Creator Statement

Creator statement (600-900 words) discussing the tech and its useful/lessness. The two perspectives can be in dialogue, or not.

The project I worked on was named “HOASH” or “Head on a Shtick”. The title of the project is a word play on a quote from the movie “American Psycho”. The technologies I used were as follows: a pi camera module, Raspberry Pi, LED light bulbs, a breadboard, a button. Also, python3 libraries such as picamera2, time, requests, gpiozero, signal, random. Lastly, I used an emotion detection API called cameralyze to build my project. HOASH is housed in a cardboard box, and has 2 LED lights, a camera, and a button.

The functionality of the project is simple. The user is given a prompt on an emotion to express. Then, the user is prompted to show that emotion and take a picture of themselves using the HOASH by pressing the button. If the user shows the correct emotion, the HOASH lights up the green LED light and gives the user a point. Otherwise HOASH lights up the red LED light and doesn’t give the user a point.

The way HOASH works is that, under the hood, it is a python program run on a Raspberry Pi. The python program generates a random emotion for the user to express using the random python library. After that, the python program waits for a user to press a button, listening through the gpiozero library. Once the user presses a button, the python program takes a picture of the user using picamera2 and sends it off to the emotion detection API by cameralyze to be assessed using the requests library. After getting the emotion response from the API, the python program compares it to the emotion the user was supposed to express. If the user expresses the right emotion, then the python app uses the gpiozero library to light up a green LED light and give the user a point. Otherwise, the python app lights up the red LED light and doesn’t give the user a point.

I initially wanted HOASH to be able to read a user's emotion in real time, and then show the emotion of the user using LED lights. However, it was almost impossible to find free API's that allowed me to do real time emotion detection. Also, just detecting a user's emotion seemed rather boring. So, I decided to pursue the current version which tells the user an emotion to display, takes a picture, then grades the user on whether they were able to display that particular emotion.

When I started building HOASH my goal was to build a project that has no real utility. One might think that HOASH has utility, after all it could help one to detect their emotions. Perhaps one could interpret being able to detect their own emotions as a use case of HOASH. However, we humans are especially good at detecting emotions on faces, whether it is our own or not. So, having an external machine that does this emotion detection does not provide much utility, especially given how you have to keep it plugged to a socket at all times.

HOASH overcomplicates a task that can easily be accomplished by a human which is emotion detection. Also, the core functionality of HOASH is not for utility either. HOASH allows users to gamify their emotion expressions, so it is more of an art piece rather than a device that provides utility to its users. This gamification of emotions aspect of HOASH makes it clear that this project was not made with utility in mind as gamification overcomplicates the usability of the only functionality of HOASH that could be called a utility project which is the emotion detection. As the emotion detection mechanism is hidden behind a layer of gamification, saying HOASH has any utility makes zero sense. In conclusion, HOASH is a project that has no utility.