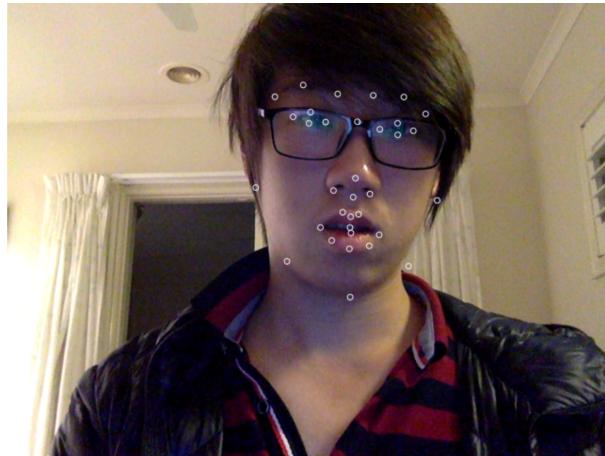


## Task 1: Feature point



### EMOTION TRACKING RESULTS

Timestamp: 88.00  
Number of faces found: 1  
Appearance: {"gender": "Female", "glasses": "Yes", "age": "65+", "ethnicity": "East Asian"}  
Emotions: {"joy": 0, "sadness": 0, "disgust": 16, "contempt": 0, "anger": 0, "fear": 0, "surprise": 10, "valence": -14, "engagement": .56}  
Expressions:  
{"smile": 0, "innerBrowRaise": 0, "browRaise": 6, "browFurrow": 0, "noseWrinkle": 0, "upperLipRaise": 50, "lipCornerDepressor": 0, "chinRaise": 0, "lipPucker": 0, "lipPress": 0, "lipSuck": 0, "mouthOpen": 98, "smirk": 0, "eyeClosure": 0, "attention": 98, "lidTighten": 0, "jawDrop": .67, "dimpler": 0, "eyeWiden": 1, "cheekRaise": 0, "lipStretch": 0}  
Emoji: 😞

### Mimic Me!



Skip

Score: 0 / 1

Start  Stop  Reset

### INSTRUCTIONS

- Press **Start** to initialize the detector.
- Your current emoji will be shown next to your head.
- Mimic each emoji being displayed to score a point!
- Press **Stop** to end the detector.
- Watch the tracking results and log messages for more information.

### DETECTOR LOG MSGS

Start button pressed  
Webcam access allowed  
The detector reports initialized

For this task, I extract the x and y coordinates from the `face.featurePoints` property, then draw them using `ctx.arc()` with white stroke.

## Task 2: Dominate Emoji



### EMOTION TRACKING RESULTS

Timestamp: 25.42  
Number of faces found: 1  
Appearance: {"gender": "Male", "glasses": "Yes", "age": "18 - 24", "ethnicity": "East Asian"}  
Emotions: {"joy": 0, "sadness": 0, "disgust": 1, "contempt": 0, "anger": 0, "fear": 0, "surprise": 0, "valence": 0, "engagement": 0}  
Expressions:  
{"smile": 0, "innerBrowRaise": 1, "browRaise": 0, "browFurrow": 1, "noseWrinkle": 0, "upperLipRaise": 1, "lipCornerDepressor": 0, "chinRaise": 0, "lipPucker": 0, "lipPress": 0, "lipSuck": 0, "mouthOpen": 98, "smirk": 0, "eyeClosure": 0, "attention": 98, "lidTighten": 0, "jawDrop": .67, "dimpler": 0, "eyeWiden": 1, "cheekRaise": 0, "lipStretch": 0}

### Mimic Me!



Skip

Score: 1 / 1

Start  Stop  Reset

### INSTRUCTIONS

- Press **Start** to initialize the detector.
- Your current emoji will be shown next to your head.
- Mimic each emoji being displayed to score a point!
- Press **Stop** to end the detector.
- Watch the tracking results and log messages for more information.

### DETECTOR LOG MSGS

Start button pressed  
Webcam access allowed  
The detector reports initialized

For this task, I calculated the centre anchor of the emoji by averaging out the sum of all x coordinates and y coordinates. Also, I calculated the font-size (in this case the vertical height of the emoji) by choosing the difference of the max and the min y coordinates.

## Task 3: Game implementation

**Mimic Me!**

Score: 1 / 1

Start Stop Reset

INSTRUCTIONS

- Press **Start** to initialize the detector.
- Your current emoji will be shown next to your head.
- Mimic each emoji being displayed to score a point!
- Press **Stop** to end the detector.
- Watch the tracking results and log messages for more information.

**EMOTION TRACKING RESULTS**

```

Timestamp: 25.42
Number of faces found: 1
Appearance: {"gender": "Male", "glasses": "Yes", "age": "18 - 24", "ethnicity": "East Asian"}
Emotions: {"joy": 0, "sadness": 0, "disgust": 1, "contempt": 0, "anger": 0, "fear": 0, "surprise": 0, "valence": 0, "engagement": 0}
Expressions:
{"smile": 0, "innerBrowRaise": 1, "browRaise": 0, "browFurrow": 1, "noseWrinkle": 0, "upperLipRaise": 1, "lipCornerDepressor": 0, "chi
  
```

**DETECTOR LOG MSGS**

```

Start button pressed
Webcam access allowed
The detector reports initialized
  
```

For the game implementation, I added the respective `setTargetEmoji()` with `chooseRandomEmoji()` and update functions in respective event listeners. I stored the current score, total score and current emoji as variables through the game, by default, there are ten rounds. Furthermore, I found out sometimes it's a bit hard for me to mimic some emojis, so I added a Skip button to pass the current one and jump to next one.