

**PROJECT SYNOPSIS**

**“VEHICAL NUMBER PLATE DETECTION  
USING MATLAB”**

## **INTRODUCTION**

Have you ever wonder that how an ANPR (Automatic Number Plate Recognition) system works? Let me tell you the concept behind it, the camera of the ANPR system captures image of vehicle license plate and then the image is processed through multiple number of algorithms to provide an alpha numeric conversion of the image into a text format. ANPR system is used at many places like Petrol Pumps, Shopping Malls, Airports, highways, toll booths, Hotels, Hospitals, Parking lots, Defense & Military check points etc. There are many image processing tools available for this Number plate detection, but here in this tutorial we will use MATLAB Image Processing to get the vehicle license plate number into the text format.

## **FEASIBILITY STUDY**

The purpose of motor vehicle registration by a government authority is to establish a link between the vehicle and its owner or user. The registration number is generally alphanumeric and it uniquely identifies the vehicle within the issuing authority's database. These number plates can be of different colour, fonts, and sizes depending upon the country and their rules.

## **OBJECTIVE AND SCOPE**

**This project can be used in the following areas:**

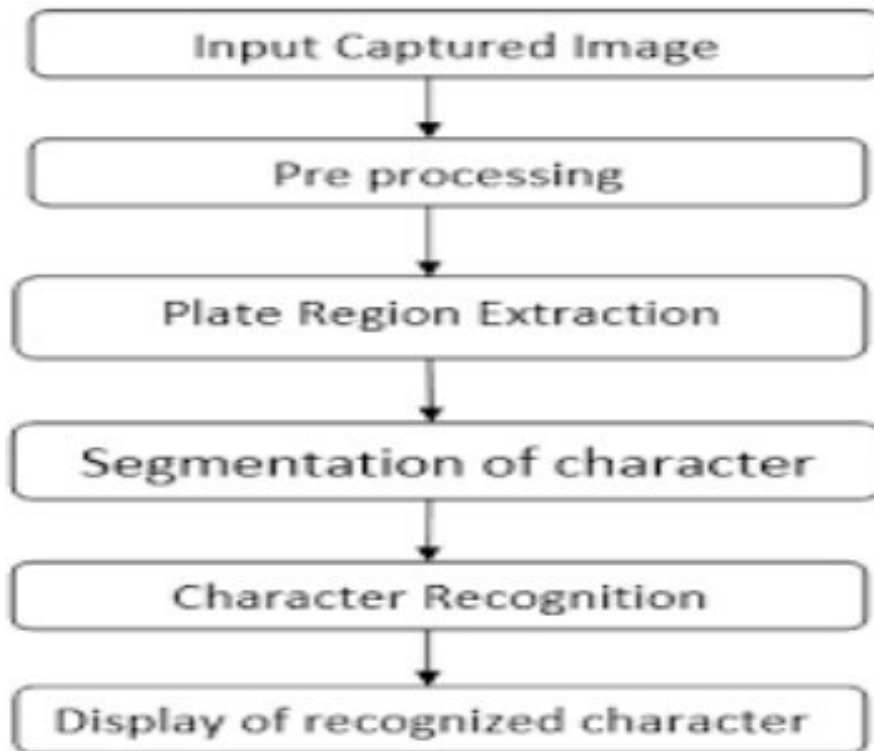
Analysis of city traffic during peak hours

1. Automation of weigh-in-motion systems
2. Enhanced vehicle theft prevention
3. Effective enforcement of traffic rules
4. Flexible and automatic vehicle entry and exit from a car parking area

## 5. Car parking management system

### DEVELOPMENT

#### FLOW DIAGRAM OF ANPR :



### METHODOLOGY/ PLANNING OF WORK

#### Steps to achieve objective

- 1) product requirement document
- 2) Software architecture
- 3) Implementation
- 4) Verification
- 5) Maintenance

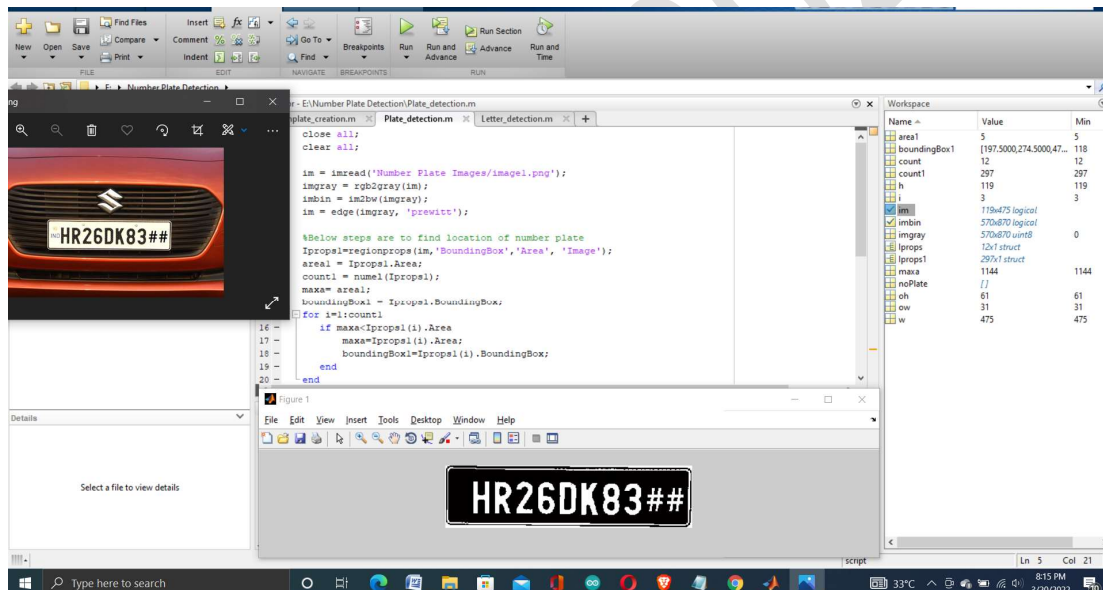
## FACILITIES REQUIRED FOR PROJECT

### SOFTWARE -:

MATLAB

## EXPECTED OUTCOME/RESULT

This section presents the simulation results of the developed ANPR system. Different images of cars having different colour and structure types are taken and stored in PC.



For Report and code contact-

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