NETRA

Accurate, Fast, Developer- Friendly ALPR

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Our Features

TRAFFIC MANAGEMENT

Can be utilized for any camera point building by any organization to aide them in traffic management

REAL TIME TRAFFIC ANALYSIS

Helps in Journey time analysis (JTA) for authorities to identify passing through vehicles and their time from one node to another

INTELLIGENT TRANSPORTATION SYSTEM

The model provides solutions for measuring and analyzing area-related traffic data of a certain area or an entire city. Thus helping in ITS

ASSISTED SMART PARKING

Assist in smart parking management.

Go monitoring...

Picture of a license plate is taken to capture the information located on it automatically. This system can work in real-time under the most challenging conditions, such as rain, fog, high speed of the cars, etc.

The license plate recognition model can search for the information located on the number plates and compare it to the database.

CONNECT TO PI CAMERA

↓

VEHICLES NUMBER PLATE IMAGES

Manually upload captured shots of vehicles to perform ocr and add to database

SEE MORE →

REAL TIME ANALYSIS

Real time OCR and database updation based on video being captured by Raspberry Pi camera.

SEE MORE →

REGISTERED USER DETAILS

Details of registered user(regular drivers) stored in database (csv prototype)

--can be used to view activities of vehicles of interest.

~restricted access

	Plate Num	Tag of Veh	Date	In Time	Out Time	Duration	Current Status
1	Plate Num	Tag of Veh	Date	In Time	Out Time	Duration	Current Status
2	DL10CE45;	Faculty	########	12:27:32		########	IN
3	GJ05JA114	Faculty	########	13:34:56	13:58:07	00:23:11	OUT
4	DL05CE44	Faculty	########	13:56:34	15:12:04	01:15:30	OUT
5	DL17RE55;	Faculty	########	13:57:06		########	IN
6	TN21QW2	Faculty	########	14:35:45		########	IN
7	TN21TR27	Officer	########	14:26:48		########	IN

APPLICATIONS

Bus timing prediction

Tags are given to registered users, one such tag included is University Bus tag.

Data on real-time stamps of bus entries can be collected which can be used to predict the reaching of the latest bus to various stops within the campus.
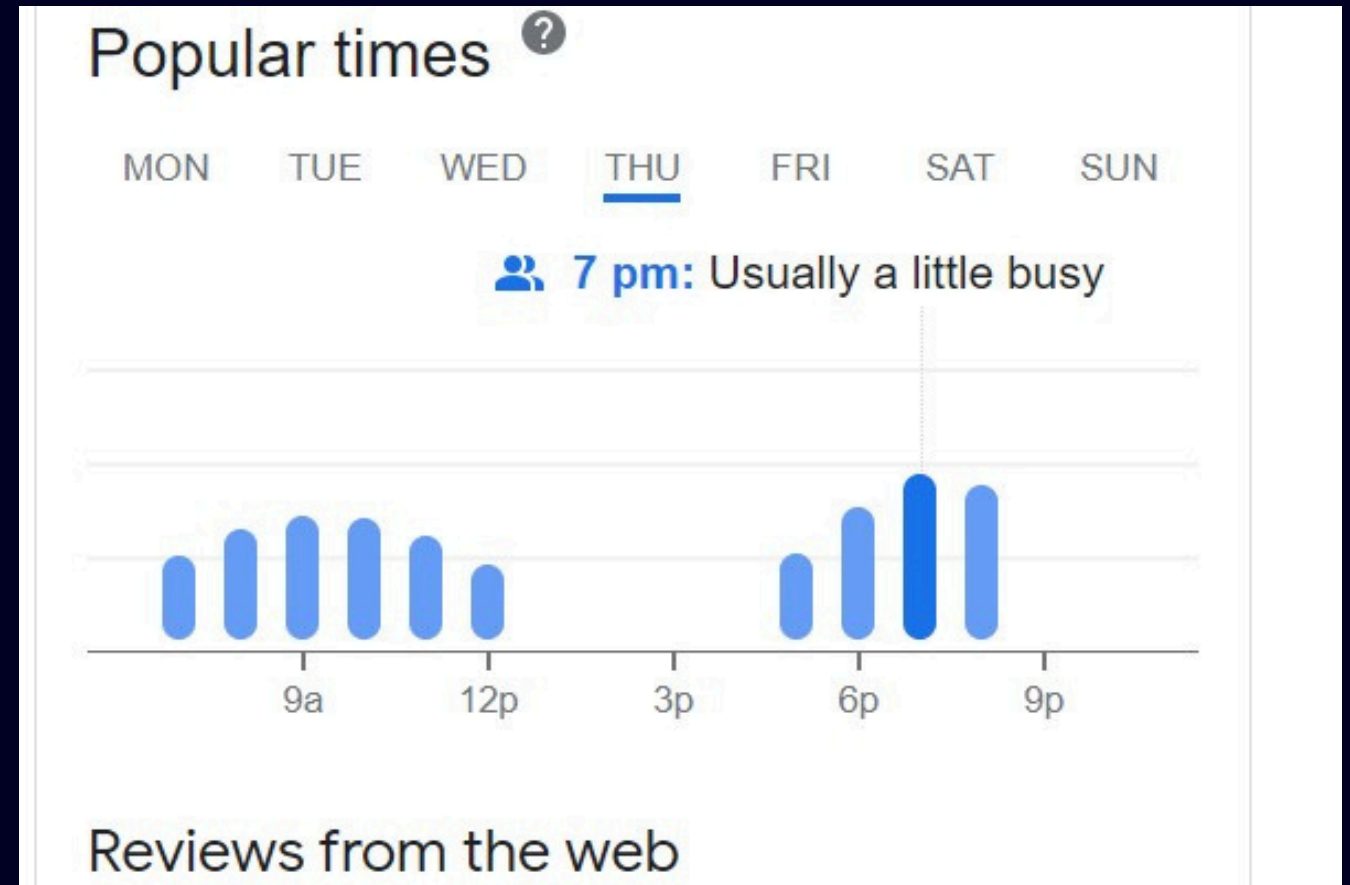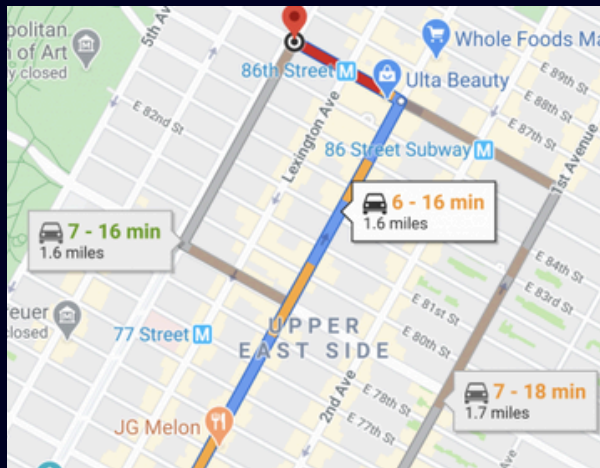
Distributing this information can help a lot of SRM members relying on public transport to make decisions and also promote efficient use of public transport over personal vehicles based on timings.
This effectively manages traffic.

6	TN21QW2435	Faculty	########	14:35:45		########	IN
7	TN21TR2784	Officer	########	14:36:48		########	IN
8	KL26H5009	Officer	########	14:50:12	15:12:25	00:22:13	OUT
9	HH20TH4536	Officer	########	14:58:01	15:38:19	00:40:18	OUT
10	TN32TR4665	Bus	########	15:02:03	16:12:08	01:10:05	OUT
11							

TRAFFIC DENSITY

Depending on data collected for entries and exit of vehicles, real-time analysis of traffic within the campus can be conducted that can provide us with underline percentage density of traffic withing the campus for particular time slot

Intelligent Transportation System (ITS)

Alert based on real-time traffic analysis

Based on data of entries & exit and its real-time analysis,
information can be obtained about the rate of traffic increase within the SRM campus.
Precautionary control can hence be taken to avoid major traffic blocks.

Alert for vehicles of interest

Based on tagging of vehicles, activity regarding any vehicle of interest can be tracked.
eg. a stolen or missing vehicle

Assisted smart parking

Based on tagging of vehicles, permission can be given to particular plate numbered vehicles to park in specified parking spots.

We have our own prototype model for permission grant checking by accessing the database.

	A	B	C	D	E	F	G	H
1	Plate Num	Tag of Veh	Date	In Time	Out Time	Duration	Current Status	
2	DL10CE45	Faculty	########	12:27:32		########	IN	
3	GJ05JA114	Faculty	########	13:34:56	13:58:07	00:23:11	OUT	
4	DL05CE44	Faculty	########	13:56:34	15:12:04	01:15:30	OUT	
5	DL17RE55	Faculty	########	13:57:06		########	IN	
6	TN21QW2	Faculty	########	14:35:45		########	IN	
7	TN21TR27	Officer	########	14:36:48		########	IN	
8	KL26H500	Officer	########	14:50:12	15:12:25	00:22:13	OUT	
9	HH20TH45	Officer	########	14:58:01	15:38:19	00:40:18	OUT	
10	TN32TR46	Bus	########	15:02:03	16:12:08	01:10:05	OUT	
11								

```
HELLO!!
Welcome to the Number Plate Detection System.

The Vehicle numbers registered are:-
0        DL10CE4581
1        GJ05JA1143
2        DL05CE4451
3        DL17RE5587
4        TN21QW2435
5        TN21TR2784
6         KL26H5009
7        HH20TH4536
8        TN32TR4665
9              NaN
10             NaN
11             NaN
Name: pno, dtype: object




Searching......
The car number to search is:- TN19 AT 5518


The Vehicle is  not allowed to visit.
```

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