

**BUSITEMA
UNIVERSITY**
Pursuing Excellence

FACULTY OF ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING

PROGRAM: DIPLOMA IN ELECTRICAL AND ELECTRONICS ENGINEERING

FINAL YEAR PROJECT REPORT

TITLE: AUTOMATED MONITORING AND CONTROL METER

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Submitted to faculty of engineering as a partial fulfilment of the requirements for the award of Diploma in electrical and electronics engineering of Buistema University

DECLARATION

I, NYAWERE HEDWIG, affirm that the information contained within this proposal report represents the original work of myself and my collaborators. This work has not been previously submitted for any award or recognition at any institution of higher education.

NYAWERE HEDWIG

Signature

Nyawa

Date

10th - OCT - 2024

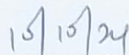
APPROVAL

This confirms that NYAWERE HEDWIG has submitted the final year proposal report to the Department of Electrical Engineering. I certify that this report represents her original work, completed under the guidance and approval of our supervisors.

PROJECT SUPERVISOR

Name: ENG.KIGOZI JOHN

Sign.....

Date.....

ACKNOWLEDGEMENT

With deepest gratitude, I would first like to thank God for providing me with the strength, good health, wisdom, and protection I needed to complete this proposal report. I am also incredibly grateful to my esteemed supervisors for their unwavering support, guidance, and knowledge throughout this process. Their time and advice were invaluable, and I truly appreciate their dedication. I would like to extend my thanks to the entire staff of the Electrical Engineering department and the wider university community for their contributions. Their support fosters a positive learning environment. Finally, my deepest appreciation goes to my family and friends who have supported me both financially and emotionally throughout my academic journey. Their unwavering belief in me has been a source of immense strength. May God bless their endeavours.

ABSTRACT

In Uganda, Umeme Ltd is responsible for the billing and supply of electric power. Previously a postpaid metering system was used but there was a challenge when it came to recording of the readings because most premises were inaccessible due to different reasons. Umeme later introduced Yaka, a prepaid metering system where the customer is automatically turned off once the units paid for are fully used up. But the system was not enabling the user to set the daily target unit consumption. This project aims to design an improved pre-paid metering, monitoring and control system for the user which can be used to modify the current Yaka System to solve the above- mentioned challenges. This system also allows the user to load units using the key pad and a phone

TABLE OF CONTENT

Contents	ii
DECLARATION	iii
APPROVAL	iv
ACKNOWLEDGEMENT	v
ABSTRACT	vi
TABLE OF CONTENT	1
CHAPTER ONE	1
1.0 BACKGROUND	1
1.1 PROJECT DEFINITION	1
1.2 PROBLEM STATEMENT	1
1.3 OBJECTIVES	2
1.3.1 MAIN OBJECTIVE	2
1.3.2 SPECIFIC OBJECTIVES	2
1.4 JUSTIFICATION	2
1.5 STUDY SCOPE	3
1.5.1 TECHNICAL SCOPE	3
1.5.2 GEOGRAPHICAL SCOPE	3
1.5.3 TIME SCOPE	3
CHAPTER TWO:	5
2.0 LITERATURE REVIEW	5
2.1 Existing System	5
2.2 Proposed System	5
2.3 Improved Prepaid Metering System	5
CHAPETR THREE:	7
3.0 METHODOLOGY	7
3.1 THE BLOCK DIAGRAM	7
3.2 DESCRIPTION OF THE PROJECT	7
3.3 COMPONENTS USED:	7
CHAPTER FOUR	12
4.0 PROJECT IMPLEMENTATION:	12
4.1. SETTING PROCEDURE	12
4.2. EXPECTED RESULTS	13
4.3. THE FLOW CHART	14
vi Page	

4.4. SCHEMATIC DIAGRAM.....	15
4.5. ADVANTAGES OF AN AUTOMATED MONITORING AND CONTROL METER	16
4.6. DISADVANTAGES OF THIS PROJECT.....	16
CONCLUSION.....	17
APPENDIX.....	19
REFERENCE.....	<u>35</u>

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