Technical Assessment

This document outlines the development of microservice consisting of two main components: a UI backend service and an AI backend service.The UI end takes the image input from the user. The AI backend utilizes a lightweight open-source model to perform object detection and returns the results in a structured JSON format. The two components communicate seamlessly to provide a comprehensive solution to the user.

Prerequisites

To successfully replicate this solution, ensure you have the following installed:

- **Docker**: For containerization of the application.
- **Python (Flask or FastAPI)**: For building the backend services.
- **Lightweight Detection Model**: Any open-source model suitable for object detection (e.g., YOLO, MobileNet SSD,etc)

(for reference use:- https://github.com/ultralytics/yolov3) for detection, if you dont have GPU, use CPU to complete your task

Deliverables

- Your task project folder should be zipped and mailed to us,such that we should be able to replicate your solution in our system or share your **github private link**.
- A documentation to your project solution, essentially the steps, how did you to reach to the solution (any reference you took from anywhere mention it in the documentation)
- Output images (containing the bounding box) and corresponding json files.