ABSTRACT

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With growing population and a Hill city like Aizawl. Two wheeler vehicle become the very convenient and easiest way of transport and also time saving aspect as compare to other LMV vehicle rather than to stuck in a Traffic Jam. The common method of finding a parking space is manual where the rider usually finds a space on the street through luck and experience. This process takes time and effort and may lead to the worst case of failing to find any parking space if the rider is riding in a city with high vehicle density. With an increased number of two wheeler, it can also create numbers of issue in day to day traffic system in city, with the miss-management of parking lot or parking system. Now a days, due to a lack of parking space and a inappropriate parking of two wheeler in Hot Zone Area of AMC parking area which results the congestion for other vehicle and tend to jam the traffic become the main issue. And in some case, due to the unaware of nearby parking space and due to the One-way approach traffic system in some part of the cities become very difficult to look for the nearby parking space which tend to consume much of our time and Petrol. With the concept of Mobile crowd sensing, a emerging technology based on the sensing and networking capabilities of smartphone and wearable devices. A (Quick Response) QR Code based smart implementation of two wheeler parking space availability in real-time has been projected to implement on these project. The application consisting of simple qrcode scanning module where the users can check the space availability based on parking operator action. The main aim of this application is to mitigate and control the traffic congestion in Hot Zone area of Aizawl city and aware the other nearby parking space availability. And even a private person can also implemented his/her Own Garage for public two wheeler parking space with aspect of time-being where their vehicle is on the other premise, which generate extra income source for them. As QR code based system doesn't drain much battery consumption as compare to other smart parking facilities like using of sensor and application like Bluetooth. The user don't have to turn-on regularly

while going outside. User only need to scan QR code using that specific application during entry level check in or exit level for check out. In this Application, it collect only Vehicle Number from the user side which is encrypted by OpenSSL and store in a database. And for the parking operator, they have to register as per the parking area provided to them by AMC which will also encrypted using OpenSSL and store into the database with a QR Code generated by the encrypted information of parking operator. In this application, it also provide a manual entry of vehicle by parking operator which will manually check-out by parking operator.

By selecting the Area zone, the each and every application users can view the list of parking lot and the number availability of each parking lot.