

## 1. Display Feature Points

This functionality is done by:

```
function drawFeaturePoints(canvas, img, face) {  
  // Obtain a 2D context object to draw on the canvas  
  var ctx = canvas.getContext('2d');  
  //console.log(face);  
  
  ctx.strokeStyle = 'white';  
  
  // Loop over each feature point in the face  
  for (var id in face.featurePoints) {  
    var fp = face.featurePoints[id];  
    ctx.beginPath();  
    ctx.arc(fp.x, fp.y, 2, 0, 2*Math.PI);  
    ctx.stroke();  
  }  
}
```

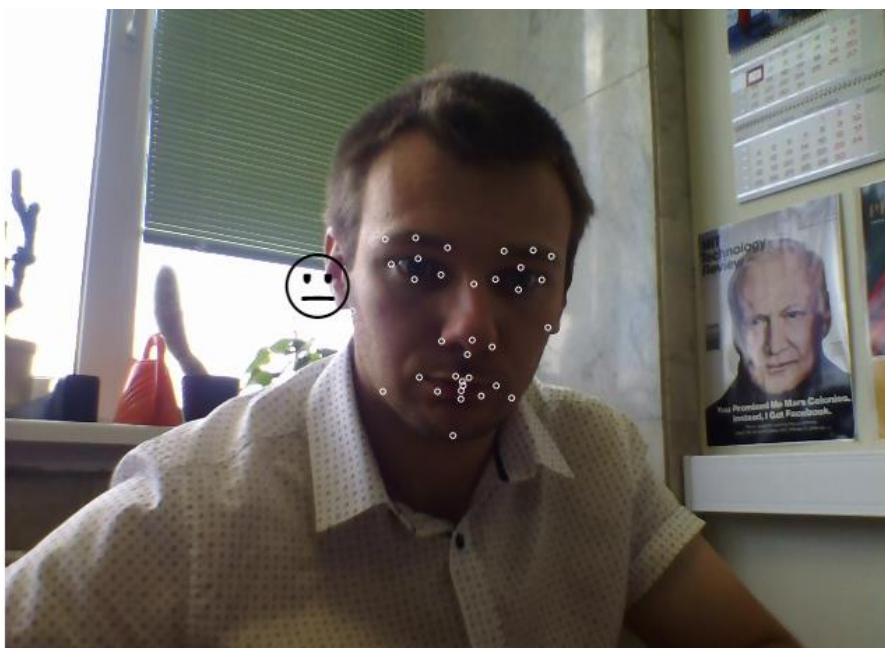
## 2. Show Dominant Emoji

This functionality is done by:

```
function drawEmoji(canvas, img, face) {  
  // Obtain a 2D context object to draw on the canvas  
  var ctx = canvas.getContext('2d');  
  
  ctx.font="50px serif";  
  ctx.fillStyle = 'black';  
  var fp = face.featurePoints[0];  
  
  ctx.fillText(face.emojis.dominantEmoji, fp.x-50, fp.y);  
}
```

Coordinates (fp.x-50, fp.y) ensures, that emoji is displayed near the face

The result of 1 and two is shown in the picture:



### 3. Implement Mimic Me!

This functionality is done by:

```
function playGame(canvas, img, face) {  
  //randomly select emoji  
  function setRandomTarget() {  
    target = emojis[Math.floor(Math.random() * (emojis.length - 1))];  
    setTargetEmoji(target);  
    console.log(target);  
  }  
  
  //in case game is just started  
  if (target == null) {  
    setRandomTarget();  
  }  
  
  //in case user was able to mimic emoji  
  if (target == toUnicode(face.emojis.dominantEmoji)) {  
    setRandomTarget();  
    score = score + 1;  
    setScore(score);  
  
    var fp = face.featurePoints[0];  
    var ctx = canvas.getContext('2d');  
    ctx.font="50px serif";  
    ctx.fillStyle = 'black';  
    ctx.fillText("Great!", fp.x-50, fp.y+100);  
    ctx.font="42px serif";  
    ctx.fillStyle = 'white';  
    ctx.fillText("Great!", fp.x-50, fp.y+100);  
    setTimeout(';', 2000);  
  }  
}
```

The score is increased every time user mimics emoji:

#### Mimic Me!



Score: 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.