

SMART PARKING:

In this project involves is an efficient and cost-effective system to monitor the availability of parking spaces in real-time. Smart parking is including to the use of technology and data-driven solutions to improve the efficiency, management, and accessibility of parking spaces in urban or crowded areas. The goal of smart parking systems is to reduce traffic congestion, save time and fuel for drivers, and enhance the overall parking experience.

PROBLEM DEFINITION:

- One of the most critical problems in urban cities is car parking and traffic control systems. Finding parking space is often difficult for drivers in modern cities.
- Parking management influences drivers search time and cost for parking spaces.
- It may also cause traffic congestion.
- Finding a parking space in most metropolitan areas, especially during the rush hours, is difficult for drivers.
- Difficulty arises from not knowing where the available spaces may be at that time traffic congestion may occur
- Lack of parking spaces, mainly in the urban area
- Misuse of available parking spaces
- More time and fuel/gas are used to find open parking spaces
- Difficulty in finding vehicles at large parking lots
- Traffic congestion is concentrated on underutilized parking spaces
- Business parking lots are taken over by passenger parking
- Incorrect parking
- Proper management of disabled areas & unused private parking lots
- The natural impact of excessive fuel consumption in search of a parking space
- Unclear parking policies.

DESIGN THINKING:

Efficient and smart way to automate the management of the parking system that allocates an efficient parking space using internet of things technology. The IoT provides a wireless access to the system and the user can keep a track of the availability of the parking area. With increase in the population of the vehicles in metropolitan cities, road congestion is the major problem that is being faced. The aim of this project is to resolve this issue. The user usually wastes his time and efforts in search of the availability of the free space in a specified parking area. The parking information is sent to the user via notification. Thus, the waiting time for the user in search of parking space is minimized.