**Assignment 6**

**Use Case 2**

**VisDrone-DET2018: The Vision Meets Drone Object Detection in Image Challenge**

**Objective:**

The VisDrone-DET2018 challenge aims to bridge the gap between current object detection performance and the practical needs of drone platforms. To achieve this, the challenge organizes a large-scale object detection competition and releases a comprehensive dataset specifically collected from drone-based imagery.

**Real-Time Impact:**

Enhanced Robustness: By focusing on drone-based object detection, the challenge promotes improvements in detection algorithms, making them more robust for real-time applications.

Practical Applications: The advancements achieved through this challenge have significant implications for various practical scenarios, including video surveillance, autonomous driving, and image understanding.

Algorithm Development: The challenge encourages the development of advanced, real-time detection systems specifically tailored for drone platforms, pushing the boundaries of current technology.

Through these efforts, VisDrone-DET2018 not only drives innovation in object detection but also ensures that these advancements are applicable in real-world scenarios, particularly those involving drones.

**Dataset:** <https://www.kaggle.com/datasets/wwj0510/visdrone/data>

**Code:** <https://github.com/rubelbinu/AeroWatch--Capstone-Project>

**Link to Docker Hub:** <https://hub.docker.com/layers/rubelbinu/image-classifier/latest/images/sha256:cab23bc66bb80deb6bc1e6017a60cfdcb8d5b72ea06cd0afbafb674f8b7a8a07>

**Instruction to build the docker container**

Step 1: Create a Dockerfile

Step 2: Ensure Requirements File is Present

Step 3: Build the Docker Image

* Build the Docker Image

*docker build -t image-classifer .*

* Run the Docker Container

*docker run -p 8501:80 image-classifer*