CMP304

Project Report

Human Emotion Recognition

Instructions:

- This is a template that you will fill to complete your assignment report.

- Please read the assessment brief document before attempting this.

- The gray text is meant as guidelines. You are to replace it with your own.

- Delete the instructions part and any gray text before submission.

- After you complete this report, save it as pdf, and submit it along with the compressed folder of your application.

by: Matthew Wallace

# Introduction

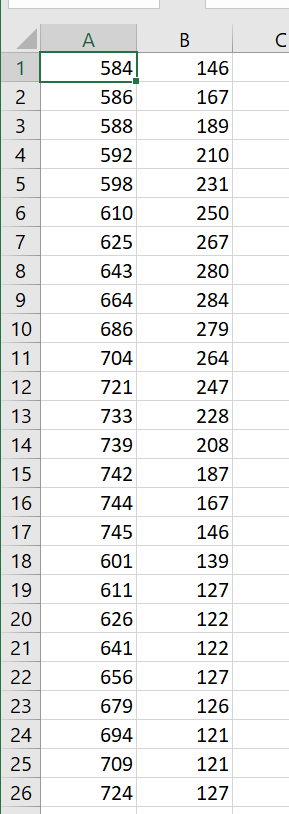
Relevant overview properly setting the context of the project.

The project is based on the face\_recognition python library, one of its python example applications called ‘find\_facial\_features\_in\_picture’ (with my changes to save the results in .csv files) and my own C++ application which uses extracted facial features, saved into .csv files, to learn an emotion and to recognize an emotion from a picture.

# Methodology

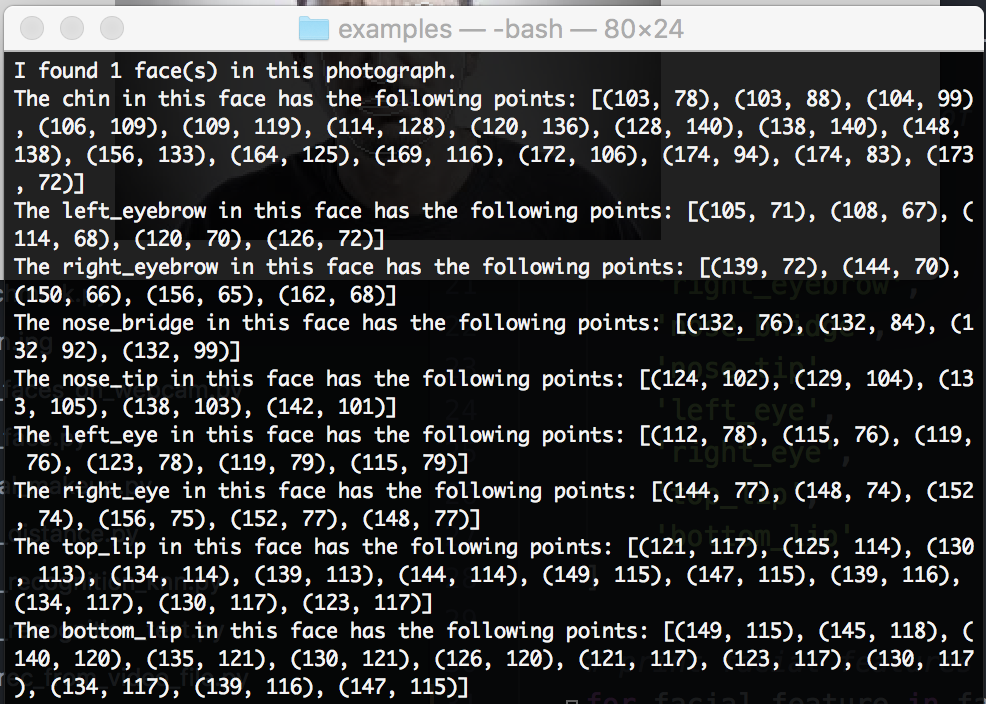
Description of the steps followed and methods used including a complete explanation and rationale for the techniques and features chosen. You should also acknowledge the tools you used.

face\_recognition python library allows for extracting facial features from a picture. It basically just gives a position (relevant to the picture) of the chin, left eyebrow, right eyebrow, nose bridge, nose tip left eye, right eye, top lip, bottom lip. These position are saved in a .csv file that looks like this:

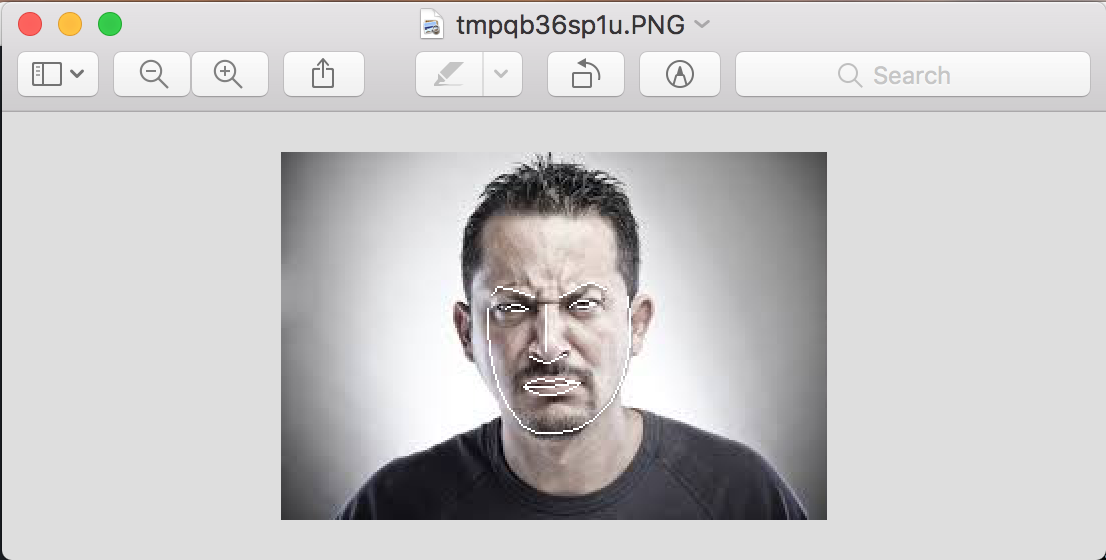


And this is how the facial features extraction of the python application look like in macOS terminal (face\_recognition library works only on Linux and macOS):

Terminal resluts



Extracted facial features



# Results

Comment on the performance of your application, including test cases. Tabulate and discuss your results. A quantitative measure of performance must be presented.

# Conclusions

Full analysis and summary of the project.

# References

A number of references properly cited in Cite Them Right Harvard style.