

ABSTRACT

Communication and information technology is currently growing rapidly and is close to human life. The rapid development of technology affects almost all areas of life, including the field of education. One example of the use of technology in education is to build a presence system. Attendance is one of the disciplinary processes in education that is very important and interrelated so that it is very important in the formal education process. The X Foundation, which is located in Cilacap, has a formal education institution, the formal education still has a manual attendance process, namely calling the names of students one by one and writing them down on attendance paper. Foundation X wants a more modern attendance process so that it can help optimize its education system, especially in the attendance process. In addition, the world has been hit by the Covid 19 Virus Pandemic, which is currently spreading to various regions, especially in Indonesia. this has a negative effect, namely the educational process is hampered, education which was originally face-to-face offline has now become online learning. Based on these problems, the presence system based on Radio Frequency Identification (RFID) using NodeMCU v2 is expected to solve these problems and in addition, this prototype is equipped with a non-contact MLX90614 temperature thermometer to detect the temperature of the students. The presence tool uses WiFi as an online communication line. Then to send the RFID TAG card id data to the database on the server, using the Antares platform. Based on the test results, it is known that the system is able to read the body temperature value, and the student's RFID tag card id data, then send the data to Antares, and display the data on the presence website. In testing the accuracy of the MLX90614 sensor, the average error percentage value is 2,97 %.. The results of the website design function well, so that the admin can monitor student attendance data. On the website there is a display of the temperature and uid number of the student tag card as well as the date and time of attendance.

Keywords: presence, RFID, NodeMCU V2, MLX901614