Abandoned Object Detection System

Overview

This repository contains the implementation of an abandoned object detection system using the YOLO (You Only Look Once) object detection framework integrated with OpenCV. The system is designed to process real-time video feeds, ensuring timely response and intervention in case of abandoned objects.

Requirements

- Python 3.x

- PyCharm (or any preferred Python IDE)

- OpenCV

- YOLO

Installation

1. Install required Python packages:

    pip install -r requirements.txt

2. Download YOLO pre-trained weights and configuration files from the official YOLO website :

(https://pjreddie.com/darknet/yolo/).

3. Configure YOLO by updating the paths in the YOLO configuration files.

Usage

1. Open the project in PyCharm.

2. Run the `trail.py` script.

   Python trail.py

3. The system will start processing real-time video feeds.

Customization

Adjust YOLO and OpenCV parameters in the `trail.py` script to optimize resource usage and performance.

Alerts

 Implement alerting mechanisms based on the detected abandoned objects using additional libraries or external services.

Contributing

Contributions are welcome! Feel free to open issues or submit pull requests to improve the abandoned object detection system.