

# **SMART PARKING PLUS**

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## **Abstract**

With the development of a country the number of the vehicles on the road is increasing, these increased vehicles leads to parking problems, traffic congestion, and pollution.

A solution has to be found out to manage the traffic on road as well as the parking area by providing the sufficient parking spaces and fast access to the parking space. The traffic can be managed smartly by using technologies which provides a reliable and low cost and easy accessible solution.

Parking guidance and information system helps the driver to find the parking space easily and easy check in and check outs are possible using the system that is implemented.

In this research project the space availability is detected by the sensors and update the current situation about the available space to the database which is in the server. The distribution of information about the spaces help to the application provided by this system to give required information for users who wish to use the parking area.

The system consist of android application which provide fast access to the information in effective and efficient manner. It also consist of web application which provide facility of account transactions as well as the credit balance increasing through PayPal. The system provide automated and manual mode of handling.

The system is developed using emerging technologies such as RFID, android, sensor, Arduino based serial communication and web application. These technologies lead system to make effective system and increase the usefulness for the users who are searching for better solutions.