

# Team: Quirks

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Domain: Image Processing

Problem statement:

Object detection and classification using digital image processing.



# ABSTRACT

- **This Project creates a Machine Learning model that will detect a car in a livestream or video and recognize characters on number plate of the car.**
- **Secondly , it will use the characters and fetch the owners information using RTO API.**
- **A web portal is created where all these information will be displayed.**



# Novelty

- Object detection is integrated with API support for benefit to humankind.
- Usually Machine Learning models are used for object detections or vehicle detection to help traffic issues, this is one step more and can be of much help.
- Beneficial in cases of thefts, accidents and other crimes.



# Technology stack

- **HTML**
- **CSS**
- **JAVASCRIPT**
- **PYTHON**
- **FLASK FRAMEWORK**
- **MACHINE LEARNING**



# Software Implementation

- The frontend has HTML, CSS and Javascript integrated to create a web portal .
- The python code takes the image as input to return the number on the number plate using CNN model.
- The number is connected and taken to RTO API to fetch details of the car
- The details are displayed in the portal.



# Business Scope

- With the increasing number of accidents, in most of the cases accidents are caused using cars.
- This portal can be of great help by fetching the information of the person involved
- And further action can be taken.
- Thus easing the crime investigation process
- Being of such great help, and feature additions in future, the scope is infinite.

**THANK YOU .**

