**Motivation**

* The task is to create an interactive program that reads in a set of emotions from image or video data that uses body language, facial expression, and head gaze, then apply that to a trained model in order to detect emotion, which will output a musical track that can be generated corresponding to the interpreted state of the user’s emotion.
* This task will incorporate all the concepts encountered in assignment 3 and extend it into an interactive program that requires data gathering and cleaning, model creation, interactive design, and a model that is able to generate music as an additional task if time and complexity permits.
* Our project can provide an interactive program that can analyze the connections between physical emotional expression and the abstract emotional expression of music, exploring elements of psychology and music theory.

**Approach**

* To recognize facial data, OpenFace can be a good starting point that provides a framework. However, as a first approach, other methods of model generation will be compared and the best one will be used in the final iteration of the code.
* In this project, we will focus on accuracy of emotional recognition in real time usage, since our output is of a music sample played to the user. Accuracy is essential because any misattribution of emotional cues will result in an output that is jarringly different in theme.

**Data**

**Evaluation**

**Team**

* As a team of two people, the work can be distributed half and half.