PYTHON MODULES
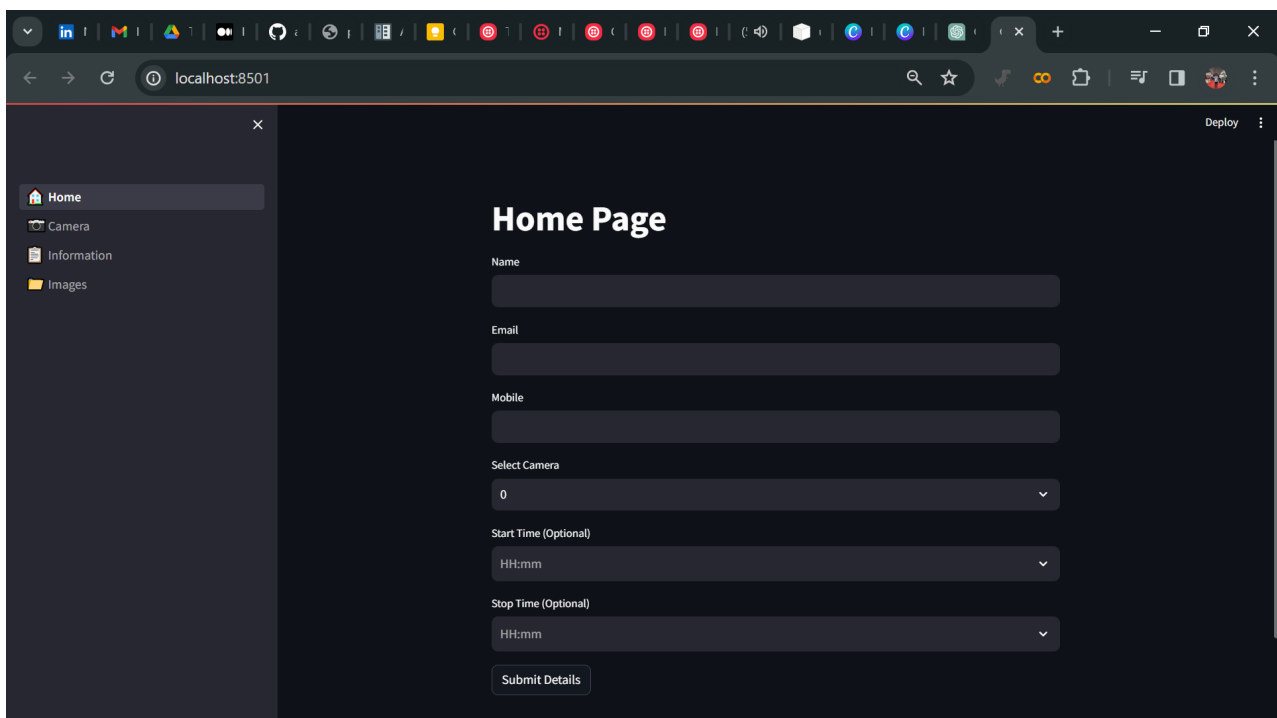
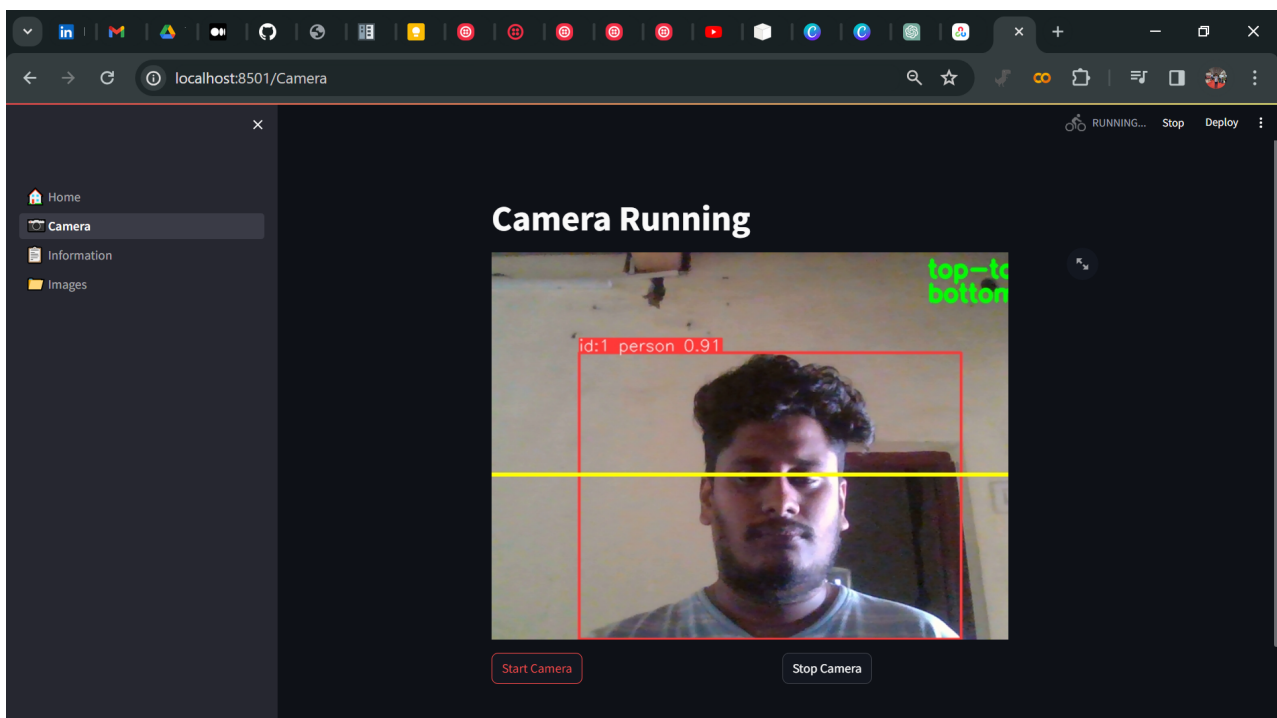## USED IN MY RECENT COMPUTER VISION PROJECT

ARUN ARUNISTO

Streamlit

Streamlit is an open-source Python library that is designed to simplify the process of creating web applications for data science and machine learning. It allows developers and data scientists to build interactive and data-driven web applications with minimal effort. Streamlit is particularly popular for its ease of use and quick prototyping capabilities.
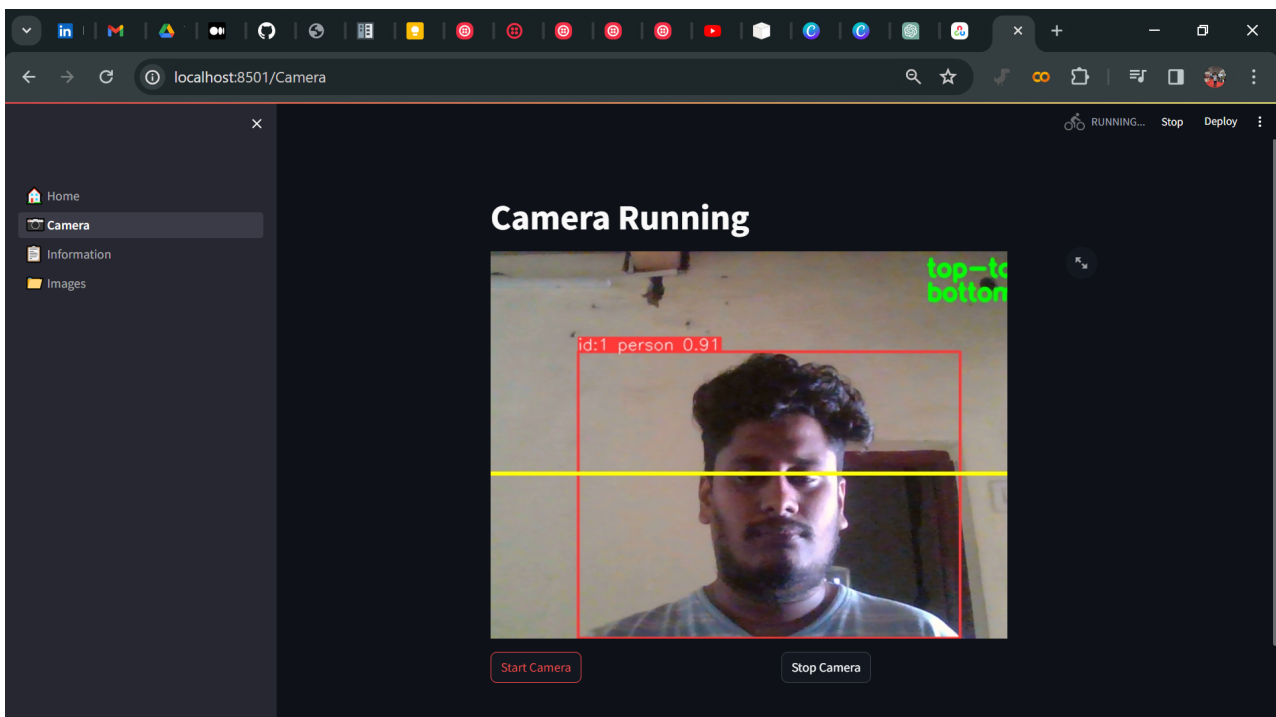
Opencv

OpenCV (Open Source Computer Vision Library) is an open-source computer vision and image processing library designed for real-time computer vision applications. It is written in C++ and has bindings for various programming languages, including Python. The Python binding is known as **opencv-python**.

Ultralytics

Ultralytics primarily refers to the **Ultralytics YOLO (You Only Look Once)** project, specifically the YOLOv8 (You Only Look Once version 8) implementation. YOLO is a popular real-time object detection system known for its speed and accuracy.

YOLO is a family of object detection algorithms that divide an image into a grid and predict bounding boxes and class probabilities directly from the entire image. This differs from traditional object detection approaches that involve sliding windows or region-based methods.

PyDrive

PyDrive is a Python library that provides a simple interface to interact with Google Drive using the Google Drive API. It allows developers to programmatically access, upload, download, and manipulate files and folders on Google Drive from within their Python scripts or applications. PyDrive simplifies the process of integrating Google Drive functionality into Python projects.

Twilio

Twilio is a cloud communications platform that provides a set of APIs (Application Programming Interfaces) for building and integrating various communication features into web and mobile applications. It enables developers to easily incorporate voice, messaging, video, and other communication functionalities into their applications without having to build and manage complex infrastructure.
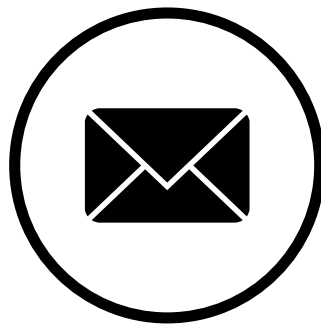
I used twilio on my project for sending messages (alert) using whatsapp.

Using Twilio for sending messages via WhatsApp is a common and powerful use case. WhatsApp for Business API, provided by Twilio, allows businesses to interact with their customers on the WhatsApp platform programmatically.

smtplib

smtplib is a Python library that provides a simple way to send emails using the **Simple Mail Transfer Protocol (SMTP)**. SMTP is the standard protocol for sending emails across the Internet. The smtplib library is part of the Python Standard Library, making it readily available for use without the need for additional installations.

PyGithub

PyGitHub is a Python library that serves as a wrapper around the GitHub REST API. It simplifies interactions with the GitHub platform by providing a convenient and Pythonic interface for working with repositories, issues, pull requests, users, and other GitHub resources.