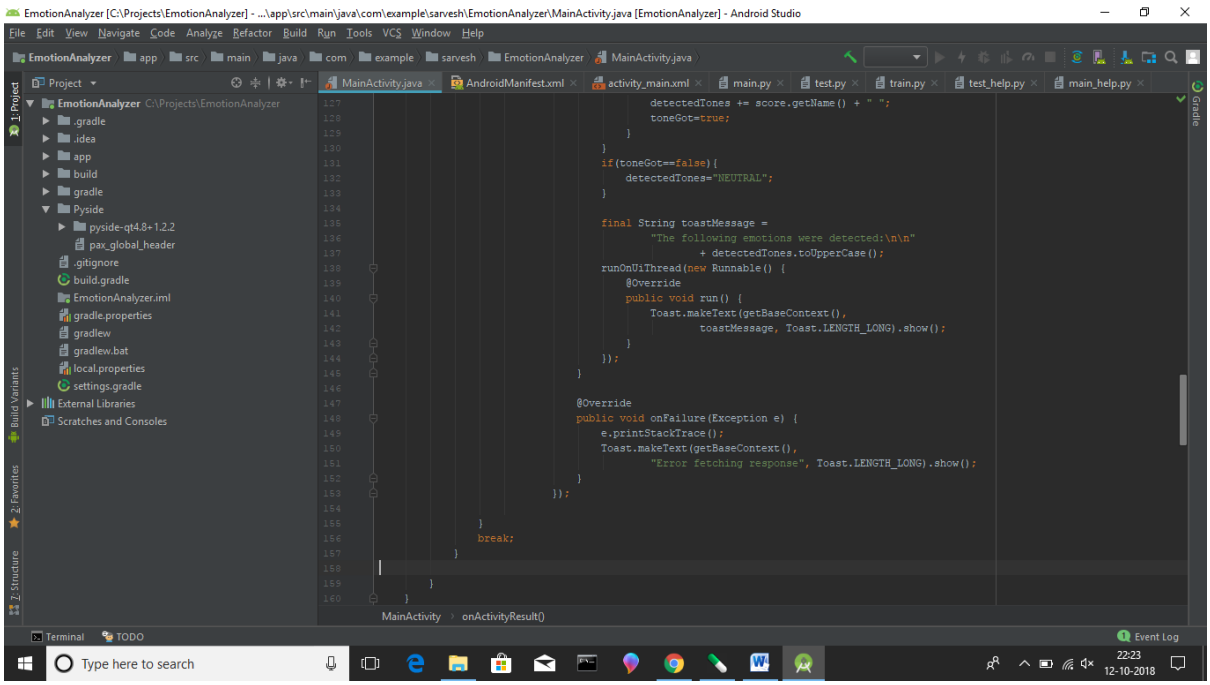
Emotion Analyzer using Voice Recognition

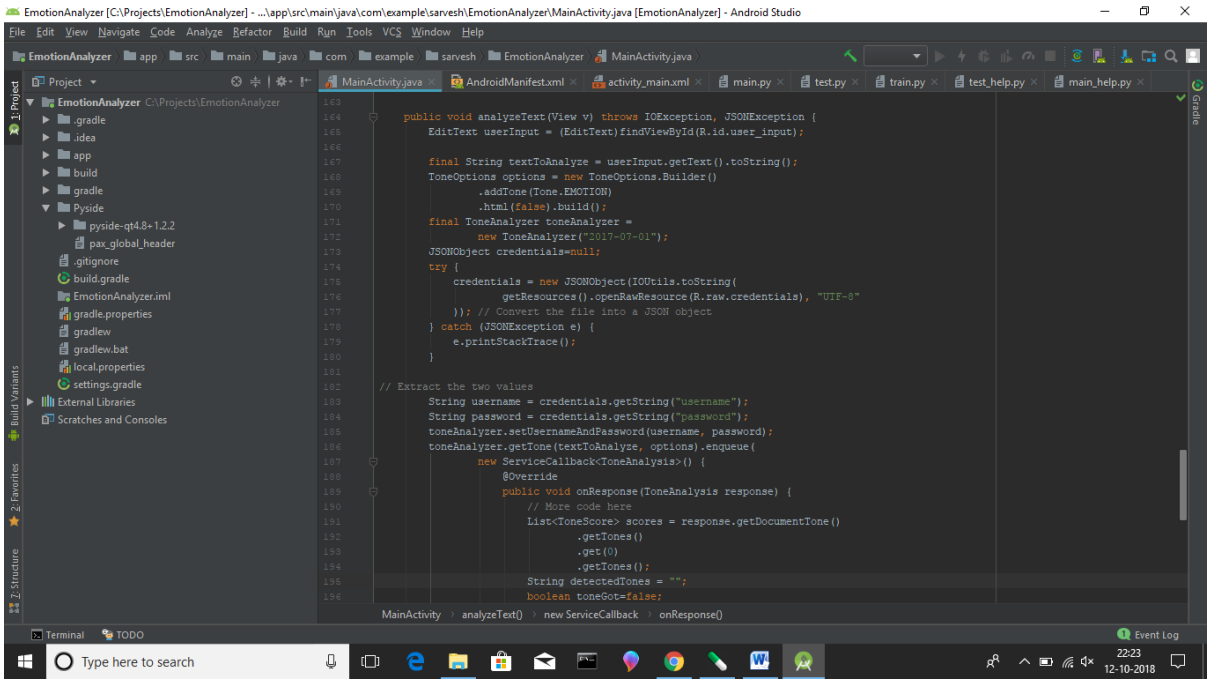
Code :

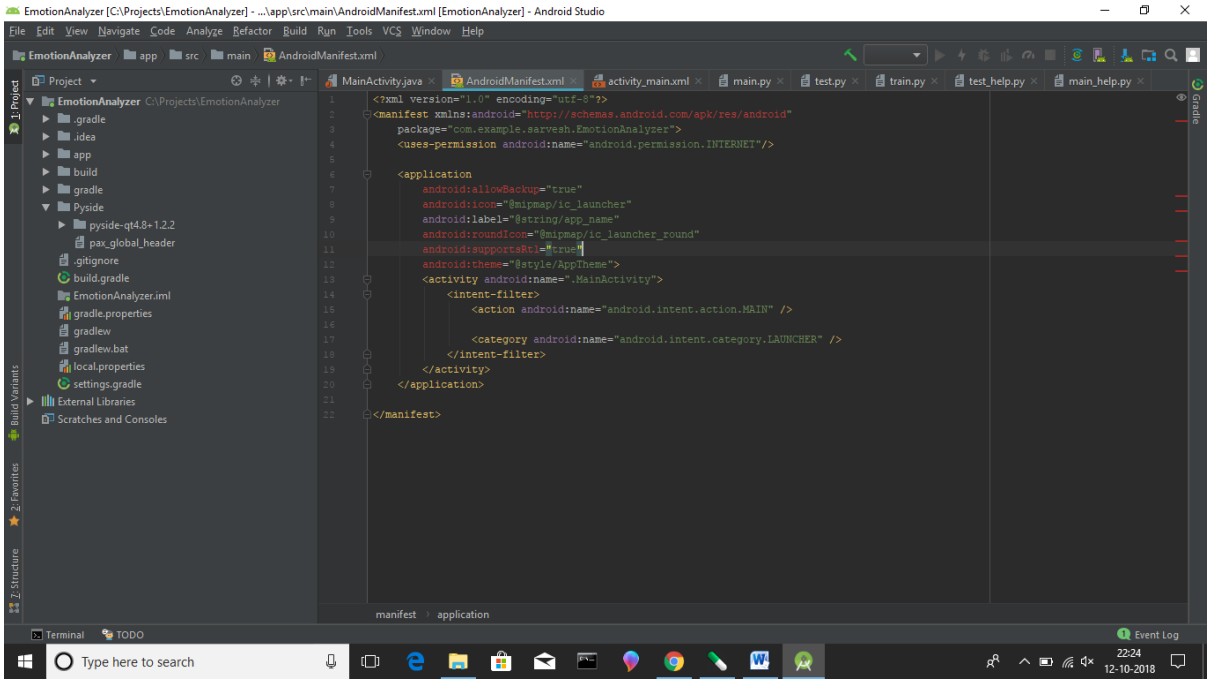


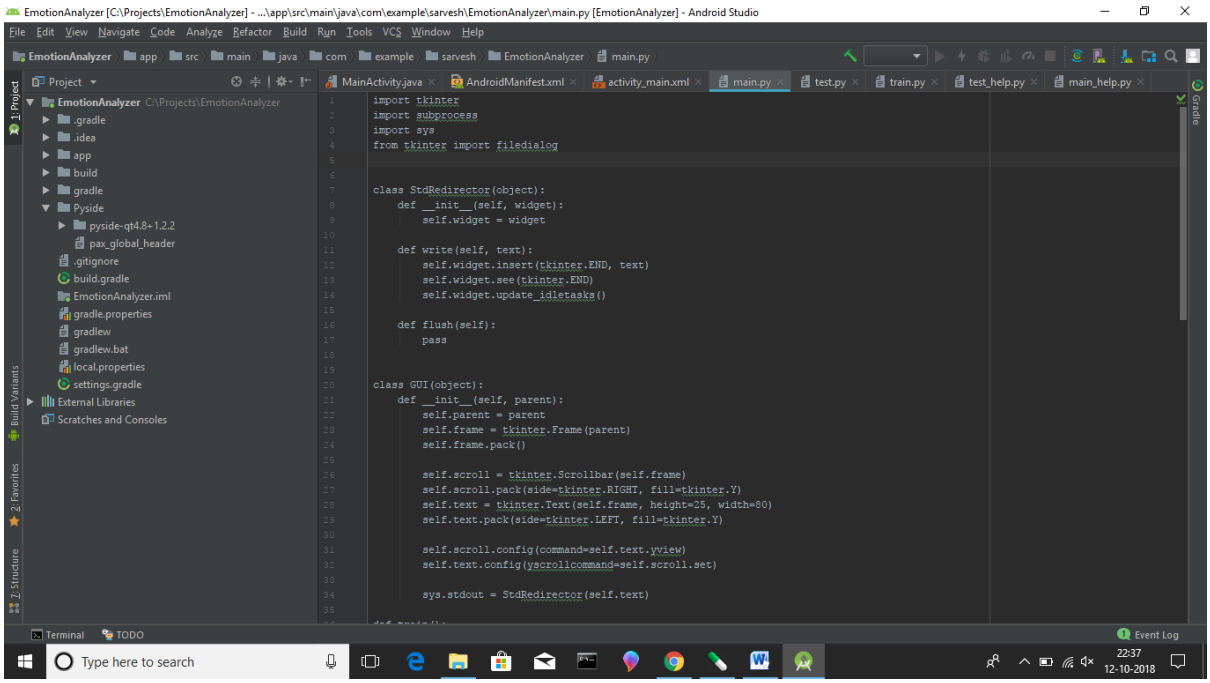


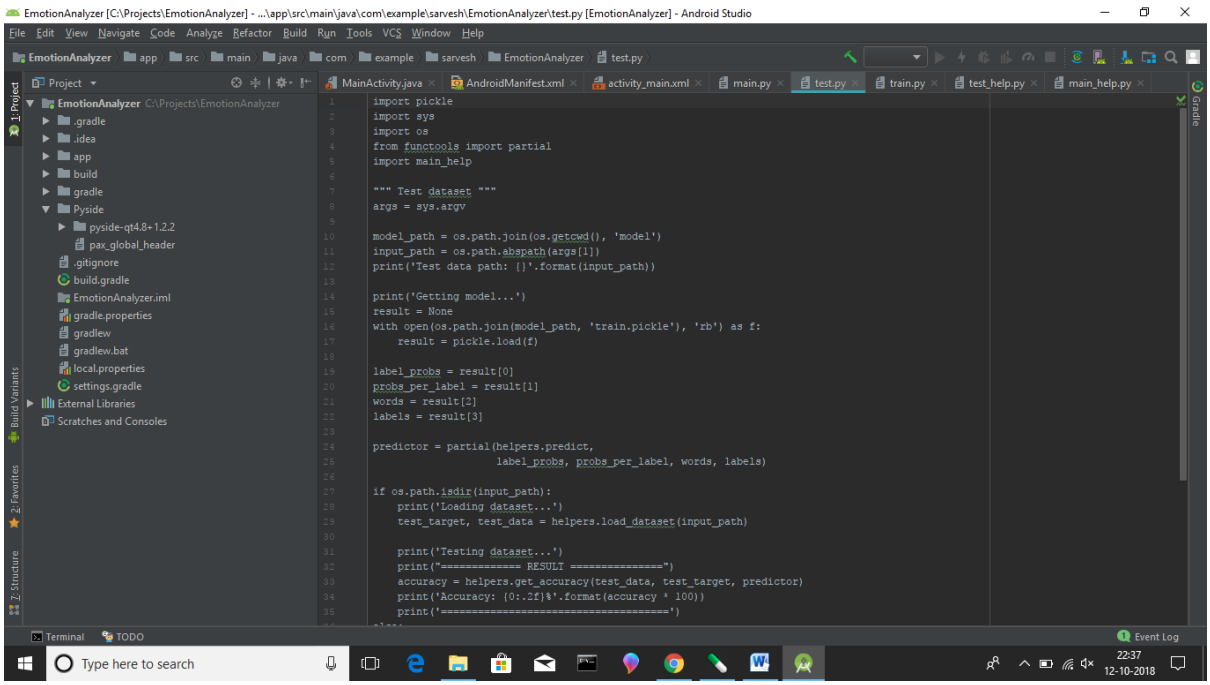

EmotionAnalyzer [C:\Projects\EmotionAnalyzer] - ...\app\src\main\java\com\example\sarvesh\EmotionAnalyzer\MainActivity.java [EmotionAnalyzer] - Android Studio
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
MainActivity.java
AndroidManifest.xml
activity_main.xml
main.py
test.py
train.py
test_help.py
main_help.py
// Extract the two values
String username = null;
try {
username = credentials.getString("username");
} catch (JSONException e) {
e.printStackTrace();
}
String password = null;
try {
password = credentials.getString("password");
} catch (JSONException e) {
e.printStackTrace();
}
toneAnalyzer.setUsernameAndPassword(username, password);
toneAnalyzer.getTone(analyzeSpeech, options).enqueue(
new ServiceCallback<ToneAnalysis>() {
@Override
public void onResponse(ToneAnalysis response) {
// More code here
List<ToneScore> scores = response.getDocumentTone()
.getTones()
.get(0)
.getTones();
String detectedTones = "";
boolean toneGot=false;
for(ToneScore score:scores) {
if(score.getScore() > 0.5f) {
detectedTones += score.getName() + " ";
toneGot=true;
}
}
if(toneGot==false){
detectedTones="NEUTRAL";
MainActivity › onActivityResult() › new ServiceCallback › onResponse()
Terminal
TODO
Event Log
Type here to search
22:23
12-10-2018


EmotionAnalyzer [C:\Projects\EmotionAnalyzer] - ...\app\src\main\java\com\example\sarvesh\EmotionAnalyzer\MainActivity.java [EmotionAnalyzer] - Android Studio
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
MainActivity.java
AndroidManifest.xml
activity_main.xml
main.py
test.py
train.py
test_help.py
main_help.py
detectedTones += score.getName() + " ";
toneGot=true;
}
}
if(toneGot==false){
detectedTones="NEUTRAL";
}
final String toastMessage =
"The following emotions were detected:\n\n"
+ detectedTones.toUpperCase();
runOnUiThread(new Runnable() {
@Override
public void run() {
Toast.makeText(getBaseContext(),
toastMessage, Toast.LENGTH_LONG).show();
}
});
}
@Override
public void onFailure(Exception e) {
e.printStackTrace();
Toast.makeText(getBaseContext(),
"Error fetching response", Toast.LENGTH_LONG).show();
}
});
}
break;
}
}
}
MainActivity › onActivityResult()
Terminal
TODO
Event Log
Type here to search
22:23
12-10-2018

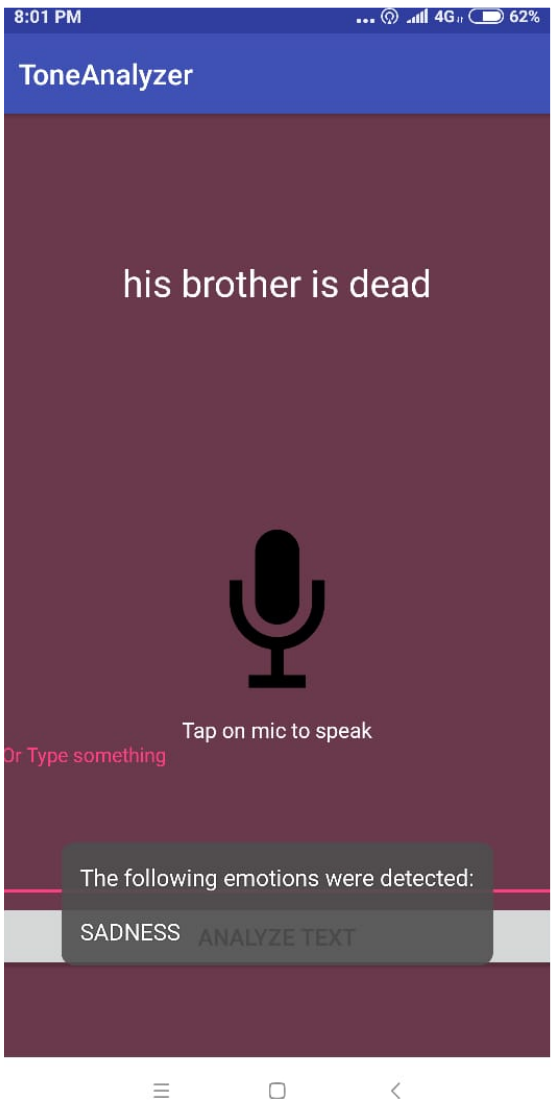

EmotionAnalyzer [C:\Projects\EmotionAnalyzer] - ...\app\src\main\java\com\example\sarvesh\EmotionAnalyzer\MainActivity.java [EmotionAnalyzer] - Android Studio
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
MainActivity.java
AndroidManifest.xml
activity_main.xml
main.py
test.py
train.py
test_help.py
main_help.py
public void analyzeText(View v) throws IOException, JSONException {
EditText userInput = (EditText)findViewById(R.id.user_input);
final String textToAnalyze = userInput.getText().toString();
ToneOptions options = new ToneOptions.Builder()
.addTone(Tone.EMOTION)
.html(false).build();
final ToneAnalyzer toneAnalyzer =
new ToneAnalyzer("2017-07-01");
JSONObject credentials=null;
try {
credentials = new JSONObject(IOUtils.toString(
getResources().openRawResource(R.raw.credentials), "UTF-8"
)); // Convert the file into a JSON object
} catch (JSONException e) {
e.printStackTrace();
}
// Extract the two values
String username = credentials.getString("username");
String password = credentials.getString("password");
toneAnalyzer.setUsernameAndPassword(username, password);
toneAnalyzer.getTone(textToAnalyze, options).enqueue(
new ServiceCallback<ToneAnalysis>() {
@Override
public void onResponse(ToneAnalysis response) {
// More code here
List<ToneScore> scores = response.getDocumentTone()
.getTones()
.get(0)
.getTones();
String detectedTones = "";
boolean toneGot=false;
MainActivity › analyzeText() › new ServiceCallback › onResponse()
Terminal
TODO
Event Log
Type here to search
22:23
12-10-2018

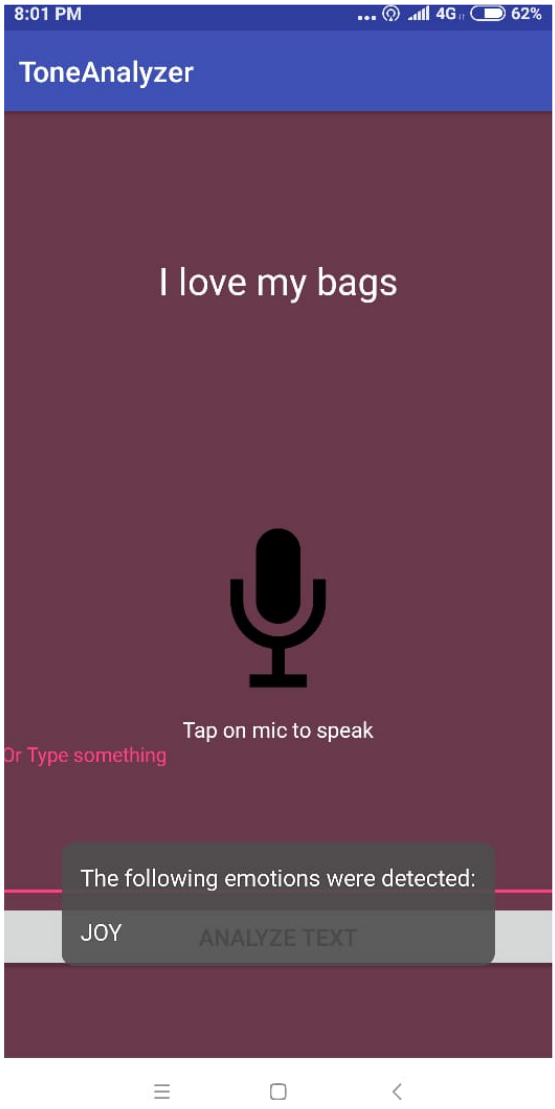

EmotionAnalyzer [C:\Projects\EmotionAnalyzer] - ...\app\src\main\AndroidManifest.xml [EmotionAnalyzer] - Android Studio
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
MainActivity.java
AndroidManifest.xml
activity_main.xml
main.py
test.py
train.py
test_help.py
main_help.py
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
package="com.example.sarvesh.EmotionAnalyzer">
<uses-permission android:name="android.permission.INTERNET"/>
<application
android:allowBackup="true"
android:icon="@mipmap/ic_launcher"
android:label="@string/app_name"
android:roundIcon="@mipmap/ic_launcher_round"
android:supportsRtl="true"
android:theme="@style/AppTheme">
<activity android:name=".MainActivity">
<intent-filter>
<action android:name="android.intent.action.MAIN" />
<category android:name="android.intent.category.LAUNCHER" />
</intent-filter>
</activity>
</application>
</manifest>
manifest › application
Terminal
TODO
Event Log
Type here to search
22:24
12-10-2018

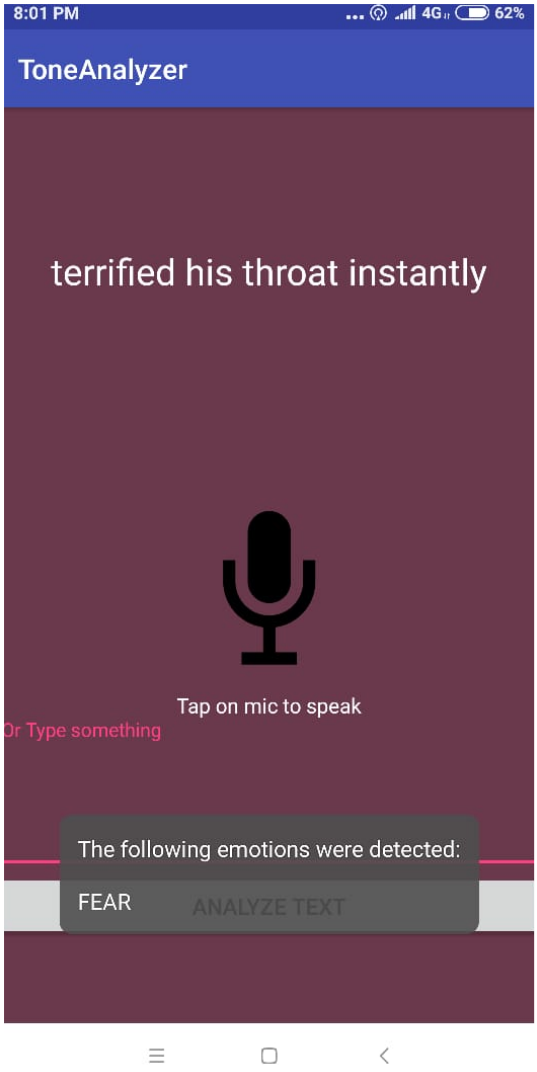

EmotionAnalyzer [C:\Projects\EmotionAnalyzer] - ...\app\src\main\java\com\example\sarvesh\EmotionAnalyzer\main.py [EmotionAnalyzer] - Android Studio
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
EmotionAnalyzer app src main java com example sarvesh EmotionAnalyzer main.py
Project
EmotionAnalyzer C:\Projects\EmotionAnalyzer
.gradle
.idea
app
build
gradle
Pyside
pyside-qt4.8+1.2.2
pax_global_header
.gitignore
build.gradle
EmotionAnalyzer.iml
gradle.properties
gradlew
gradlew.bat
local.properties
settings.gradle
External Libraries
Scratches and Consoles
MainActivity.java
AndroidManifest.xml
activity_main.xml
main.py
test.py
train.py
test_help.py
main_help.py
import tkinter
import subprocess
import sys
from tkinter import filedialog
class StdRedirector(object):
def __init__(self, widget):
self.widget = widget
def write(self, text):
self.widget.insert(tkinter.END, text)
self.widget.see(tkinter.END)
self.widget.update_idletasks()
def flush(self):
pass
class GUI(object):
def __init__(self, parent):
self.parent = parent
self.frame = tkinter.Frame(parent)
self.frame.pack()
self.scroll = tkinter.Scrollbar(self.frame)
self.scroll.pack(side=tkinter.RIGHT, fill=tkinter.Y)
self.text = tkinter.Text(self.frame, height=25, width=80)
self.text.pack(side=tkinter.LEFT, fill=tkinter.Y)
self.scroll.config(command=self.text.yview)
self.text.config(yscrollcommand=self.scroll.set)
sys.stdout = StdRedirector(self.text)
Terminal
TODO
Event Log
Type here to search
22:37
12-10-2018

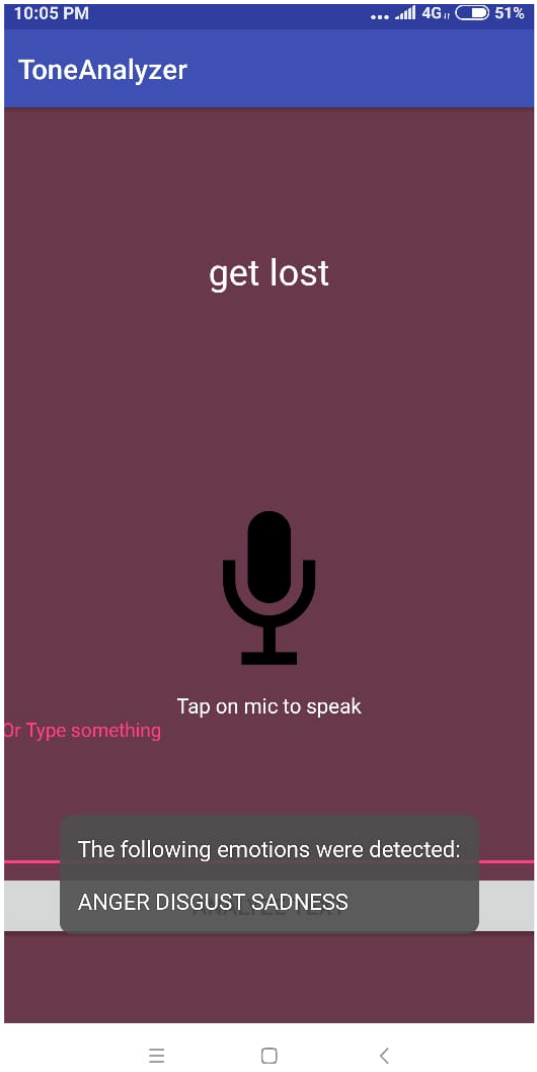

EmotionAnalyzer [C:\Projects\EmotionAnalyzer] - ...\app\src\main\java\com\example\sarvesh\EmotionAnalyzer\test.py [EmotionAnalyzer] - Android Studio
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
EmotionAnalyzer app src main java com example sarvesh EmotionAnalyzer test.py
Project
EmotionAnalyzer C:\Projects\EmotionAnalyzer
.gradle
.idea
app
build
gradle
Pyside
pyside-qt4.8+1.2.2
pax_global_header
.gitignore
build.gradle
EmotionAnalyzer.iml
gradle.properties
gradlew
gradlew.bat
local.properties
settings.gradle
External Libraries
Scratches and Consoles
MainActivity.java
AndroidManifest.xml
activity_main.xml
main.py
test.py
train.py
test_help.py
main_help.py
import pickle
import sys
import os
from functools import partial
import main_help
""" Test dataset """
args = sys.argv
model_path = os.path.join(os.getcwd(), 'model')
input_path = os.path.abspath(args[1])
print('Test data path: {}'.format(input_path))
print('Getting model...')
result = None
with open(os.path.join(model_path, 'train.pickle'), 'rb') as f:
result = pickle.load(f)
label_probs = result[0]
probs_per_label = result[1]
words = result[2]
labels = result[3]
predictor = partial(helpers.predict,
label_probs, probs_per_label, words, labels)
if os.path.isdir(input_path):
print('Loading dataset...')
test_target, test_data = helpers.load_dataset(input_path)
print('Testing dataset...')
print("============= RESULT ==============")
accuracy = helpers.get_accuracy(test_data, test_target, predictor)
print('Accuracy: {0:.2f}%'.format(accuracy * 100))
print('======================================')
Terminal
TODO
Event Log
Type here to search
22:37
12-10-2018

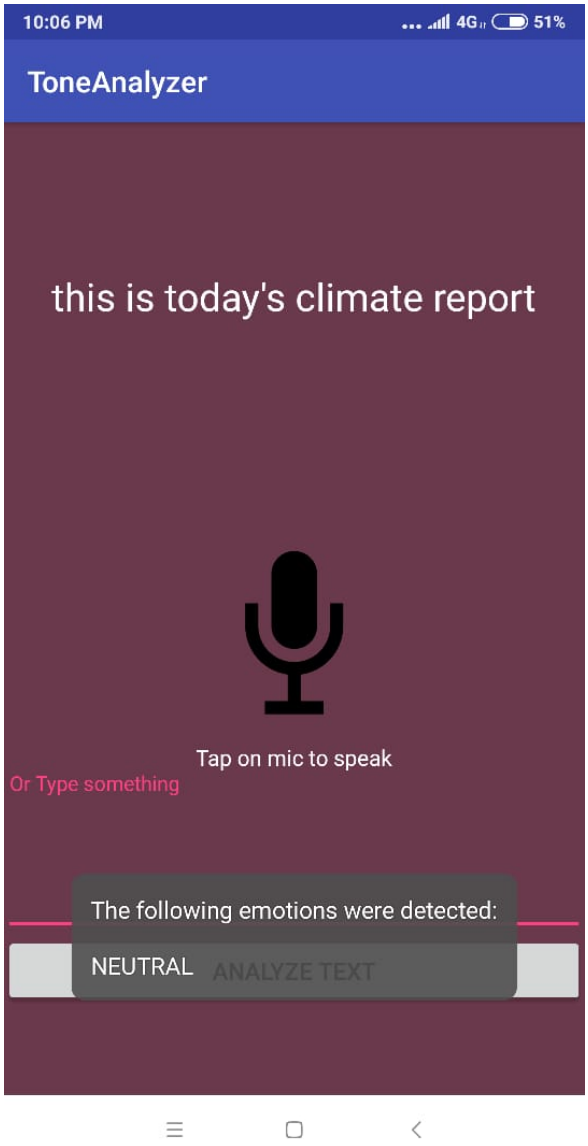
Screenshots :






8:01 PM
62%
ToneAnalyzer
terrified his throat instantly
Tap on mic to speak
Or Type something
The following emotions were detected:
FEAR
ANALYZE TEXT


10:05 PM
51%
ToneAnalyzer
get lost
Tap on mic to speak
Or Type something
The following emotions were detected:
ANGER DISGUST SADNESS


10:06 PM
51%
ToneAnalyzer
this is today's climate report
Tap on mic to speak
Or Type something
The following emotions were detected:
NEUTRAL
ANALYZE TEXT