

## **Abstract**

Technological developments trigger the development of the world of informatics. At first a job still uses the conventional way. With the development in the field of informatics some work can be done in a modern way. One of them is in the use of classes that initially required manual work to open the door, lock the door, open the flow of electricity, and closed the flow of electricity in the class into an automatic work. Therefore a smart class is created that can do the job automatically. This study discusses the smart classes that have been designed where this smart class can provide security in the form of granting class permissions that match the user id and schedule. When access rights are received the lock on the class door will open and the power will light up. The tool used is Node32S as the core of this smart class, RFID to read the user id on the card, motion sensor (PIR) to detect the presence of people inside, solenoid door lock acts as a tool to lock the door, the relay works like a power switch in the smart class this, the web server to provide verification permissions and communication protocols using client-server. In this research, two experiments have been done, namely the experiment of tool functionality and verification experiment. In the experiments the functionality of the tool gives results that indicate that the tool is running well. While in the verification experiments provide less than maximum results. This is due to network factors, the router and the distance between the router and the tool.

**Keywords:** Smart Class, RFID, Node32S