	Pimpri Chinchwad Education Trust's
	Pimpri Chinchwad College of Engineering

Department: AS&H   Academic Year: 2020 - 2021   Sem – II

Subject : CPPS - II

Mini Project Report

Project Title : Computerized Voting System

Division: J

Team Members

Name of the Student: **Roll numbers**

1. **Amaan S Tamboli**   **(FY20J1043)**
2. **Om P Bidve**   **(FY20J1064)**
3. **Saish S Kothawade**   **(FY20J1067)**
4. **Yash M Salunke**   **(FY20J1019)**
5. **Ajaykumar S Shendage**   **(FY20J1030)**

INDEX

Sr no	Title	Page No
1.	**Introduction**	**3**
2.	**Problem Recognition/ Problem Statement**	**4**
3.	**Algorithm/Modeling**	**5**
4.	**Flowchart**	**7**
5.	**Outputs**	**8**
6.	**References**	**16**

INTRODUCTION

Democracy is the most healthy & participative form of govt. in the world. It encourages collaboration & coordination between public & private systems, citizens & govt .It allows its citizen to participate in the working of the govt .where the power and political sovereignty is exercised by the people through voting. E-democracy is an electronic form of democracy that enhances the democratic procedures & processes by communication technologies. It makes the public participation & decision making process easy. In earlier days, The term was misunderstood as e- governance .The development of E. Democracy has paved the way for effective and efficient democratic practices. It is the practice of using information and communication technologies for enhancing the democratic process within the established democratic norms. In this era of information technology (I T) every aspect related to human society & development is digitalized... India is the world's largest democracy and E-voting was first experimented in India in 2004 elections. The evolution of E-voting and E.V.M. machine has significant importance in the election system. As the EVM have been used till now there are still some drawbacks of the EVMs.

Process of Elections

To conduct the elections and ensure smooth functioning, the Election Commission of India was formed. The Election commission takes care of everything related to elections which includes the superintendence, control and direction of the elections and the conduct of the elections.The following is a summary of the process of voting that you need to know.

- You first need to be registered on the Electoral Roll which is a list of eligible voters. You can apply voter id online as well as at the VRECs, at designated locations or through a Booth Level Officer.
- You will be issued a Voter ID which you need to present at the polling booth.
- The responsibility lies on the citizen to be aware of who is standing for elections.
- It is also the responsibility of the citizen to find out where the polling booth is in their respective constituency.
- You can vote on the Electronic Voting Machines.
- If you speak only English, you should familiarize yourself with the symbols of the candidates, because the names of the candidates will be listed in alphabetical order in the respective state's language.
- All you have to do is press the blue button next to your desired candidate's name and symbol. You can also vote NOTA.
- You will receive a mark of ink on your finger that signifies that you voted.
- While it helps identify if you have already voted, it is also a proud symbol you can bear.

PROBLEM STATEMENT

While there are some who genuinely cast their vote, many people sit back and relax on voting day, and others are cajoled into voting for particular candidates. The importance of voting is lost amongst the hustle and bustle of city life. While everyone sits and complains about this and that, and makes suggestions that the government should change this and that, the elections come and go without half the population paying attention. The highest recorded voter turnout in India was recorded in 2014 for the Lok Sabha elections at 66.4%. That means close to half the population does not exercise their right to vote. Every person will vote if it becomes easier for them to vote.

- People need to stand in a queue for hours for their chance to vote.
- In hot country such as India, it becomes very difficult to stand in queues for longer period
- It becomes difficult for senior citizens to get out of their home and go to the voting centres to cast their vote.
- Indian general elections are one of the most expensive elections. The last elections costed around Rs. 50000 crore!
- Even the EVMs were in a huge controversy, it is said that they could be tampered though it is not yet proved.
- The maintenance cost of the EVMs is also very high

As the technology is improving, the voting system should also improve. So we have tried to bring a solution to it. Getting to know that everything is going digital, so why not voting can be practiced digitally! This will definitely save a lot of time of the people and money of the government which could be used for more useful purposes…
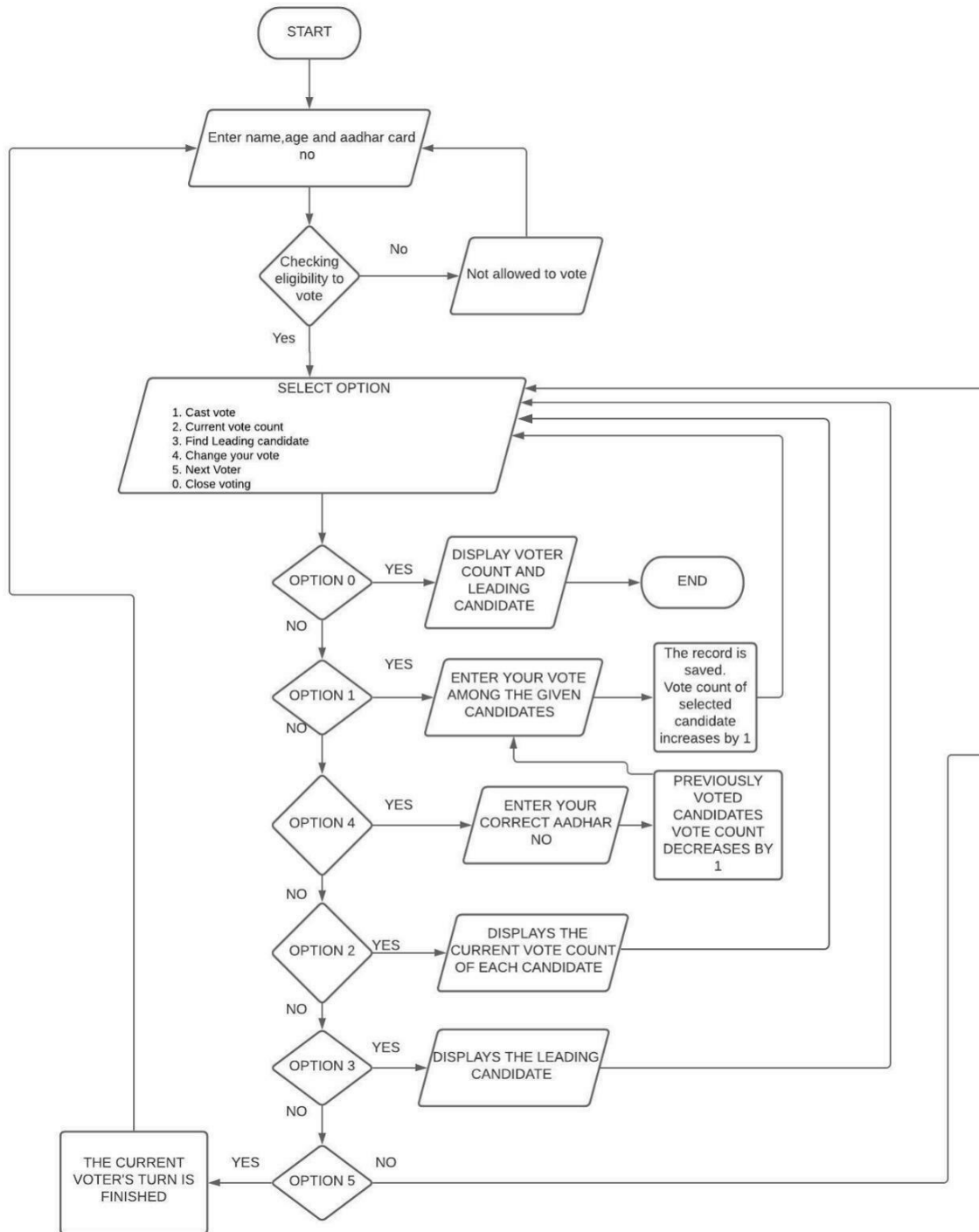
So we have tried to work upon such project, this could be used on small scale first.

ALGORITHM / MODELING

1. The user first need to enter his/her personal details like name, age and aadhar card no.

2. If the user is eligible to vote he/she can select among the list of operations:
   - i. Cast vote
   - ii. Current vote count
   - iii. Find Leading candidate
   - iv. Change your vote
   - v. Next Voter
   - 0. Close voting

3. If the user chooses i. option he/she can cast a vote for his/her favorite candidate from the list of given candidates or NOTA.

4. Users response will thus be recorded and saved in the system and the vote count of the candidate thus chosen will increase by 1.

5. Again the user is given the list of same set of operation, The user can either choose to discontinue his turn and allow the next voter to continue after him/her by choosing v. option, or can select other operations.

6. If the user chooses ii. option, the program displays the vote count of each of the candidate which was stored in the data up to the current user's turn.

7. If the user chooses iii. option, the program calculates and displays the candidate with the maximum amount of votes among the list of candidates by comparing the vote count of all the listed candidates.

8. If the user chooses iv. option, the program asks user to enter the aadhar card no which he/she entered when the user casted his/her previous vote, the user then needs to enter exact same aadhar card no.

9. If the aadhar card no does not matches with any stored in the data, the user can enter the no once again.

10. After entering the correct no , the program then decreases the vote count of the candidate the user previously voted by 1.

11. The program then allows the user to recast his/her vote among the same list of candidates. So the user can cast the vote again .

12. The new vote thus casted will be recorded in the system and the vote count of the candidate voted will increase by 1.

13. The user can then discontinue to vote using v. option and pass on the chance to vote to the next voter.

14. This cycle will repeat till the limit of the voters is breached.

15. If the limit of voters is reached, the program displays the vote count of each candidate along with the winning candidate.

16. If in case the voting ends before reaching the voter limit, officials can choose option 0 to close the voting. The program asks for a password in order to close the voting.

17. If the password entered is wrong, voting will continue and if the password entered matches with the saved password voting will be closed and the program will display the vote count of each candidate and the leading candidate.

FLOWCHART

START

Enter name,age and aadhar card no

Checking eligibility to vote — No → Not allowed to vote

Yes

SELECT OPTION
1. Cast vote
2. Current vote count
3. Find Leading candidate
4. Change your vote
5. Next Voter
0. Close voting

OPTION 0 — YES → DISPLAY VOTER COUNT AND LEADING CANDIDATE → END

NO

OPTION 1 — YES → ENTER YOUR VOTE AMONG THE GIVEN CANDIDATES → The record is saved. Vote count of selected candidate increases by 1

NO

OPTION 4 — YES → ENTER YOUR CORRECT AADHAR NO → PREVIOUSLY VOTED CANDIDATES VOTE COUNT DECREASES BY 1

NO

OPTION 2 — YES → DISPLAYS THE CURRENT VOTE COUNT OF EACH CANDIDATE

NO

OPTION 3 — YES → DISPLAYS THE LEADING CANDIDATE

NO

THE CURRENT VOTER'S TURN IS FINISHED ← YES — OPTION 5 — NO

OUTPUT

```
----------------------------------------------------
        ***** WELCOME TO e-ELECTION 2021 *****
----------------------------------------------------


Enter your name: ABC
Enter your age: 19
Enter your aadhar no: 213445



          |-MENU-|


Select the opertaion:-
 1. Cast the Vote
 2. Current Vote Count
 3. Find Leading Candidate
 4. Change your vote
 5. Next Voter
 0. Close Voting


 Please enter your choice : 1

<VOTER NO. 1>

 **** Please choose your Candidate ****
```

```
**** Please choose your Candidate ****


1. Yash Salunke
2. Ajay Shendage
3. Amaan Tamboli
4. Om Bidve
5. Saish Kothawade
6. None of The Above


Input your choice (1 - 5) : 2


Thanks for voting !!


          |-MENU-|


Select the opertaion:-
  1. Cast the Vote
  2. Current Vote Count
  3. Find Leading Candidate
  4. Change your vote
  5. Next Voter
  0. Close Voting


Please enter your choice : 5
```

```
------------------------------------------------
        ***** WELCOME TO e-ELECTION 2021 *****
------------------------------------------------


Enter your name: PQR
Enter your age: 20
Enter your aadhar no: 412334



        |-MENU-|

Select the opertaion:-
 1. Cast the Vote
 2. Current Vote Count
 3. Find Leading Candidate
 4. Change your vote
 5. Next Voter
 0. Close Voting

 Please enter your choice : 1

<VOTER NO. 2>

 **** Please choose your Candidate ****
```

```
    **** Please choose your Candidate ****


    1. Yash Salunke
    2. Ajay Shendage
    3. Amaan Tamboli
    4. Om Bidve
    5. Saish Kothawade
    6. None of The Above


    Input your choice (1 - 5) : 2


    Thanks for voting !!

            |-MENU-|


 Select the opertaion:-
    1. Cast the Vote
    2. Current Vote Count
    3. Find Leading Candidate
    4. Change your vote
    5. Next Voter
    0. Close Voting


    Please enter your choice : 2
 Loading...
```

```
**** Voting Statistics ****
Yash Salunke - 0
Ajay Shendage - 2
Amaan Tamboli - 0
Om Bidve - 0
Saish Kothawade - 0
NOTA Votes - 0


         |-MENU-|


Select the opertaion:-
  1. Cast the Vote
  2. Current Vote Count
  3. Find Leading Candidate
  4. Change your vote
  5. Next Voter
  0. Close Voting

  Please enter your choice : 3
Loading...

  Leading Candiate ==> [Ajay Shendage]
```

```
              |–MENU–|

 Select the opertaion:-
  1. Cast the Vote
  2. Current Vote Count
  3. Find Leading Candidate
  4. Change your vote
  5. Next Voter
  0. Close Voting


 Please enter your choice : 4


Enter your aadhar no as entered while voting: 412334



  **** Please choose your Candidate again ****


  1. Yash Salunke
  2. Ajay Shendage
  3. Amaan Tamboli
  4. Om Bidve
  5. Saish Kothawade
  6. None of The Above

 Input your choice (1 - 5) : 3
```

```
**** Please choose your Candidate again ****


1. Yash Salunke
2. Ajay Shendage
3. Amaan Tamboli
4. Om Bidve
5. Saish Kothawade
6. None of The Above

Input your choice (1 - 5) : 3

Thanks for voting !!



         |-MENU-|

Select the opertaion:-
  1. Cast the Vote
  2. Current Vote Count
  3. Find Leading Candidate
  4. Change your vote
  5. Next Voter
  0. Close Voting

Please enter your choice : 0
```

```
Select the opertaion:-
 1. Cast the Vote
 2. Current Vote Count
 3. Find Leading Candidate
 4. Change your vote
 5. Next Voter
 0. Close Voting

 Please enter your choice : 0

 Enter password to close the voting: VOTING_SYSTEM_2021

 END OF VOTING
Loading...


 **** Voting Statistics ****
 Yash Salunke - 0
 Ajay Shendage - 1
 Amaan Tamboli - 1
 Om Bidve - 0
 Saish Kothawade - 0
 NOTA Votes - 0
Loading...

 Leading Candiate ==> Warning !!! No-win situation
PS C:\CPPS PROGRAMS>
```

REFERENCES:

- https://www.thehindu.com/opinion/op-ed/The-problem-with-EVMs/article13369610.ece
- https://www.bankbazaar.com/voter-id/why-should-we-vote-in-india.html
- https://www.csi-sigegov.org/egovernance_pdf/12_95-103.pdf
- https://en.wikipedia.org/wiki/Electronic_voting