# Lab 7 - Face + Eye Detection
# Due 11/5/2024

## 1 Introduction

Training a model to detect faces in an image will take a very long time to do from scratch. Luckily there are already predefined face detection models that are a part of the OpenCV library. Your job is to use one of these premade models to detect faces and also eyes in a video.

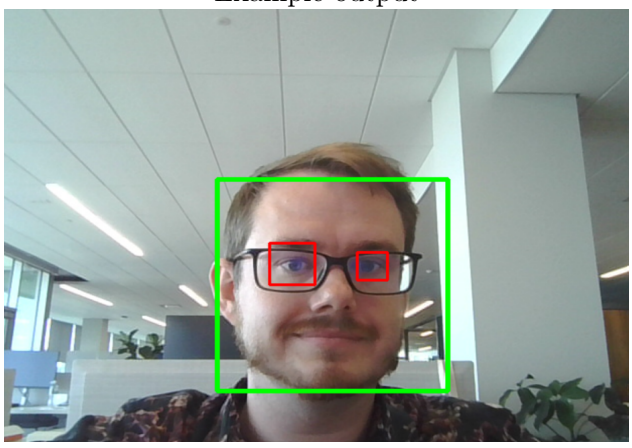
Because there are so many tutorials on how to do face detection with Python and OpenCV you must expand upon those tutorials to do something extra with the regions that are found from running a face and eye detection algorithm.

**You can use any built in function in python that does not require the TAs to download extra libraries.**

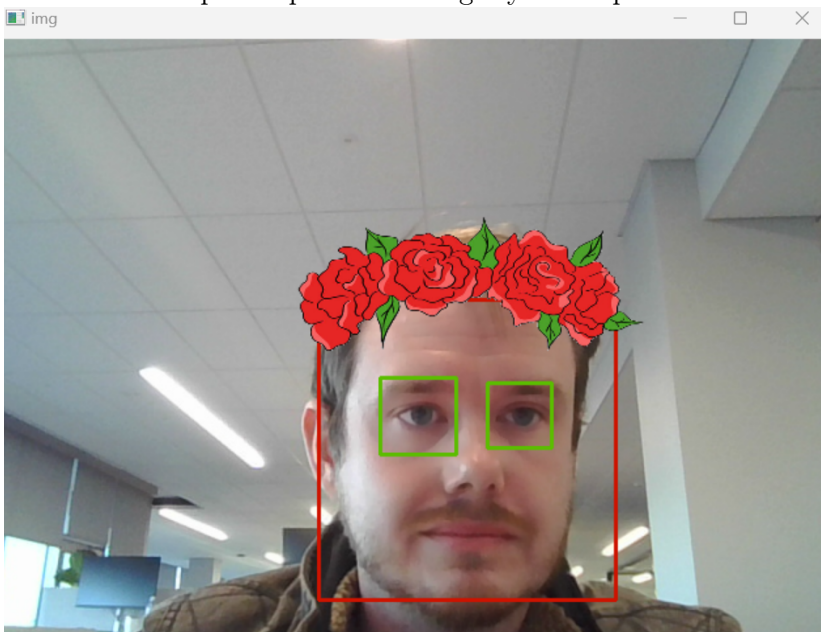
## 2 Grading (Out of 100 points)

- 10 Points : Add your name and date to the beginning of your code.
- 10 Points : Use appropriate comments throughout your code.
- 30 Points : You are able to detect multiple faces in a video.
- 30 Points : You are able to detect multiple eyes in a video.
- 20 Points : Do something with the defined regions(i.e invert the eyes.)

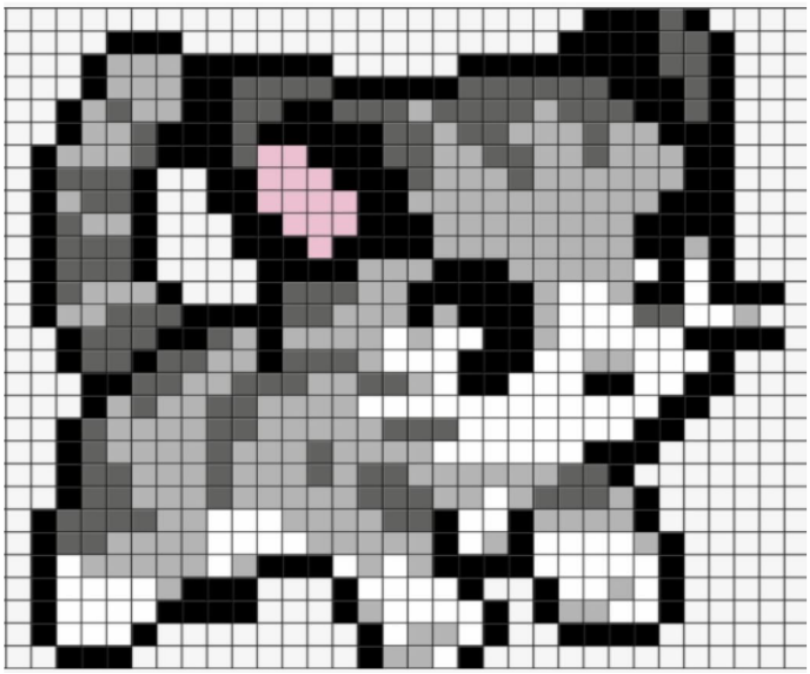
Example output



Example output that will get you full points.




## 3 How to turn in

You must submit a zip folder that includes all files, folders, and images that are required to run your program. Name the zip folder "Lab7-Lastname.zip" and upload it to canvas.

Good Luck Cat!