

(54) Title of the invention : IOT SMART VEHICLE PARKING WITH RFID SMART CARD PAYMENT SYSTEM

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(57) Abstract :

Car parking is a major issue in many malls and cities. Efficient and smart way to automate the management of the parking system that allocates an efficient parking space using internet of things technology. To avoid that problem, developed an invention on smart parking system User can find the slot availability, use IR sensor to find the parking slot on the vacancy position. The invention aims at designing an advanced smart parking system. In this system in this work use IR obstacle sensors as vehicle presence detection and these sensors are connected to Arduino Microcontroller. All 3 IR sensors detect the 3 parking positions corresponding data will be post on LCD and IOT app. This system having security for accessing vehicle using RFID. If the vehicle is valid then allow for payment of the parking fee after payment done servo motor will open and vehicle get in. after vehicle get in it will be place in any of the parking slots. That parking slots information will post into IOT server. Microcontroller sends the status of all IR sensors to LCD modules to display the available slots. Microcontroller reads the data display over LCD and IOT then user can easily access the data. This proposed system will reduce waiting time at parking area and by this system effectively use parking zone smartly. This proposed system implemented using embedded 'C' programming language.

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