

## Installation and User Guide to Emotion Detection

1. In a Windows PC, download the 'dist.zip' file. For running the source code directly with Python in all platforms (Windows, MacOS, Linux), please jump to step 9
2. Unzip the file to any location.
3. Please make sure the display scale is set to 100% in the system setting for best viewing experience

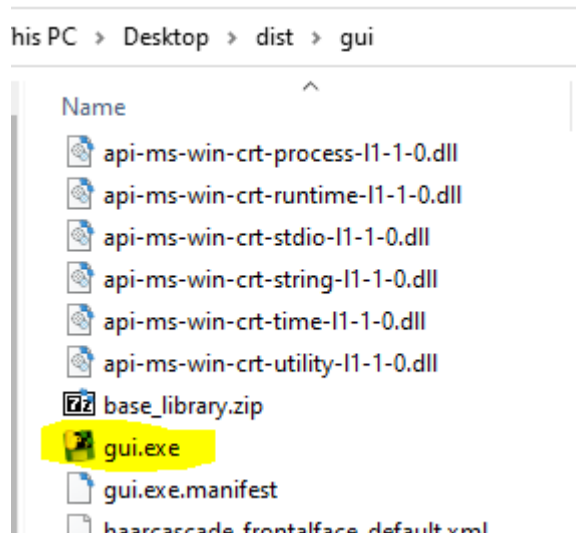
### Scale and layout

Change the size of text, apps and other items

100% (Recommended)

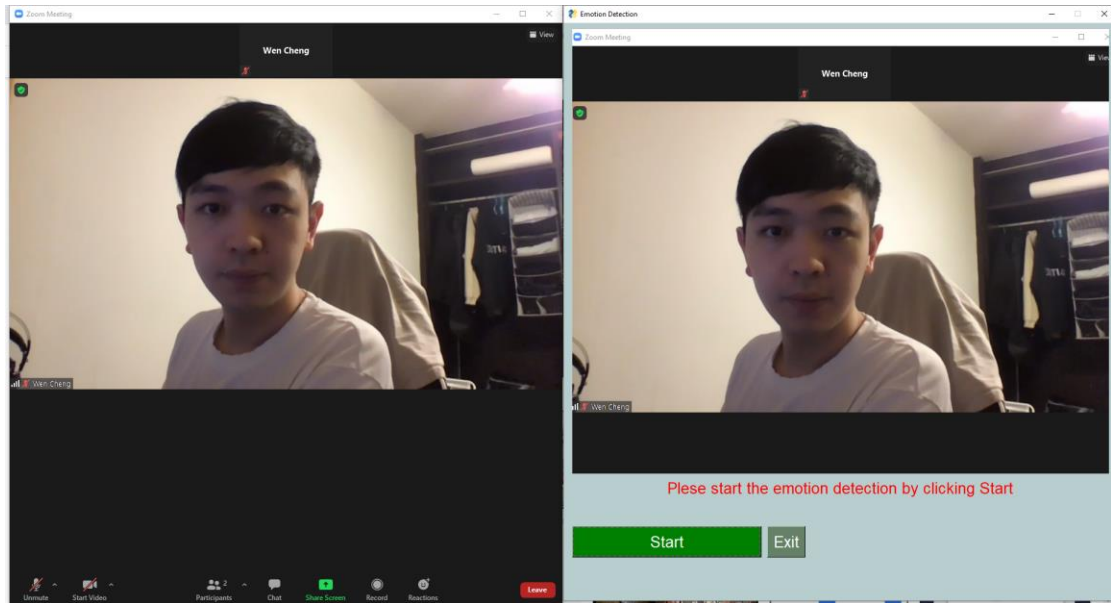
[Advanced scaling settings](#)

4. To launch the application, go to 'gui' folder and double click on the 'gui.exe' file

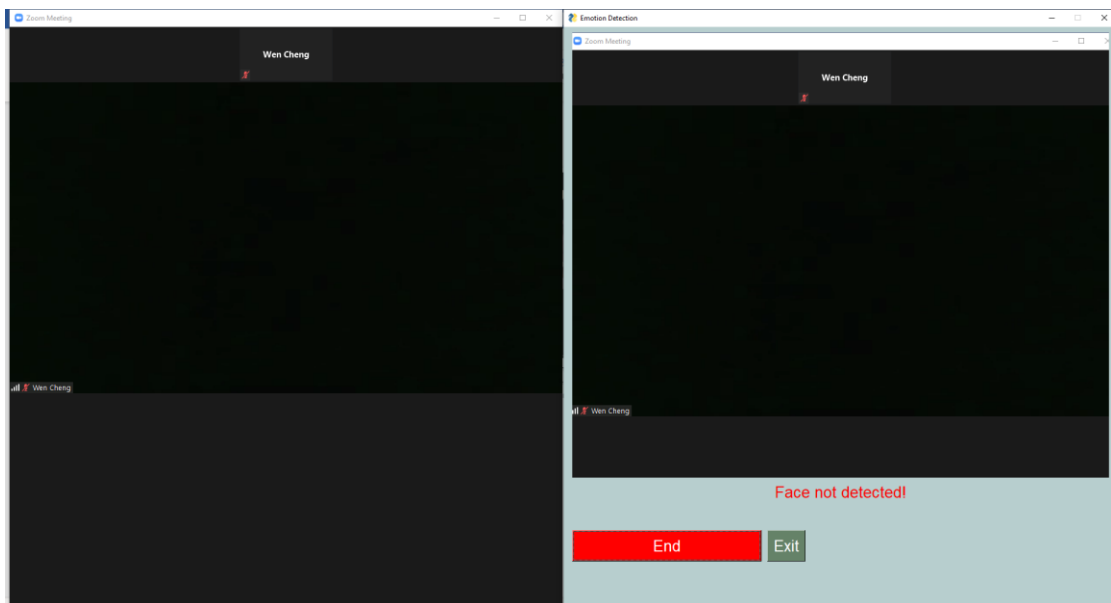


It take a few seconds for the program to open, if no response after launching the file, please download and install the latest Visual C++ Support from <https://support.microsoft.com/en-sg/help/2977003/the-latest-supported-visual-c-downloads> and launch the application again after the installation.

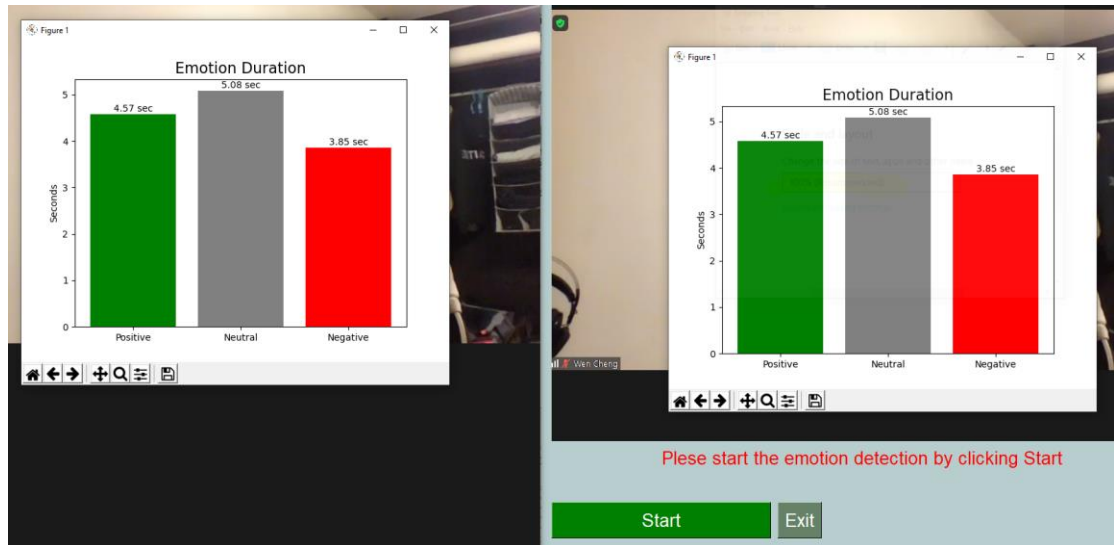
5. The program will be launched at the right side of the screen, occupying half of the whole screen, before starting the session, please place the interview window with the interviewee's face presented on the left half of the screen as illustrated below:



6. Once ready, click the Start button and the application will start to detect the face and predict the emotion of the interviewee, during this session, if the program fails to detect any face, it will display a warning message on the UI



7. Once the interview completes, please click on the 'End' button, a bar chart will be prompt with the duration of each emotion category, user may choose to save the graph if needed or close the graph.



8. Without restarting the application, user may continue with another interview session and repeat step 5-7

**Below are the steps to run the Python source code**

9. Please install Anaconda
10. Create a new environment with below command  

```
conda create -n myenv pip python=3.6
```
11. After environment is created, activate the environment by  

```
conda activate myenv
```
12. Installed all the necessary packages with below commands  

```
pip install --ignore-installed --upgrade tensorflow==2.3.1
```

```
pip install pysimplegui
```

```
pip install opencv-python
```

```
pip install matplotlib
```

```
pip install mss
```
13. After all packages installed, cd to the unzipped directory '/dist/gui/' then run  

```
python gui.py
```

now please follow step 5-7