

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY
PUNE

B.Tech - 5th Semester

MINOR PROJECT – II

GROUP MEMBERS

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Problem Statement

- ❖ In many metropolitan malls the parking management problem can be viewed from various angles such as high vehicle density.
- ❖ This results in annoying issues for the drivers to park their vehicles as it is very difficult to find a parking slot.
- ❖ The drivers usually waste time and effort in finding parking space and end up parking their vehicles finding a space on the street which further leads to space congestion.
- ❖ In worst case, people fail to find any parking space especially during peak hours and festive season.

Locating a parking spot during peak hours in most populated areas like shopping malls, universities, exhibitions or convention centre is difficult for the drivers. The difficulty rises from not knowing where the available spots may be at that required time. Smart parking is a solution to metropolitan cities to reduce congestion, cut vehicle emission totals and save persons' time by helping them in finding a spot to park.

Objectives:

- ❖ The basic objective of a smart parking solution is to identify a vehicle's presence or absence in a particular parking space
- ❖ To pass on this data (Number plate data) into a system for visualization and analysis – to be available for parking asset managers and/or enforcement officers.

Keeping in mind the objectives mentioned above, the next step is to take into consideration following important features:

- Accuracy of detecting a vehicle number plate
- Total cost of solution
- Privacy concerns

The camera installed are well known for their accuracy of detecting a vehicle presence – therefore the camera located at the entrance and exit of a parking area will count with high accuracy the entrance and exit of the vehicles, taking into consideration even two cars stopping very close to each other.

The total cost of solution considering the initial purchasing and installation cost, you will have low maintenance cost and no need of replacing batteries or camera.