



**IMPLEMENTATION OF IOT-BASED SYSTEM FOR MONITORING
ROOM CONDITION**

UNDERGRADUATE FINAL PROJECT

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

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APRIL 2023

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CHAPTER I

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 connectivity.

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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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TABLE OF CONTENT

ABSTRACT	i
DEDICATION	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENT	iv
LIST OF FIGURE	vi
LIST OF TABLE	viii
CHAPTER I	1
INTRODUCTION	1
1.1 Background	1
1.2 Problem Statement	1
1.3 Final Project Objective	1
1.4 Scope and Limitation	2
1.4.1 Scope.....	2
1.4.2 Limitation.....	2
1.5 Final Project Methodology	2
1.6 Final Project Outline	3
CHAPTER II	5
LITERATURE STUDY	5
2.1 Smart Home	5
2.2 Arduino	5
2.3 NodeMcu	5
2.4 DHT11	6
2.5 Flame Sensor	6
2.6 Rain Drop Sensor	7
2.7 Relay	7
CHAPTER III	9
SYSTEM ANALYSIS	9
3.1 System Overview	9
3.2 Function Analysis	9
3.3 Use Case Diagram	9
3.4 Use Case Narrative	10
3.5 Swimlane Diagram	18
3.6 Hardware and Software Requirement	27
3.6.1 Hardware Requirement	27

3.6.2	Software Requirement	28
CHAPTER IV	.....	30
SYSTEM DESIGN	.....	30
4.1	User Interface Design	30
4.2	Wiring Diagram	32
CHAPTER V	.....	34
SYSTEM DEVELOPMENT	.....	34
5.1	User Interface Development	34
5.1.1	Login or Register Page.....	34
5.1.2	Home Page	35
5.1.3	Profile Page.....	36
5.1.4	Chart Page.....	37
5.2	Wiring Diagram Implementation	37
5.2.1	Wiring Diagram NodeMcu	38
5.2.2	Wiring Diagram Arduino Wemos.....	38
5.3	Application and Prototype System Details	39
5.3.1	Send Sensor Data	39
5.3.2	Notification	42
5.3.3	Read Data.....	43
5.3.4	Display and Filter Chart.....	45
5.3.5	Export Data	47
5.3.6	Map	48
CHAPTER VI	.....	50
SYSTEM TESTING	.....	50
6.1	Testing Environment	50
6.2	Testing Scenario	50
6.2.1	Prototype System	50
6.2.2	Web Application	51
CHAPTER VII	.....	52
CONCLUSION AND FUTURE WORK	.....	52
7.1	Conclusion	52
7.2	Future Work	52
REFERENCES	.....	53

LIST OF FIGURE

Figure 1. 1 Rapid Application Development (RAD) Design.....	3
Figure 2. 1 NodeMcu	6
Figure 2. 2 DHT11	6
Figure 2. 3 Flame sensor.....	7
Figure 2. 4 Rain drop sensor	7
Figure 2. 5 Relay 1 channel	8
Figure 3. 1 Use case diagram.....	10
Figure 3. 2 Register Swimlane.....	18
Figure 3. 3 Login Swimlane.....	19
Figure 3. 4 Profile Swimlane	20
Figure 3. 5 View Data Swimlane.....	21
Figure 3. 6 Edit Data Swimlane.....	22
Figure 3. 7 Export Swimlane	23
Figure 3. 8 Relay Swimlane.....	24
Figure 3. 9 Sensor Swimlane	25
Figure 3. 10 Map Swimlane.....	26
Figure 3. 11 Device Notification Swimlane	27
Figure 4. 1 Login or Register UI (Website).....	30
Figure 4. 2 Home Page UI (Website).....	31
Figure 4. 3 Profile Page UI (Website)	31
Figure 4. 4 Chart Page UI (Website)	32
Figure 4. 5 NodeMcu Wiring Diagram.....	32
Figure 4. 6 Arduino Wemos Wiring Diagram	33
Figure 5. 1 Login Page (Website).....	34
Figure 5. 2 Register Page (Website)	34
Figure 5. 3 Home Page Sensor Section.....	35
Figure 5. 4 Home Page Gauge Chart	35
Figure 5. 5 Home Page Electronic Controls	36
Figure 5. 6 Home Page Map	36
Figure 5. 7 Profile Page	37
Figure 5. 8 Chart Page	37
Figure 5. 9 Wiring Diagram NodeMcu.....	38
Figure 5. 10 Wiring Diagram Arduino Wemos	38

Figure 5. 11 Library Wifi.....	39
Figure 5. 12 Configure Wifi.....	39
Figure 5. 13 Define DHT Pin.....	39
Figure 5. 14 Define Pin Sensor	40
Figure 5. 15 Configure Setup.....	40
Figure 5. 16 Sensor Looping.....	41
Figure 5. 17 Send Data to Database.....	41
Figure 5. 18 Controller Send Database	42
Figure 5. 19 Notification WhatsApp.....	42
Figure 5. 20 Notification Telegram	43
Figure 5. 21 Controller Read Data.....	43
Figure 5. 22 JavaScript Read Data.....	44
Figure 5. 23 Controller Chart.....	45
Figure 5. 24 Template Chart Js	45
Figure 5. 25 Function Chart Js.....	46
Figure 5. 26 Date Filter.....	46
Figure 5. 27 Function Button Excel.....	47
Figure 5. 28 Controller Excel.....	47
Figure 5. 29 Map JavaScript 1	48
Figure 5. 30 Map JavaScript 2	49

LIST OF TABLE

Table 3. 1 Function Analysis	9
Table 3. 2 Narrative (UCN) Register	10
Table 3. 3 Narrative (UCN) Login.....	11
Table 3. 4 Narrative (UCN) View.....	12
Table 3. 5 Narrative (UCN) Profile	12
Table 3. 6 Narrative (UCN) Edit.....	13
Table 3. 7 Narrative (UCN) Export	14
Table 3. 8 Narrative (UCN) Map	15
Table 3. 9 Narrative (UCN) Notification	16
Table 3. 10 Narrative (UCN) Relay	16
Table 3. 11 Narrative (UCN) Send Data.....	17
Table 6. 1 Prototype System Testing	51
Table 6. 2 Web Application Testing	51