INTRODUCTION

1.1 Background

Computerized Voting System is technically defined as the process in which one (voter) can vote their desirable candidate via computer system. It is totally different from the present voting system as it reduces the amount of money spent, manpower and time to a very large extent as compare to the manually voting system.

This is a foundation level. Emphasis has been given in this application to replicate all the processes required in a traditional system. CVM system is a self-sufficient with all the information required about the voters, candidate and votes. Once the information is fed to the system it can identify individual voters, their votes and the candidates. Tedious function such as counting the votes has been simplified in this system. The basic function of the polling has been reduced to single operation. A single polling manager can manage large number of voters.

The program code is written in 'C++' language has been chosen because of its procedural nature and the flexibility it provides in interacting with hardware and operating system efficiently.

1.2 Statement of Problems

Since we are facing problems including fault votes, time management problem, biased votes, corrupt candidates etc. The use of computer can easily reduce the effort and make voting an easy as well as voter and candidate friendly affairs. It reduces the amount of time, problems like fault votes.

The present system has been marked by many problems some of which are listed below:

- 1. Time consuming
- 2. Invalid Votes
- 3. Manipulation Work
- 4. User identification
- 5. Manipulation in counting
- 6. Probability factor

1.3 Objectives

1. To automate the process of voting and increase the speed of counting.

1.4 Application

This project can be used to choose representative in computerized way in a small group of people.

1.5 Scope and Limitation

It can be used for consumer survey, large scale voting, and highly secured and error free result.

The following are some of the limitations of the electronic voting system:

- 1. The system administrators can hack the system at his will.
- 2. The voters should be at least that much educated to enter the vote i.e. press the required button.
- 3. If the requirement of the voting is to keep the confidentiality of the votes, it is not possible since the system administrator would always be in a position to overview the votes of each and every individual at the time of voting.

1.6 Report structure

We have divided this project into 5 parts: introduction, literature review, methodology, results and conclusion. The first chapter includes the introduction of electronic voting system. Literature review consists of similar works done previously by other teams. Algorithm, flowchart and other diagrams are included in methodology. The four part, results comprises of output of the system. At last, conclusion chapter concludes our project.

LITERATURE REVIEW

2.1 Related Works

All computer scientists who have done work in or are interested in voting systems seem to agree that paper voting does not meet the requirements for public elections. But voting on the computer offers only weak security, its main disadvantages are in the areas of anonymity and protection.

Neumann gives a list of suggestions for "generic voting criteria" which suggests that a voting system should be so hard to tamper with and so resistant to failure that no commercial system is likely to ever meet the requirements and developing a suitable custom system would be extremely difficult and prohibitively expensive.

Rebecca Mercuri invented the "Mercuri method" for electronic voting. A critical component of this method is very similar to the Caltech/MIT proposal: a voting machine must produce humanreadable hardcopy paper results, which can be verified by the voter before the vote is cast, and manually recounted later if necessary.

From the above literature review, it could be understood that the published information on electronic voting system is very scanty. However, the topic is gaining more importance very recently among the researchers and this indicates the high priority of researchers towards this project. We are trying to do a simple project in which no such things are used. We have referred to some projects done by students of computer science.

METHODOLOGY

3.1 System Requirement Analysis

Our project is carried out in an organized way, for that we are doing it in a few easy steps which is understandable by everyone. For the preparation of this project following task were performed:

3.2 Algorithm

- Step 1: Start
- Step 2: Login into the system by entering username and password.
- Step 3: If the username and password doesn't match show error message and go to step 2.
- Step 4: If the username and password is "admin" then show the admin menu to register, view, edit and delete access then go to step 8.
- Step 5: If voter then show the voters menu which has candidate's information.
- Step 6: Take the choice of the voter.
- Step 7: Count the vote, log out the voter and delete voter's information.
- Step 8: Stop.

3.3 Flowchart

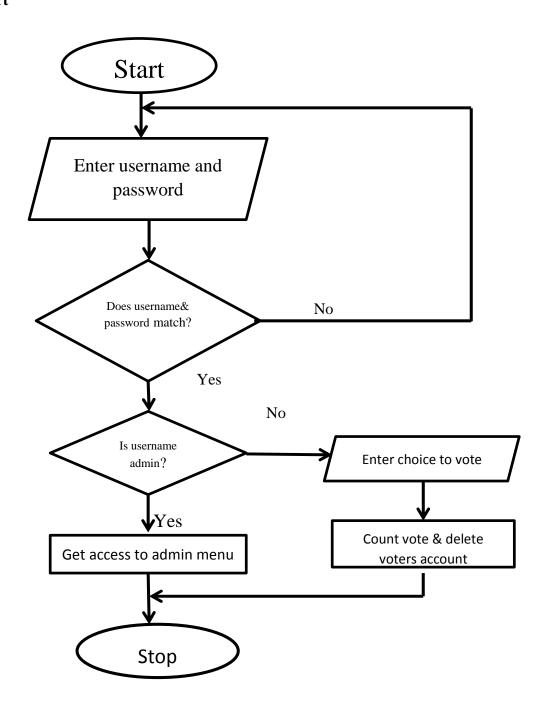
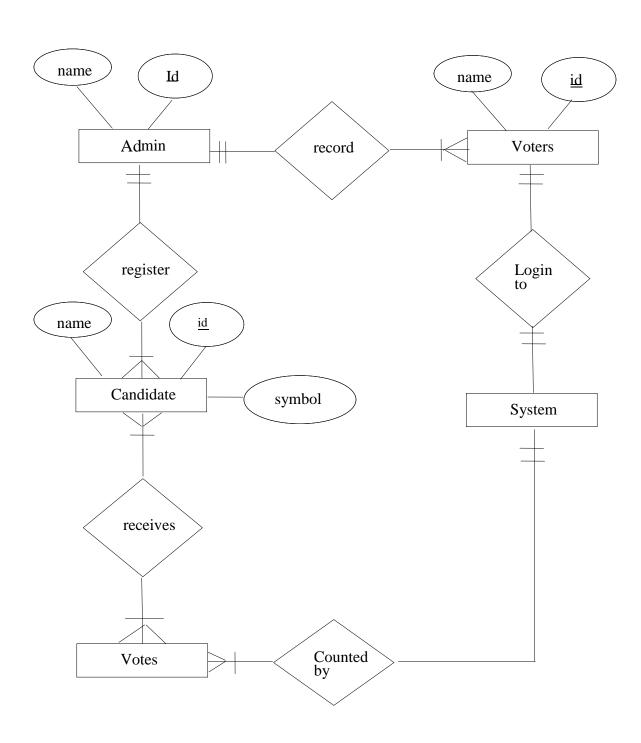


Fig: 3.3.1 Flowchart

3.4 Use Case Diagram Login <<extend>> <<extent>> Username Password Edit candidate information / <extend> <<extend>; <<extend>> Display <<extend>> Update Add Delete Edit voter Admin Voter<<extend> information <extend> A <<extend>> <<extend> Display Delete Update Voter profile Cast vote Show



3.5 E-R Diagram

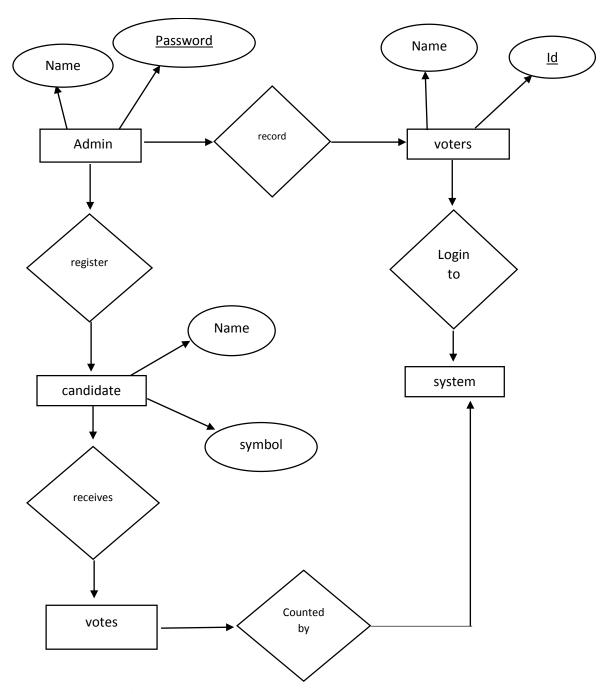


Fig: 3.5.1 E-R Diagram

3.6 Data Flow Diagram

Fig: 3.6.1 Context Diagram of Class Representative

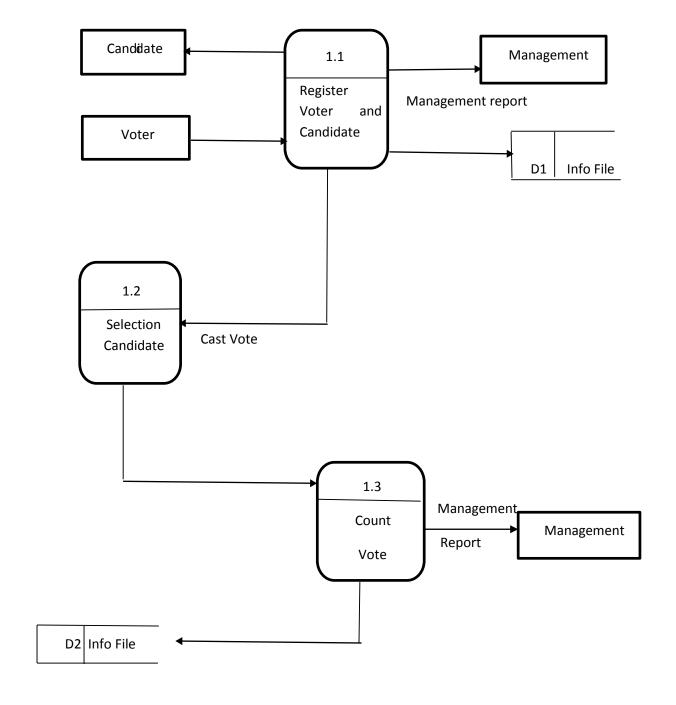


Fig: 3.6.2 DFD-1

3.7 Language Used

• C++

RESULT AND DISCUSSIONS

4.1 Work Done

We have developed a system which can store the record of all the students and candidates. And all the students (voters) can cast vote to their desired candidates and display the result in computerized way.

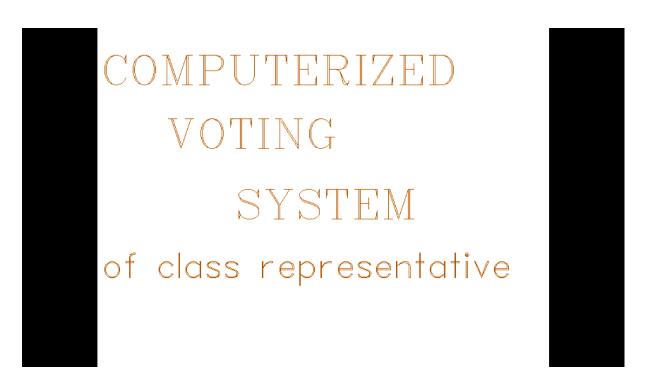


Fig: 4.1.1Welcome Page

Figure above shows welcome page of our system.

```
*******LOG—IN MENU*****

enter name: admin enter id: *******

invalid id or username enter again!!
```

Fig 4.1.2 Main Menu

This is the log-in menu. User need to enter name and id to access the system. Above message is displayed if wrong id or password is given.

Fig: 4.1.3 Admin Menu

If the user is verified as admin then this screen is displayed. Admin can perform various operation from this menu.

```
enter name of candidate hari
symbol: rectangle
id: 1

enter name of candidate ram
symbol: circle
id: 2

enter name of candidate sita
symbol: triangle
id: 3

enter choice:
1.Add voters information
2.Update voter information
3.Display voter information
4.Reset voter's file
5.Add candidates information
6.Display candidates information
7.Exit
```

Fig:4.1.4 Add Candidate Information

Figure above shows admin adding the candidate's information in the file.

```
1.Add voters information
2.Update voter information
3.Display voter information
4.Reset voter's file
5.Add candidates information
6.Display candidates information
7.Exit1

enter name of voter meena
enter id 730301

enter choice:
1.Add voters information
2.Update voter information
3.Display voter information
4.Reset voter's file
5.Add candidates information
6.Display candidates information
7.Exit1

enter name of voter shiva
enter id 730302
```

Fig: 4.1.5 Add Voter Information

Figure above shows admin adding the voter's information in the file.

```
NAME ID
meena 730301
shiwa 730302
laxmi 730303

Press any key to continue

-
```

Fig: 4.1.6 Display Voter Information

Figure above shows the information about voter.

```
NAME: ram
SYMBOL: rectangle
NO. OF UOTES0

NAME: hari
SYMBOL: circle
NO. OF UOTES0

NAME: sita
SYMBOL: triangle
NO. OF UOTES0

enter choice:
1.Add voters information
2.Update voter information
3.Display voter information
4.Reset voter's file
5.Add candidates information
6.Display candidates information
7.Exit_
```

Fig: 4.1.7 Display Candidate Information

Figure above shows the information about candidate.

```
enter name of voter laxmi
enter id 730303

enter choice:

1.Add voters information

2.Update voter information

4.Reset voter's file

5.Add candidates information

6.Display candidates information

7.Exit4

This will delete all voters information

Press y to delete

9

Voters file has been deletedenter choice:

1.Add voters information

2.Update voter information

3.Display voter information

4.Reset voter's file

5.Add candidates information

6.Display candidates information

7.Exit_
```

Fig: 4.1.8 Reset Voter

Figure above shows how to delete all the voter's information

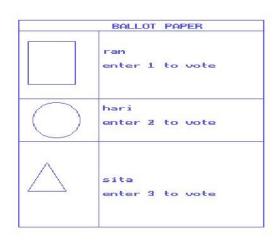


Fig: 4.1.9Ballot Paper

This is the ballot paper of our system.



You have successfully voted!

Fig: 4.1.10 Thank you screen

This figure shows that voter has successfully voted the required candidate.

```
NAME: ram
SYMBOL: rectangle
NO. OF VOTES1

NAME: hari
SYMBOL: circle
NO. OF VOTESZ

NAME: sita
SYMBOL: triangle
NO. OF VOTES0

enter choice:
1.Add voters information
2.Update voter information
3.Display voter information
4.Reset voter's file
5.Add candidates information
6.Display candidates information
7.Exit
```

Fig: 4.1.11 Total Votes

Figure shows total votes of the candidates.

CONCLUSIONS AND REOMMENDATIONS

6.1 Conclusions

This project on Computerized Voting System of Class representative creates and handles details regarding polling which will enable all students to cast vote via a computerized platform. Database consisting of records and details of the students and candidates who are eligible to vote are maintained by this system. This system automatically counts the votes and display result.

6.2 Future Recommendation

This project can be further enhanced by making the use of mouse pointer. Candidates cannot choose their own symbols and there cannot be more than three candidates.

References

https://pdfs.semanticscholar.orgD.Friedman& his team "Electronic voting Literature Review" [visited on 21 December 2017]

<u>https://academica.com</u>M.Nagash "Mini Project on Electronic Voting System" [visited on 18 December 2017]

https://scribd.com/Michelle Ann M.L.Batausa "Report on Electronic Voting System" [visited on 19 December 2017]

https://www.slideshare.net/folagtech/electronic-voting-system Afolabi B. OluwaGbenga "Slide on Electronic Voting System" [visited on 29 March 2017]

https://www.joblagao.com[visited on 26 March 2017]

https://www.uow.edu.au "Computerized Voting System" [visited on 19 May 2018]