



MANTHAN
राष्ट्रीय सुरक्षा सर्वोपरि

Solution By: The Nimbuses
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Idea Introduction



IDEA TITLE- ANPR in high speed and heavy traffic

Tech Stack

- 1. Matlab
- 2. Arduino IDE

Resources Used

- 1. Arduino
- 2. Arducam camera shield

Any Third Party

- API/Services used
- No



IDEA-OUTCOME – ANPR in high speed and heavy traffic

Our idea will provide high accuracy in number plate recognition even though the vehicle speed is high and the vehicle is moving through the high traffic density area. We used Arduino to focus the camera on number plate.

Our Approach Towards Idea



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Azadi Ka
Amrit Mahotsav



1. With the help of Arduino the camera is accessed in different angles and the output of the Arduino is inputted into Matlab.
2. The input video is then converted to frames of images.
3. Then these images are preprocessed as grayscale images and edges of the image are extracted.
4. The number plate is cropped with the help of Optical character recognition.



How you Targeted problem?

We mainly targeted On increasing the accuracy of the solution for the problem by adding various features to solution.



What Innovation or feature you added
My model will detect any style of characters in the number plate and accurately provide the number plate of fast moving vehicles



Any functional requirement in further development ?
Yes, we are developing the solution for detecting the fake number plates.



Team Slide



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TEAM LEADER
S.MAKIBALAN



Member 1
A.MOHAMED BARWIS



Member 2
B.K.SANTHOSH



Member 3
J.M.S.ARAVIND KANNA



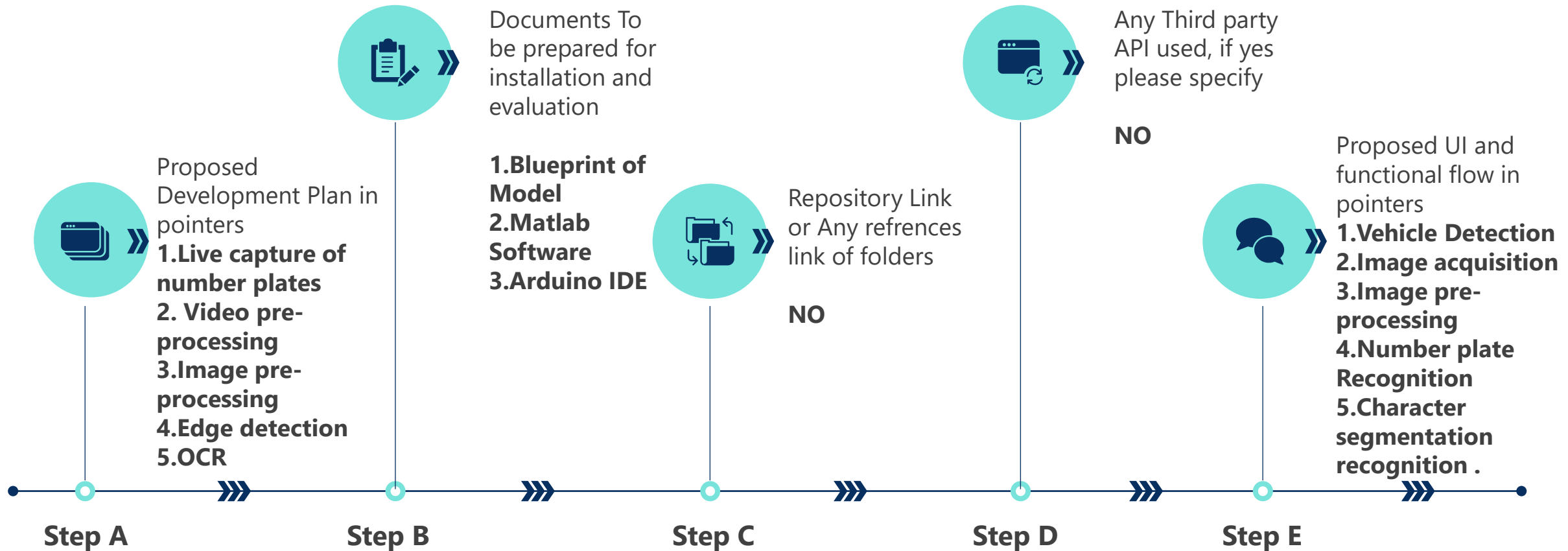
Member 4
T.K.SANTHOSH



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Development Pipeline





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Vision of Innovation/Idea/Solution

Explain How you developed Idea?

By brainstorming with teammates and guide. Moodling in search of resources on the topic and by visiting the traffic dense areas and highways.

How much time it will take in conversion as a final product?

It will take approximately one month to converse it as a final product.



How you idea is different and innovative form other ideas:

My idea is different from others by means of detecting various styles of character in the number plate and it will also detect the fake number plates.

Any early stage innovation detected while developing the solution:

Yes, during the early stage of innovation we came up with an idea of preventing smuggling by detecting the fake license plates.