



**General Sir John Kotelawala Defense University**  
**Faculty of Computing**  
**Department of Computer Science**  
 Group Project in Hardware  
 BSc in Computer Science/ Computer Engineering/ Software Engineering Degree  
**Intake 39**

## **PROJECT PROPOSAL**

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Project Details		
Project Title		<b>MULT-AGENT BASED M- VOTING SYSTEM</b>
Supervisor		
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# 1. Introduction

## 1.1 Background and Motivation

The fingerprint voting system is electric voting system that using for the calculated related to human vote. It's reducing the time and staff members of that occasion. In all the country votes were decided the feature. For that, we were introducing the new method of voting system to increase the standard of living. In the current system voting counted by manually because of that appearing many errors, such as duplicates counting, completely missed counting Sometimes votes were even manipulated and motivate by political parties which lead to inaccurate vote and it will distort the results of an election in favor of certain candidates. This method can be useful for easy to handle, reliability and accurate. Vote counting is one of the essential activities in the election process. Failure to complete the count could lead to impact to the future career of country. Because of that election counting should be transparent, accurate and reliable then the public will feel the confidence of the elections. Further electronic machine is a basic electronic machine that can be used to store the votes. Therefore, security, confidentiality, reliability and accurate were the heart of computerized e-voting system where election data is recorded, stored and processed as digital information in the modern era.

## 1.2 Problem Domain

Almost every country maintains a voting system to elect a leader. A manual system is often used in Sri Lanka. For example, there may be cases where the same person uses two ballots. Also, some illegal things may happen during the country of votes. But according to this project, those things are minimized. And in the manual system, many A group people is needed. When the votes are received, when the votes are counted, and when the results are given, a lot of manpower is required. Too much. It can be reduced here.

## 1.3 Aim

## 1.4 Objectives

Introducing a device which calculates the results of poll and verifying the voter's identity without making an additional effort by staff. Minimized illegal things and accurate the result. And also provide a clear result and clearly take votes from real voters.

## 2. Literature Review

### 3. Methodology

- Hypothesis

Through our project helps to conduct an accurate and efficient poll.

- Functional Requirements

This project will reduce illegal voting. Also, the illegal things that happen during the counting of votes will be reduce. Human labor will be used less. Also, if the election is held in this way, the cost will be reduced.

- Non-Functional Requirements

- **Reliability** - It is not like the traditional election system, if the election is held according to our project, it is possible to establish credibility without corruption. Illegal things like casting votes, cheating during the counting of votes will be reduce and credibility will be established.
- **Speed** - In a polling system conducted according to our project, polling results can be given in a very short period of time. The things that are done after the polling, preparation of the table, etc. are done by computer, so it takes very little time.
- **Security** - Security is very high in this system. Because the fingerprints of the voters are checked, the entry of unwanted people is minimized. For reasons like this, the security is high.
- **Accuracy** - The accuracy is very high in the voting system conducted according to our project. Only the right people's votes are obtained and the correct voting is also done. Therefore, the accuracy is very high here.

## Non-Functional Requirements

- **Security:**  
There must be security on database to protect customers and clients details.
- **Data Integrity:**  
All data displaying for users must be correct.
- **Reliability:**  
There should be a trust among all users.
- **Availability:**  
Server of the system must be available when the users use the system.
- **Maintainability:**  
The system should support new updates and upgrades.
- **Accessibility:**  
The system should always be accessible for the users for the maximum effectiveness.

## Technology

### 3.41 Software

- **SQL Database**  
We use SQL database to store all data create by the admins and added to the system.
- **Java**  
Java to code and implement the system

### Hardware

- 1 Finger Print Scanner
- 2 LED Screen
- 3 Alarm
- 4 Arduino Mega Board
- 5 Touch Screen

## 4. Time Plan

Tasks	Duration													
	August		September				October				November			
	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1.Proposal														
2.Analysis														
Analyse the problem														
Requirement gathering														
3.Design														
Card system														
Testing														
4.Development and implementation														
Final testing														
Delivering														