## **BUSITEMA UNIVERSITY**

#### FACULTY OF ENGINEERING

#### **DEPARTMENT OF COMPUTER ENGINEERING**

#### **Diploma in Computer Engineering**

## REAL TIME TALLYING AND VOTE DISPLAY SYSTEM

BY

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Finally, May the almighty God graciously bless you all!

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# DECLARATION

We the undersigned do hereby declare that this work is an output of our effort and has not been submitted to any institution of higher learning for any award.

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## APPROVAL

This project report titled "REAL TIME TALLYING AND VOTE DISPLAY SYSTEM" has been submitted for examination with the approval of the supervisor:

Mr. PINYI OTHIENO ERIA Department of Computer Engineering. Busitema University.

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## LIST OF ACRONYMS AND ABREVATIONS

LCD - Liquid Crystal Display. RDBM - Relation Database Management System. MySQL- Database management system. HTML - Hypertext Markup Language PHP - Hypertext Preprocessor

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#### ABSTRACT

This project is a web-based system that can be accessed at any polling station. This work was designed to aid the framework for an existing system which is manually based having demerit of inaccuracy and poor performance. The system was implemented using HTML formatting language, MySQL database management for data keeping and PHP programming language for the server-side which is used to manage Real Time tallying and display of votes at the polling station. Voters can be verified by a polling officer and given digits to feed in during vote casting so that they can access the candidates. It has a provision for the verifying officer to long in so as to access the point where he can feed in the NIN number of IDs of voters to generate a cord that will permit them to vote. The verifying officer can feed in the NIN number to check whether the voter is in the database of a particular polling station so as to allow them to vote. The voter is also given his/her privacy to vote for his candidate of choice.

The total number of voters at that polling station and the number of voters who have finished voting are displayed on a screen for the onlookers to view the progress of voting. The display screen does not show the candidate the voter has voted for and on a click, after voting, the tally of votes is automatically displayed on the display screen. And if the total number of registered voters is reached, the tally of votes of respective candidates is displayed on the display screen.

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## **CHAPTER ONE: INTRODUCTION**

#### 1.0 Background

Voting is now a right in many jurisdictions and a privilege which is not taken lightly by many citizens. While the right, and ability, to vote is widely granted the integrity of the vote is often suspect and verification of the accuracy of the votes cast is of at most concern.

Usually, in most elections, a voter goes to the polling station, selects a candidate of choice on a ballot paper, and puts the ballot paper in to a ballot box. The ballots are counted and the total of the ballots are computed by hand. Accordingly, there are a lot of time and effort used, and an error may occur during counting and computing.

Real Time Tallying and Vote Display System at the polling station may be provided in order to solve the problem of counting by hand and tallying by applying high-tech information technology in election field to accelerate the efficiency of voting management.

The present invention relates to an electronic voting, counting, and examination system which employs an electoral register identification system shared on network, an electronic voting system managed online or offline, an electronic counting system counting votes online or offline in real time, and an electronic examination system examining and displaying votes by safely keeping and displaying of votes in figures, thereby effectively coping with hacking outside or error occurrence such that the system can be stably operated[1].

The system will also include the display of candidate's name on the screen and the total number of the registered voters at that time all stored in the web server, it will not show the candidate of the voter's choice. Once the registered number of voters is reached, the given duration of the voting is done, the system stops the voting process and tally of votes is displayed on the screen on a click.

#### 1.1 Problem Statement

The existing voting system in Uganda involves a lot of manual operations which include manual tallying of votes. in the process more votes can be added or deducted by the individuals tallying. This leads to production of wrong results that may be unfair to the voters and candidates. Therefore, this project aims at designing a system that in real time tallies and display votes at the polling station so as to produce fair results to the candidates and the voters.

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