DESIGN OF AUTOMATIC ATTENDANCE GATE SYSTEM BASED ON INTERNET OF THINGS (IOT) IN FACTORY DEPARTMENT PT SWEET INDOLAMPUNG

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ABSTRACT

The FAS Division is responsible for reporting the presence of Factory department workers to the Accounting Department. The way to see attendance is done using amano and fingerprint. The amano and fingerprint areas have two gates that are the entry and exit access. The operation of both gates is still done manually and must be opened and closed six times a day. According to the attendance summary made, many employees are late and go home earlier than working hours. The author made this tool so that there are no more employees who are late and go home early. The research method is carried out by identifying problems, literature studies, determining research objectives, determining tools and materials, system design, system improvement, conclusions. The results of this study are a prototype of an attendance gate tool that has a shape like an original building located in the factory department environment, consisting of employee parking, attendance hallway, and FAS building. The tool uses two micro servos to move the two gates, then an LCD to display the date and time, a buzzer that lights up when the gate is operating. Gate one is the entrance to the attendance hallway when leaving for work and Gate two is the entrance to the attendance hallway when leaving for work. The conclusion is How to implement IoT on this automatic amano gate tool prototype is by using a NodeMCU ESP 8266 microcontroller by sending control commands to two servos through a Blynk application connected to the Internet network, which can facilitate the work of FAS division employees. The level of accuracy of this tool is in the form of gate movement according to the input touching 100%.

Keywords: Internet Of Things (IoT), NodeMCU, Servo, Blynk, Presence.