**MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE**

**VEHICLE AUTHORIZATION SYSTEM USING QR CODE**

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**Abstract** - Number of vehicles increasing, different organization has different set of vehicles. The organization such as Schools, Colleges, Hospitals, Orphanage, Charitable Institutions, Some Small Scale Institution, etc. Have basic alert system which protect from unauthorized entry of vehicles. Quick Response method is weightless, less expensive, fast and accurate as compared to other systems. The code is easy to connect with android system. Consist of matrix bar code of two dimensional, which can be read using Smartphone. The QR code can store large amount of data such as text, uniform resource locator (URL), email where the data can be fetched. The code is a matrix form, so it can be scanned from any direction horizontal and vertical and it is a black module with white as back side. The registered vehicle details are stored in the database. When QR code is scanned using camera of Smartphone the stored data are decrypted. The main objective of the system is to avoid the entry of unauthorized vehicles into the organization and provide effective parking method.

During the process of scanning, notification is given on system when unauthorized vehicle enters the organization. Each and every vehicle will be monitored and their data will be stored in the database of the system. The identity of vehicle is shared to organization on a day to day basis. So, each vehicle can register before it enters the organization using user application and corresponding bar code id can be generated. The organization like Small scale industries, Charitable Organization, apartments are providing facilities that are more convenient to the users. Users can register their vehicle using user application, to generate QR code. The institution will have live records of vehicle entering and leaving from the perimeter. The vehicles can be categories in to Authorized and unauthorized vehicles of the institution. Here the admin or security of institution plays an important role rescanning the QR code generated and storing it in the database. The person with unauthorized vehicles is not permitted inside the perimeter. It provides high security, data retrieved using unique id.

While using this application the organization can strictly monitor the vehicles inside their compound and get complete details of the owner and their vehicles. So, the system can be defined as it is a strictly monitored vehicle management system using QR code scanning.