

ABSTRACT

Today's increasingly developing technology greatly facilitates human activities in various fields. One of them is in the economic field, namely the creation of the concept of online buying and selling or also called e-commerce. During the pandemic, online buying and selling has increased to date. This certainly has an impact on delivery service companies. The community, especially the owner, urgently needs delivery services to send and receive goods. The role of the courier is needed in delivery so that the package reaches its destination. However, when the courier arrives at the destination, there is often a problem. A common problem occurs when the recipient of the package is not at home. In this case, there are usually several alternative actions such as the package being entrusted to the nearest neighbor. However, if the neighbor is also not at home, the package will be delivered the next day.

From some of the problems above, a smart bell is needed that can receive packages when the homeowner is not at home. The bell consists of several main components, namely the NodeMCU 8266 microcontroller, Esp32-Cam and PIR sensor which functions to regulate when the package arrives and can take pictures, and the recipient will receive a notification through the Telegram application. This system can recap the courier's movements through PIR sensors, buzzer sounds, notifications on telegram when the package arrives, as well as lock and unlock information when the courier puts the package in the box.

The purpose of this study is to produce a smart bell monitoring system tool. packet receiver with PIR sensor, NodeMCU 8266, buzzer, esp32 cam, and telegram notifications. With this tool, it is hoped that it will make it easier for the recipient of the package when not at home and can monitor the Smart bell remotely. The telegram notification that appears from the PIR detecting motion takes about 5 seconds. Then the unlock command from the telegram sent by the user to the electricity takes about 10 seconds.

Keywords : Smart bell, Node MCU 8266, ESPCAM-32, PIR Sensor