

Smart Parking System using ARDUINO with Node-mcu

Abstract

Car parking is a major issue in modern congested cities of today. There simply are too many vehicles on the road and not enough parking spaces. We led to the need for efficient parking management systems. This we demonstrate the use of IOT based parking management system that allows for efficient parking space utilization using IOT technology. To demonstrate the concept we use IR sensors for sensing parking slot occupancy along with a dc motor to simulate as gate opener motors. We now use a wifi modem for internet connectivity and a microcontroller for operating the system. We create a webpage for online connectivity and IOT management GUI design. The system detects the parking slots are occupied using IR sensors. The system reads the number of parking slots available or occupied and updates data with the cloud server to allow for checking parking slot availability online. This allows users to check for available parking spaces online from anywhere and available hassle-free parking. Thus the system solves the parking issue for cities and gets users an efficient IOT based parking management system.



