

AUTOMATED TOLL TAX SYSTEM

I came up with a solution that can solve all the chaos.

This will follow up in the following manner

Step 1 : Driver gets to the automated area

Step 2 : Let the system scan the number plate (ANPR) Image Processing!!

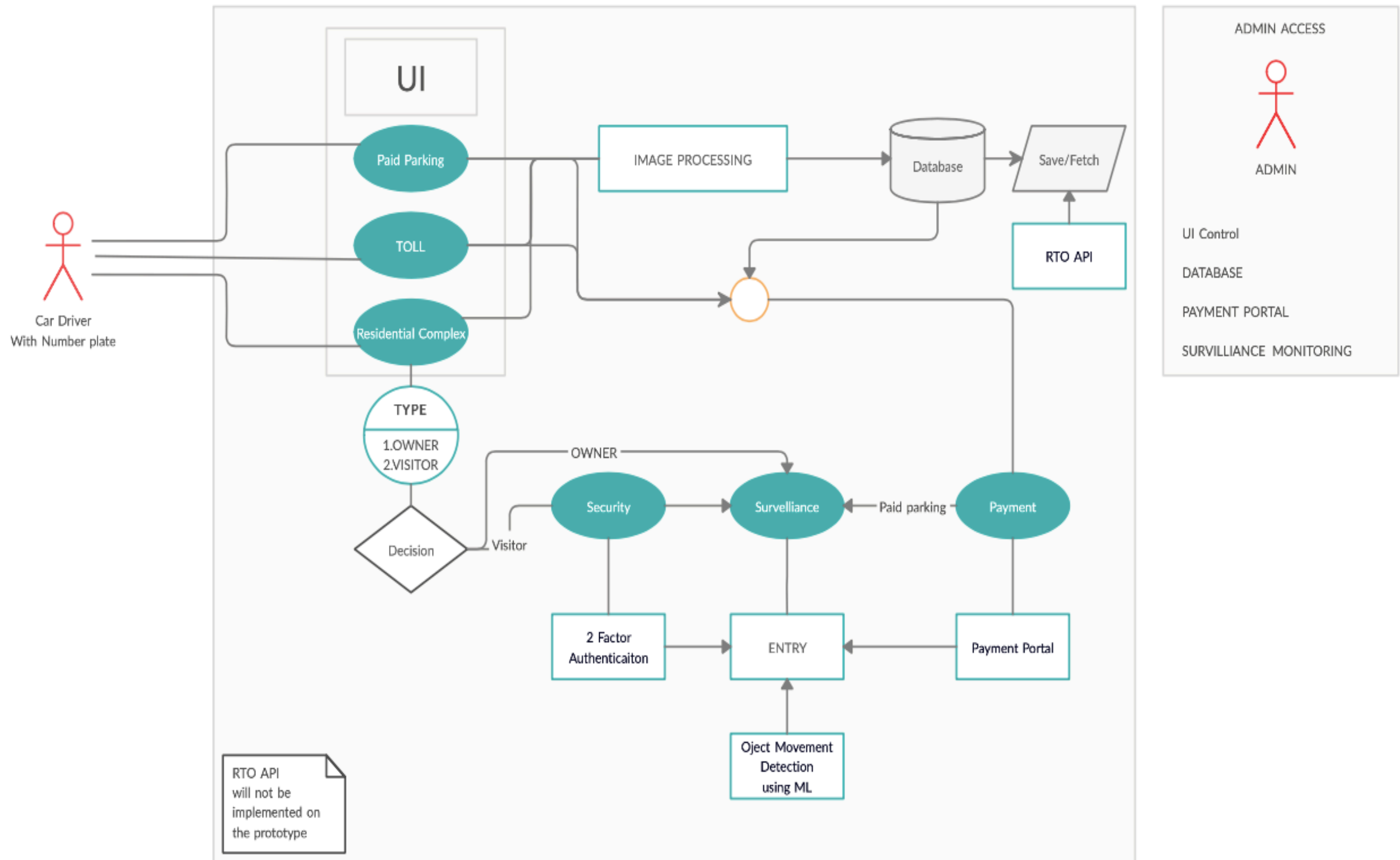
Step 3 : The number plate data gets stored in our database for further processing
Security Process!!

Step 4 : Credibility check then SOFTWARE asks for Authentication/Payment
● **Automated Surveillance system for Car**

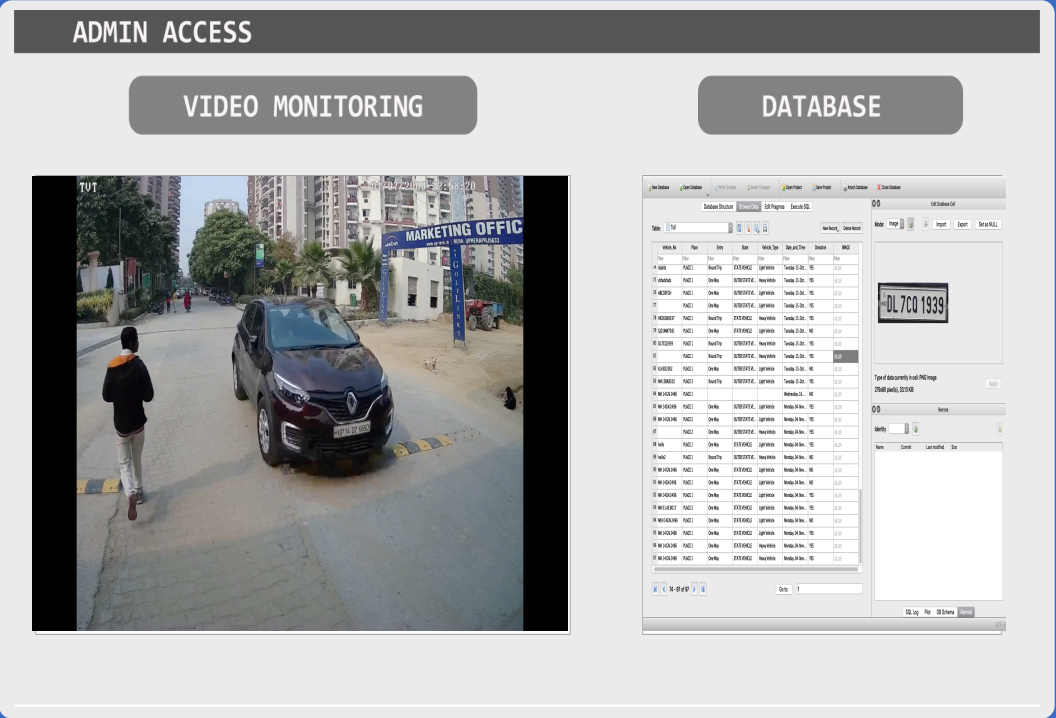
ADMIN
Process!!

- **Database connectivity for Securing the data**
- **Payment Portal**

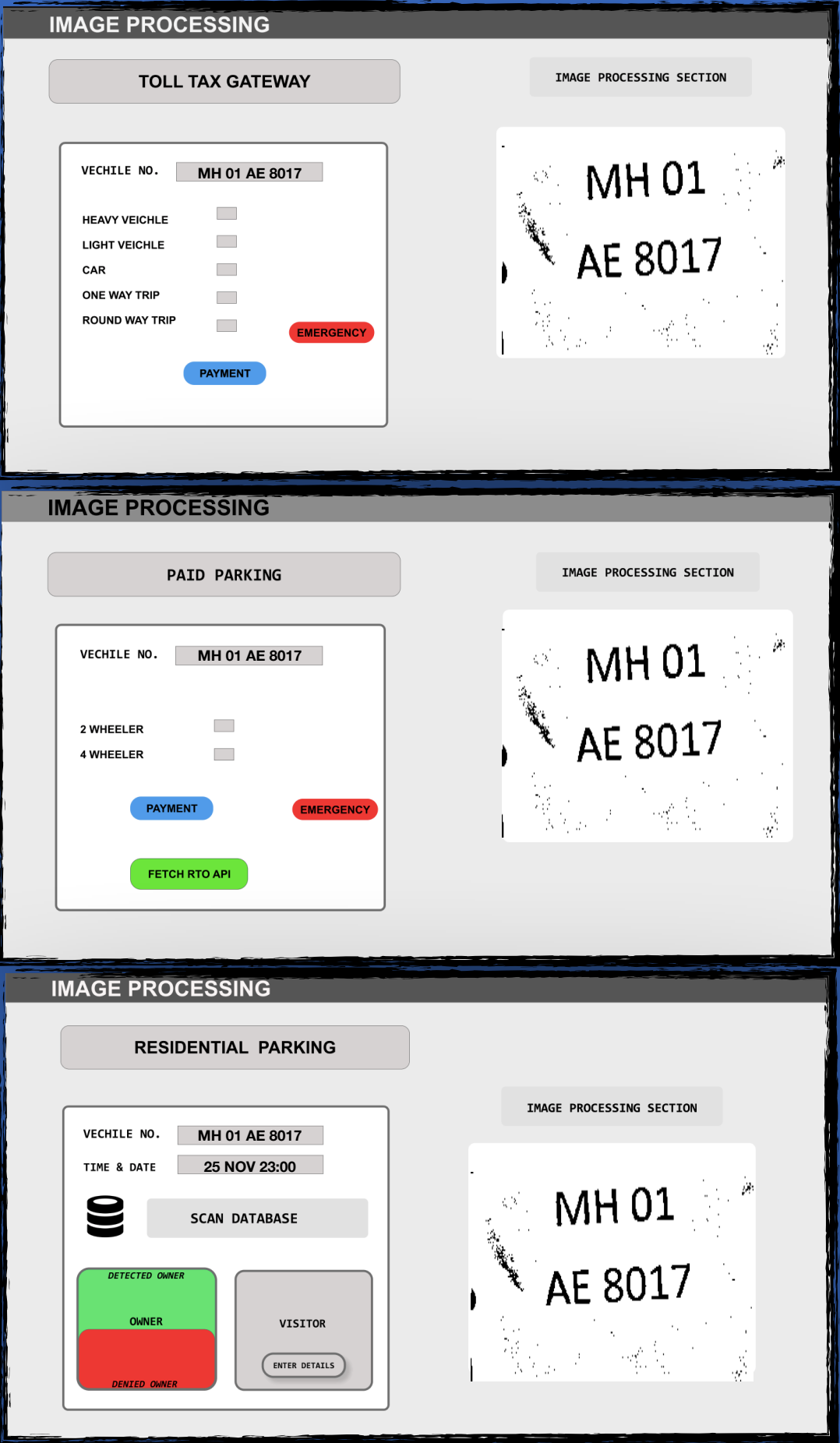
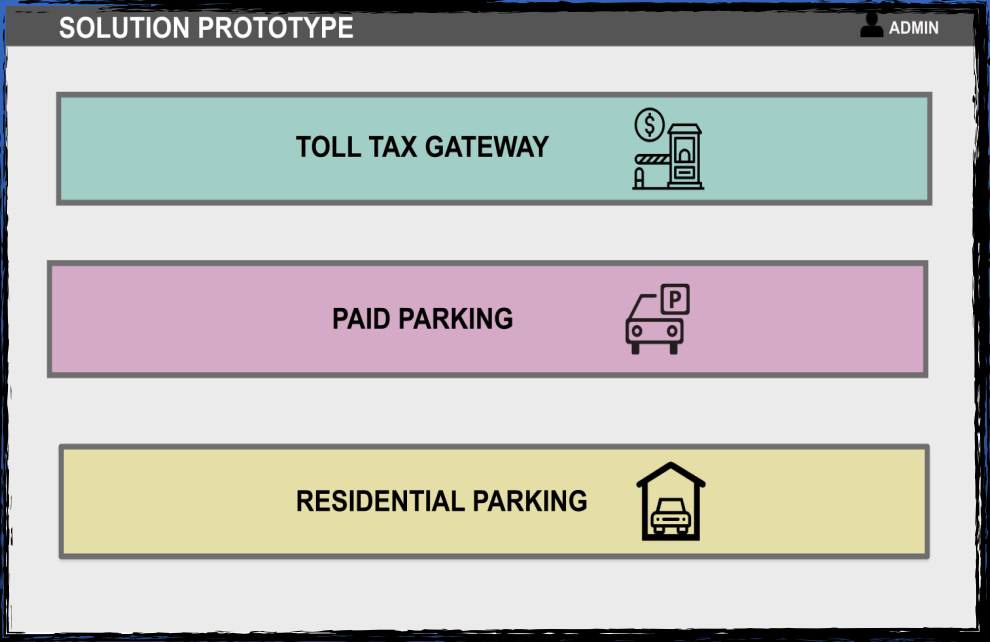
SOFTWARE IDEA DEMONSTRATION



USER INTERFACE WORKING



Admin Access



TWO FACTOR AUTHENTICATION PROCESS

IMAGE PROCESSING

RESIDENTIAL PARKING

VECHILE NO.

TIME & DATE



SCAN DATABASE

DETECTED OWNER

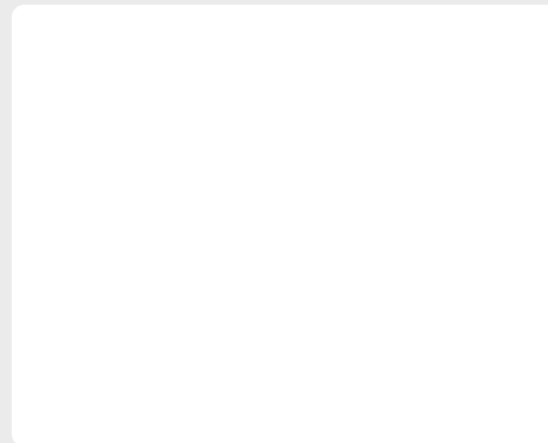
OWNER

DENIED OWNER

VISITOR

ENTER DETAILS

IMAGE PROCESSING SECTION



Residential parking directly allows vehicle that are registered in database

IF Not registered then the pop up block is open like this
FOR
2 factor authentication
process

VISITOR DETALIS

NAME :

MOBILE NO :

OWNER'S MOBILE NO :

ENTER OTP :

VEHICLE NUMBER

SUBMIT

TECHNOLOGY STACK

Surveillance monitoring & Image Processing

- OpenCV
- Tesseract
- Tensorflow
- Numpy

Authentication

- OTP Based

Payment

- ONILNE Transaction

User Interface

- JavaScript
- Tkinter

Database

- PHP
- MYSQL
- Amazon DynamoDB

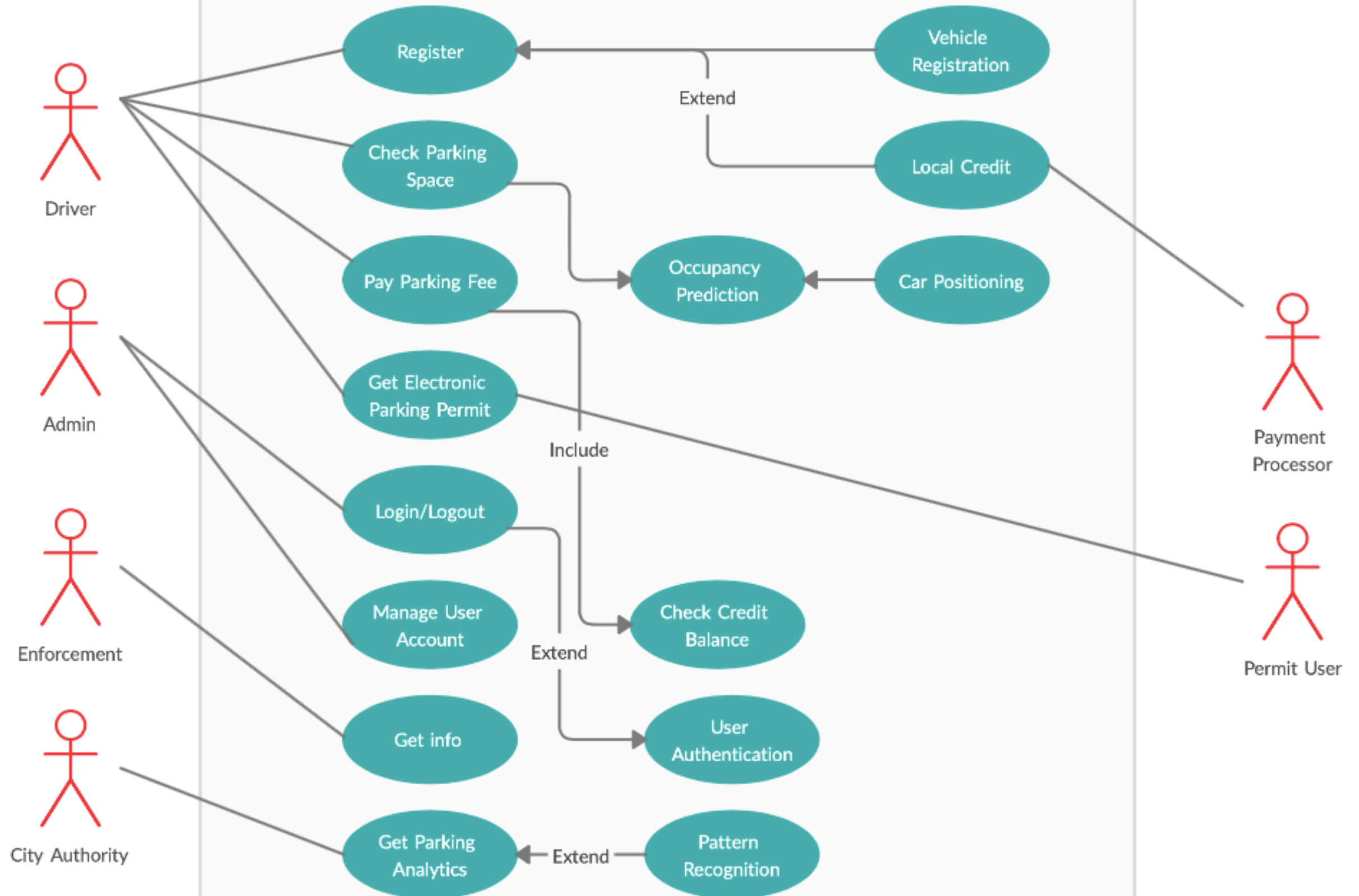
Languages Used

- Python
- Java
- CSS
- HTML

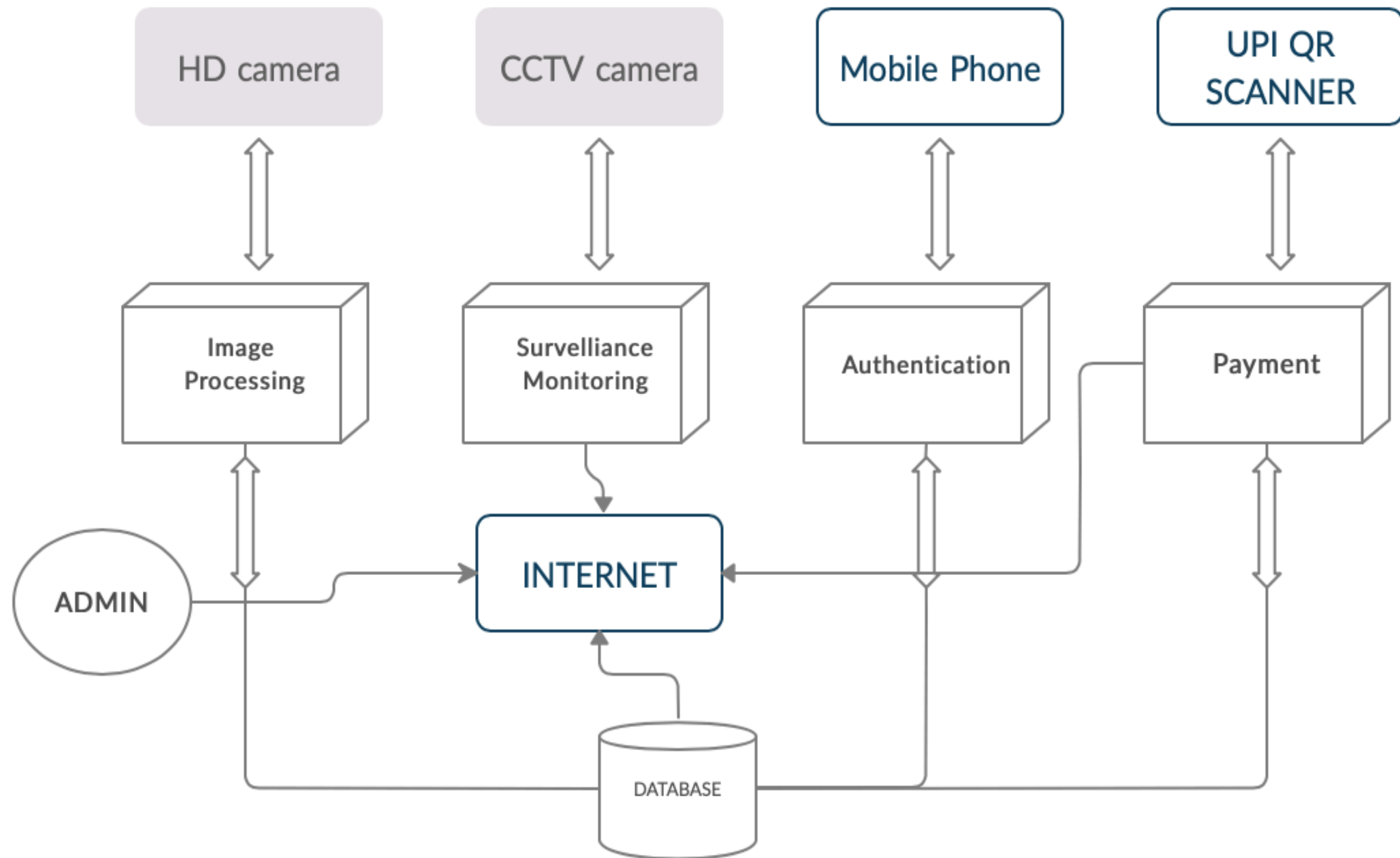
Additional Softwares

- Jupyter Notebook
- SPYDER

USE CASE



DEPENDENCY DIAGRAM



SHOW STOPPER

Our solution is Different and more reliable Because :-

- **This Focus on 3 most important car Surveillance point**
 - **PAID PARKING**
 - **Residential Area**
 - **TOLL GATES**
- **Two-Factor Authentication makes is more safer.**
- **This is Affordable and Reliable Approach.**
- **Database connectivity can be used to access the all time data in no time**
- **This is Fast process usually takes 30 - 60 sec*.**
- **Automated Surveillance monitoring will helps to prevent vehicle stealing.**
- **Payment is UPI based so its hassle Free**

UPGRADE IDEA!!

RTO and police servers can also be connected to get vehicle details and track STOLEN vehicles