PROJECT REPORT

ANALYSIS OF THE RELATION BETWEEN NUMBER OF PEOPLE AND ROOM TEMPERATURE IN THE COMPUTER LABORATORY

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APPROVAL AND RATIFICATION PAGE

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ABSTRACT

One factor that supports comfort in the laboratory room is temperature. With this research, this research will be made to examine how the number of people in the laboratory room affects room temperature.

This embedded system creates an embedded system to measure temperature, count people inside the laboratory, and analyze it. The embedded system uses two sensors. The first one is the temperature sensor to measure the room temperature and the second sensor is the infrared sensor to count people in and out. All the data will be sent online to the MQTT server.

This project will produce an embedded system that will measure room temperature, people in, people out, and an application that will monitor all the data from an android application in real time.

Keywords: Embedded System, Internet of Things, Arduino Microcontroller, Monitoring System

PREFACE

This final report consists of 6 chapters. The contents of chapter 1 are to explain the background of this project was made and constraints on this project. For chapter 2, it will quote from the journal for theoretical basis of this project. Chapter 3 contains the steps and research methodology that will be used in this project. Chapter 4 contains what embedded system analysis, how the sensor works, the outline of how it works, and the design of this project in a flowchart. Chapter 5 will contain final conclusions of this project and suggestions for future projects.

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