Smart Parking System using ESP8266 Wi-Fi Module

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Abstract*: This paper examines the issues with conventional parking lots. Additionally, it covers the effects and inconveniences brought on by the inefficiency of conventional parking places. The authors of this work propose and develop a smart parking system that makes use of IoT technology and enables users to locate open parking spaces in a certain location. Additionally, it prevents unnecessary movement through already crowded parking lots. The authors of this study introduce a revolutionary parking system with an IoT over WiFi module. The authors propose a mobile-based Internet of Things (IoT) solution to the problem. ESP8266, SG90 servo motor, and IR sensors are important parts. Users may quickly search for neighboring parking lots and view real-time availability in each parking lot with the aid of the solution. Through the app, they may even reserve the desired parking space before heading to the lot. Through the mobile application, the user may also make the payment. Additionally, the administrator may offer a free parking spot.*

Keywords: IoT (Internet of Things), IR Sensors, Smart Parking, Traffic Congestion, Android Application, SG90 Servo Motor

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