Electronic Voting Machine

Electronics Section, Hobbies Club

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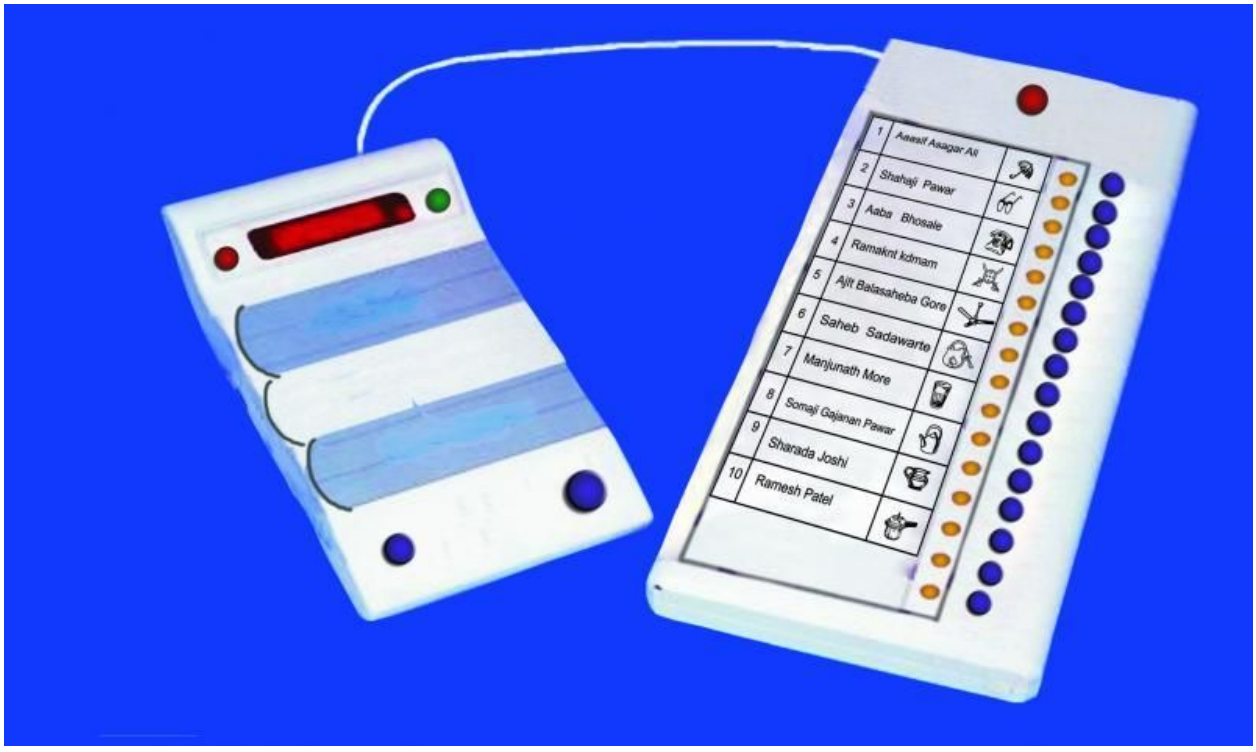
1. Introduction:

Electronic Voting Machine (EVM) retains all the characteristics of voting by ballot papers, while making polling a lot more expedient. Being fast and absolutely reliable, the EVM saves considerable time, money and manpower. And, of course, helps maintain total voting secrecy without the use of ballot papers. The EVM is 100 per cent tamper proof. And, at the end of the polling, just press a button and there you have the results.

Electronic voting machine has now days become an effective tool for voting. It ensures flawless voting and thus has become more widespread. It ensures people about their vote being secured. It avoids any kind of malpractice and invalid votes. Also such kind of system becomes more economical as consequent expenditure incurred on manpower is saved. It is also convenient on the part of voter, as he has to just press one key whichever belongs to his candidates.



2. Objective:

Our objective is to design a simplified version of Electronic Voting Machine (EVM) which can be used in our Bhawan Elections replacing the traditional Ballot based voting system which helps in saving lot of time and money and also Environment Friendly(No use of Paper).

3. Description:

Electronic Voting Machines are the total combination of mechanical, electromechanical, or electronic equipment (including software, firmware, and documentation required to program control, and support equipment), that is used to define ballots, to cast and count votes, to report or display election results, and to maintain and produce any audit trail information. The first voting machines were mechanical but it is increasingly more common to use electronic voting machines.

3.1 Hardware Tools:

The control Unit: In Total control of the polling:

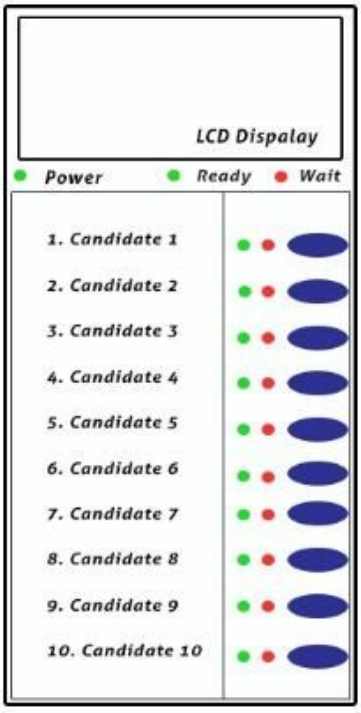
Conduction of polling, display of total votes polled, sealing at the end of the poll, and finally, declaration of results – these are the various accomplishments of just one gadget: the control unit. In total control of the polling, this electronic unit gives you all necessary information at a press of a few buttons. For instance, if you need to know the total number of votes, you just have to press the Total switch. Candidates-wise results can be had only at the end of polling.

The Ballot Unit: An electronic ballot box.

A simple voting device, it displays the list of candidates. A facility to incorporate party names and symbols is in-built. All the voter has to do is press the desired switch located next to the name of each candidate. The main advantage is the speed, apart from the simplicity of operation, which requires no training at all. A single ballot unit takes in the names of about 16 candidates.

3.2 Ballot Unit:

Design:



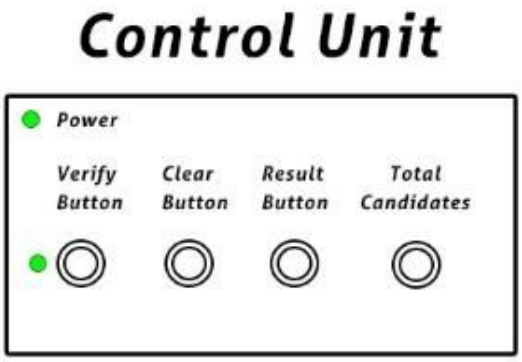
Functions:

Ballot unit is used by a voter to cast his vote. LCD display at the top is used to show the messages and the result of the election. There are three LED's at the top one is for power ON indication other green one glows when the ballot is ready for voting and the other one is red one which glows when one voter has voted and verification by the operator is pending.

There are two LED's in front of each candidate name Green one to show that the candidate is available for voting. And red LED's glows when voter presses a button against a candidate. Then it also gives a buzzer sound to indicate the vote has been registered.

3.3: Control Unit:

Design:

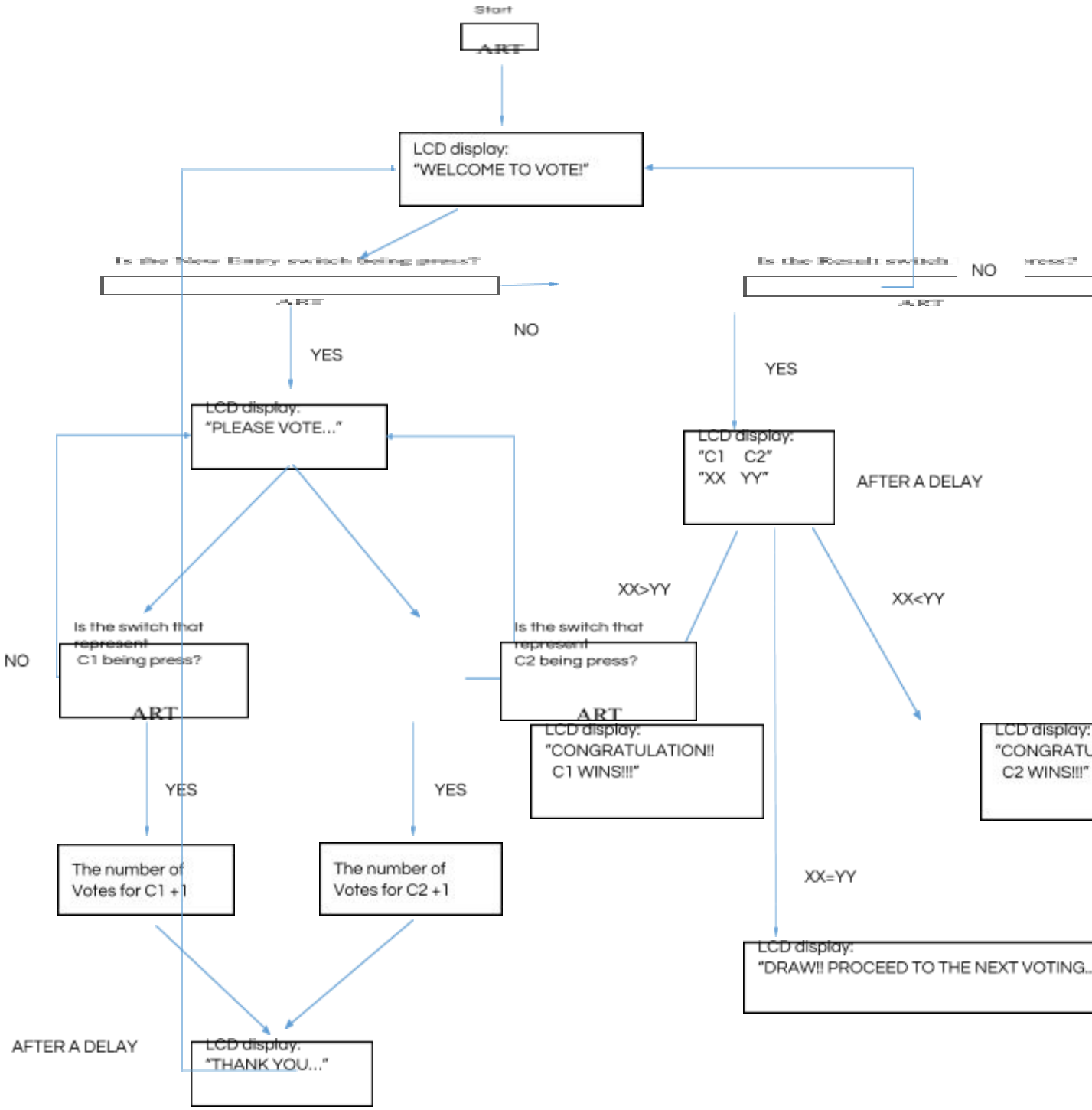


Functions:

Control Unit is used by the polling booth operator to verify the votes of the user, to count the votes of each candidate and to clear the record for later use.

When votes presses a button the ballot unit becomes locked and green LED in front of verify button glows so that voter can't vote for more than one candidate or more than one vote for a candidate then the operator verify the vote so than ballot unit becomes ready for the next candidate. Clear Button is used to delete all previously stored data. Result Button is a toggle switch which is used to show the counting of each candidate's vote on the LCD Display of the ballot. Total candidate button is used to set the total candidates competing for a particular post. We are not using a separate keyboard to input no. we use buttons on ballot for this purpose.

3.4: Flow Chart:



3.5: Components Required:

4. Proposed Completion Time:

Try to complete By December before winter vacations.

5. Team Members:

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