

Rancang Bangun Sistem Informasi Slot Parkir Berbasis Internet Of Things(IOT)

Hanam Widhyanto

*Program Studi Teknik Elektro, Fakultas Sains & Teknologi
Universitas Telnologi Yogyakarta
Jl. Ringroad Utara Jombor Sleman Yogyakarta
E-mail: hanam.widhyanto@gmail.com*

ABSTRACT

Parking is a temporary immovable condition of a vehicle because the driver abandons it. Every motorized vehicle driver tends to find a parking space for his vehicle in a large area and as close as possible to the place of activity or activity. The solution that most people have done to date includes employing parking attendants. However, this solution is less efficient for large-scale parking lots because every information provided is sometimes inaccurate, and the daily income reports are sometimes not directly captured by management.

Internet of Things (IoT) is a concept that aims to expand the benefits of internet connectivity that is connected continuously. In this case, it can be concluded that IoT refers to and utilizes an object that will be able to communicate with one another via an internet network. Creating a parking slot information system to make it easier for management and users to find out daily income and the presence or absence of a parking slot available. Infrared sensors are arranged so with an average distance of 5.06 cm between the sending and receiving signals.

In this study, the authors made an IoT-based Parking Slot Information System tool using an Infrared Sensor and RTC (RealTimeClock) DS-3231. Infrared sensor functions to detect parked cars' presence or absence, then the RTC functions as a provider of working hours from 09.00 to 15.00. For total revenue and total incoming cars, NodeMCU will send a notification to TelegramBot. Telegram application through BothFather in designing this tool is used as a monitoring medium for parking slot information tools.

Keywords: *Parking, IoT, Infrared Sensor*