

## Road Guard System STIRLING



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## Problem statment



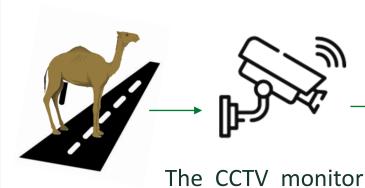
The aim of this project is to develop a system that detects wild animals. The idea is inspired because of the increase in the number of traffic accidents and deaths due wild animals crossing the roads.

### **Objectives**

- To develop Road Guard controller application.
- To detect the animals a currently.
- To develop driver warning to inform ROP.
- To analysis the data of animals crossing.
- To develop an AI model that can predict accidents caused by animals.

### Methodology & Solution

Road Guard System is developed using Agile Methodology to implement the following solution:



Animals

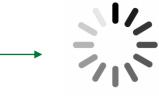
crossing

the road.



Stream live video.

and



Neural



Network

detect Stray Animals.

to



Sign alarm Driver Drivers according to the animal that is detected.

Store the Detection

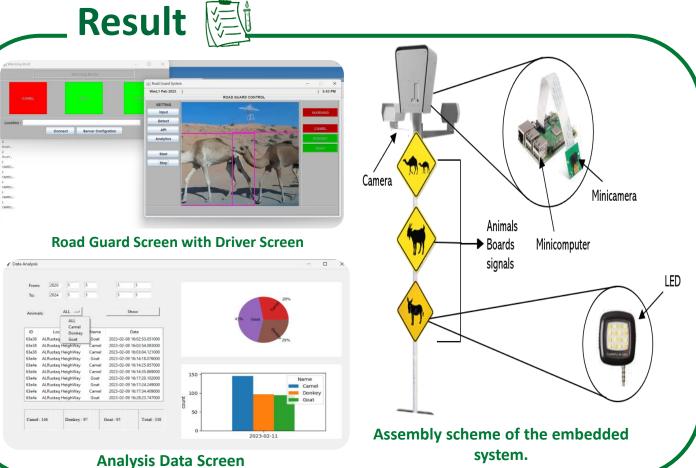
Events.





Admin Receives a warning notification and sends a team to the location. This system can show many features like predictions of accidents caused by animals and show analysis of animals that are crossing the road, among other features.

The



### Conclusion **C**



- Reducing the number of accidents and deaths due to animals.
- View an analysis of animals with detailed data for the type of animal and the time and location they are monitored on the streets.
- Predict Rate of Accident for each highway by density of wild animals Detection and driver's speed.
- Achieve 2040 Omani vision to enhance the concept of smart cities.

# Tools 3



















### Future upgrades 📜



- Detector vehicle accidents caused by wild animals, then inform the nearest hospital and police station.
- Monitoring the speed of vehicles while detecting animals on the road. If the driver doesn't slow down, a traffic violation will be recorded.





