

# IMPLEMENTATION OF IOT-BASED SYSTEM FOR MONITORING ROOM CONDITION

### **UNDERGRADUATE FINAL PROJECT**

Submitted as one of the requirements to obtain Sarjana Komputer (S.Kom)

By:

RAIHAN AKBAR 001202000036

FACULTY OF COMPUTING
INFORMATICS STUDY PROGRAM
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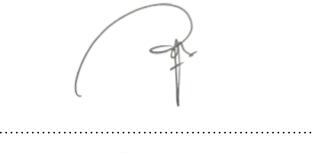
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# Cutifa Safitri, B.Sc, M.IT, Ph.D



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NIDN : 20060100053 Study program : Informatics

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CHAPTER

INTRODUCTION

Background

A smart home is an implementation of the Internet of Thing (IoT).

Smart home means a comfortable home environment where home appliances and equipment can be automatically controlled from any place by an internet connection through various gadget devices or other networking devices.

Internet of Things (IoT) is a concept that aims to expand the benefits of Internet connectivit

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# **ABSTRACT**

Smart home is a home condition that uses technology to control the situation of the house and electronic devices. Of course, this system is very useful to be able to monitor the condition of the house through gadgets. An example of this monitoring system includes fire alarms, ambient temperature, and humidity.

In this project, the author decided to use Arduino as a tool to receive and send sensor data to the database. The data from the database will be sent to the web application using an API. The author used the CodeIgniter 4 framework to create the web application. This web application is designed by the author to be more user-friendly and responsive so that it can be used on various gadgets.

This project aims to help people easily monitor utility usage at home, control electronic devices to reduce excessive electricity costs. The author hopes that this project can be useful for all Indonesian citizens.

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