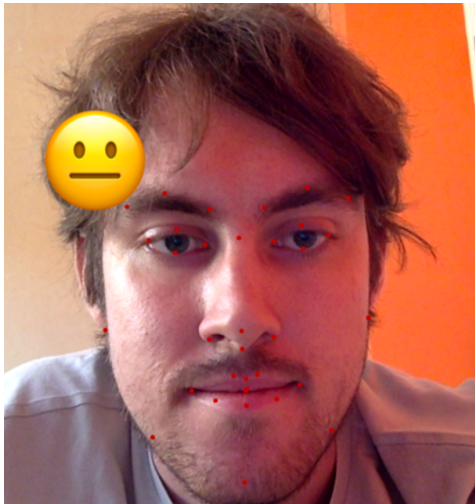


## Mimic Me Project Report

### Display Feature Points

For this task, the function “drawFeaturePoints” was implemented, which takes in the canvas and first face, and after defining a fill style iterates over each feature point co-ordinates of the face drawing a small filled in circle to highlights these positions.



### Show Dominant Emoji

For this task, the function “drawEmoji” was implemented. This function takes in the same parameters as “drawFeaturePoints”, and sets a fill style and font. The size of the font is controlled by the distance between two feature points on the x axis, changing the size of the drawn emoji dependant on the size of the face.

Anchoring the emoji to a particularly point so it stays with the face, the emoji is then drawn.

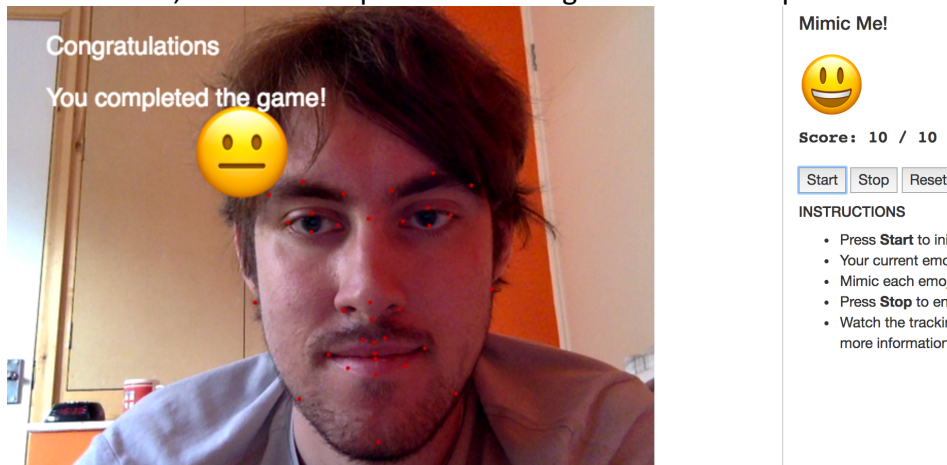
### Implementation of Mimic Me

The main premise of the game is to challenge the user with matching the target emoji with their own expression. This is done by increasing the score of the player each time the dominant emoji matches the target. A success message accompanies the correct matching.

The target emoji and score are set using the “setTargetEmoji” function, and “setScore” functions provided. Variables are set to hold information for scores, target and time passed from a certain event, as well as an array of target emojis and lines for the acting practice mini-game. Additionally, a smaller set of emojis is used to make the game more fun and less frustrating where some expressions made not be recognised as effectively or are too alike to the other emojis.

All the modes are initialised using the function “intialiseGame” which sets the needed variables to base values, and randomises the first target emoji. Additionally, all modes can be reset for a new game using the “gameReset” function.

There are 5 modes, which I shall describe in turn. The first requires the user to mimics expressions until they have managed 10 expressions, where the game is complete. There is no time limit, and this is implemented using the function “updateGameFun”.



The 2<sup>nd</sup> challenges the user to mimic as many expression as possible in a 60 second time limit, from when the first expression is successfully mimed. The game is over once the 60 second time limit is up, and this is implemented using the updateGameTimer function.

The 3<sup>rd</sup> challenges the user to attain the highest streak of matched expressions, where game over is triggered if over ten seconds has passed since the last correct expression matching. This is implemented using the updateGameTimeout function.

The 4<sup>th</sup> is the updateGameTwoPlayerTimer function which implements a game where two players race to mimic the most expressions first within a 60 second time limit. Once the 60s is up the winner is declared.

Lastly acting practice displays a line of text with an accompanying expression. The idea is for the player to read the line and make the expression, where upon a correct match the next line and expression is shown. After all expressions are matched the game is complete.

The mode can be changed by changing the function running “onImageResultsSuccess”.

The feedback function is used to provide feedback for all modes by displaying text on screen, as shown in the screenshot above. -