## # Object Detection & Object Tracking Project

## ## Setup Instructions:

- 1. Clone the repository to your local machine.
- 2. Import cv2 library to notebook
- 3. Download the pre-trained Haar cascades for face, eye, and full body detection and place them in the 'haarcascades' directory.
- 4. Ensure that your Python environment is correctly configured.

## ## Issue Log:

- \*\*Issue 1:\*\* Eye detection accuracy is low.
- \*\*Resolution:\*\* Experimented with different parameters for the eye cascade classifier.

Decreased scaleFactor and minNeighbors values to improve accuracy.

- \*\*Link to Stack Overflow:\*\* [Stack Overflow Issue Link]

https://stackoverflow.com/questions/15403850/opencv-how-to-improve-accuracy-of-eyes-detection-using-haar-classifier-cascade

- \*\*Issue 2:\*\* Does detection work with cartoons?
- \*\*Resolution:\*\* Experimented with different cascade classifiers, none worked, eventually went to Stack Overflow and realized the ones I'm using wouldn't work for cartoons.
- \*\*Link to Stack Overflow:\*\* [Stack Overflow Issue Link] https://stackoverflow.com/questions/61138383/unable-to-detect-faces-of-cartoon-images

## ## Additional Notes:

- This project uses OpenCV for object detection and visualization.
- Ensure that the 'Dataset' directory contains sample images and videos for testing the model.