

## ONLINE VOTING SYSTEM

**Prof Rani Dubey** - Faculty at Gandhi Institute For Technology, CSE Dept. (Affiliated to Biju Patnaik University of Technology)

**Satya Ranjan Acharya** – Student at Gandhi Institute For Technology, CSE Dept. (Affiliated to Biju Patnaik University of Technology)

**Pradeep Prusty** – Student at Gandhi Institute For Technology, CSE Dept. (Affiliated to Biju Patnaik University of Technology)

### Abstract

The word “vote” means to choose from a list, to elect or to determine. The main goal of voting (in a scenario involving the citizens of a given country) is to come up with leaders of the people’s choice. Most countries, India not an exception have problems when it comes to voting. Some of the problems involved include rigging votes during election, insecure or inaccessible polling stations, inadequate polling materials and also inexperienced personnel. This online voting/polling system seeks to address the above issues. It should be noted that with this system in place, the users, citizens in this case shall be given ample time during the voting period. They shall also be trained on how to vote online before the election time.

INTRODUCTION TO ONLINE VOTING SYSTEM “ONLINE VOTING SYSTEM” is an online voting technique. In this system people who have citizenship of India and whose age is above 18 years of age and any sex can give his/her vote online without going to any physical polling station.

### Introduction

Online Voting is a web-based voting system that will help you manage your elections easily and securely. This voting system can be used for casting votes during the elections held in colleges, etc. In this system the voter do not have to go to the polling booth to cast their vote. They can use their personal computer to cast their votes.

“ONLINE VOTING SYSTEM” is an online voting technique. It is based on the other online services like “ONLINE RESERVATION SYSTEM”. In this system people who have citizenship of INDIA and whose age is above 18 years of any sex can give his/her vote online without going to any polling booth. There is a database which is maintained by the ELECTION COMMISSION OF INDIA in which all the names of voter with complete information is stored.

**WORKING PROCESS:**

You have to register yourself by simply filling a registration form to register the voters. After registration, the voter is assigned a secret voter ID with which he/she can use to login to the system and cast his/her vote. If invalid/wrong details are submitted, then the person is not registered to vote. After the user successfully registers themselves, a link is sent on their respective E-mail IDs. The link is a key for the activation of the account of the user. The account is activated only after the user clicks on that link. The site will be activated only on the day of voting. Once the user logs in, they will be provided with a One Time Password (OTP) which has to be entered by the user before casting his/her vote. The password will be destroyed after casting of their respective vote. A receipt of the vote will be sent to the user on their respective E-mail IDs. The advantage of online voting is that the voters have the choice of voting at their own free time and there is reduced congestion. It also minimizes on errors of vote counting. The individual votes are submitted in a database which can be queried to find out who of the aspirants for a given post has the highest number of votes.

**1.1 Purpose**

In “ONLINE VOTING SYSTEM” a voter can use his\her voting right online without any difficulty. he\she has to fill a registration form to register himself\herself. all the entries are checked by the database which has already all information about the voter. if all the entries are correct then a user id and password is given to the voter, by using that id and password he\she can use his\her vote. if conditions are wrong then that entry will be discarded.

**1.2 Scope**

The scope of the project that is hosted on the server. there is a database which is maintained by the election commission of India in which all the names of voter with complete information are stored.

**1.3 Technologies to be used**

This project will be a Web application to be developed in PYTHON having

- Database Design (SQLITE)
- Form Design (HTML, CSS, BOOTSTARP)
- Coding (PYTHON)
- Testing (APACHE, DJANGO DEVELOPMENT SERVER)
- Reporting Tool (Data Report)

#### 1.4 Overview

Project is related to Online Voting System.

The project maintains two levels of users: -

- Administrator Level
- Voter Level

Main facilities available in this project are: -

- Maintaining voter's Identification.
- Providing online voting management.
- Providing Updating of voter's information.
- Provide voter information to ELECTION COMMISSION OF INDIA.
- ELECTION COMMISSION OF INDIA maintains the complete information of voter.
- Voter can give his\her vote from any part of India.

#### OVERALL DESCRIPTION

##### 2.1 Goals of proposed system

1. Planned approach towards working: - The working in the organization will be well planned and organized. The data will be stored properly in data stores, which will help in retrieval of information as well as its storage.
2. Accuracy: - The level of accuracy in the proposed system will be higher. All operation would be done correctly and it ensures that whatever information is coming from the center is accurate.
3. Reliability: - The reliability of the proposed system will be high due to the above stated reasons. The reason for the increased reliability of the system is that now there would be proper storage of information.

4. No Redundancy: - In the proposed system utmost care would be that no information is repeated anywhere, in storage or otherwise. This would assure economic use of storage space and consistency in the data stored.
5. Immediate retrieval of information: - The main objective of proposed system is to provide for a quick and efficient retrieval of information.
6. Immediate storage of information: - In manual system there are many problems to store the largest amount of information.

## **FEASIBILITY STUDY**

Depending on the results of the initial investigation the survey is now expanded to a more detailed feasibility study. “FEASIBILITY STUDY” is a test of system proposal according to its workability, impact of the organization, ability to meet needs and effective use of the resources.

It focuses on these major questions:

1. What are the user’s demonstrable needs and how does a candidate system meet them?
2. What resources are available for given candidate system?
3. What are the likely impacts of the candidate system on the organization?
4. Whether it is worth to solve the problem?

During feasibility analysis for this project, following primary areas of interest are to be considered.

Investigation and generating ideas about a new system does this.

### **Steps in feasibility analysis**

Eight steps involved in the feasibility analysis are:

- Form a project team and appoint a project leader.
- Prepare system flowcharts.
- Enumerate potential proposed system.
- Define and identify characteristics of proposed system

Determine and evaluate performance and cost effective of each proposed system.

- Weight system performance and cost data.
- Select the best-proposed system.
- Prepare and report final project directive to management.

**Front-end and back-end selection**

An important issue for the development of a project is the selection of suitable front-end and backend. When we decided to develop the project, we went through an extensive study to determine the most suitable platform that suits the needs of the organization as well as helps in development of the project.

The aspects of our study included the following factors.

**Front-end selection:**

1. It must have a GUI that assists employees that are not from IT background.
2. Scalability and extensibility.
3. Flexibility.
4. Robustness.
5. According to the organization requirement and the culture.
6. Must provide excellent reporting features with good printing support.
7. Platform independent.
8. Easy to debug and maintain.
9. Event driven programming facility.
10. Front end must support some popular back end like Ms Access.

According to the above stated features we selected PYTHON as the front-end for developing our project.

**Back-end Selection:**

1. Multiple user support.
2. Efficient data handling.
3. Provide inherent features for security.
4. Efficient data retrieval and maintenance.
5. Stored procedures.
6. Popularity.
7. Operating System compatible.
8. Easy to install.
9. Various drivers must be available.
10. Easy to implant with the Front-end.

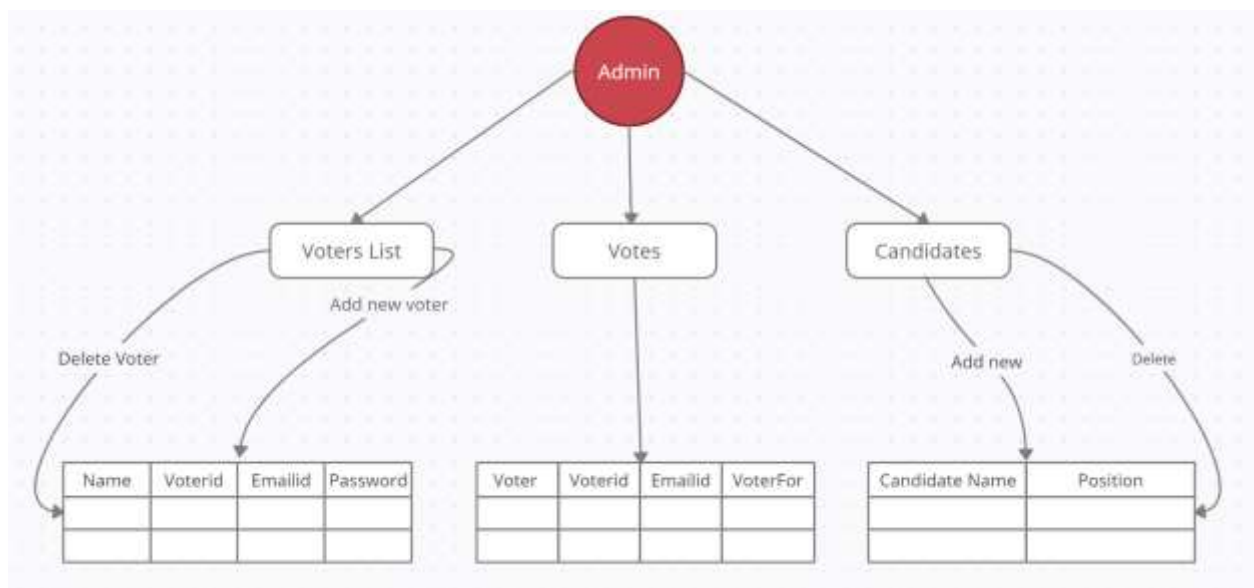
According to above stated features we selected SQLITE as the backend.

The technical feasibility is frequently the most difficult area encountered at this stage. It is essential that the process of analysis and definition be conducted in parallel with an assessment technical feasibility.

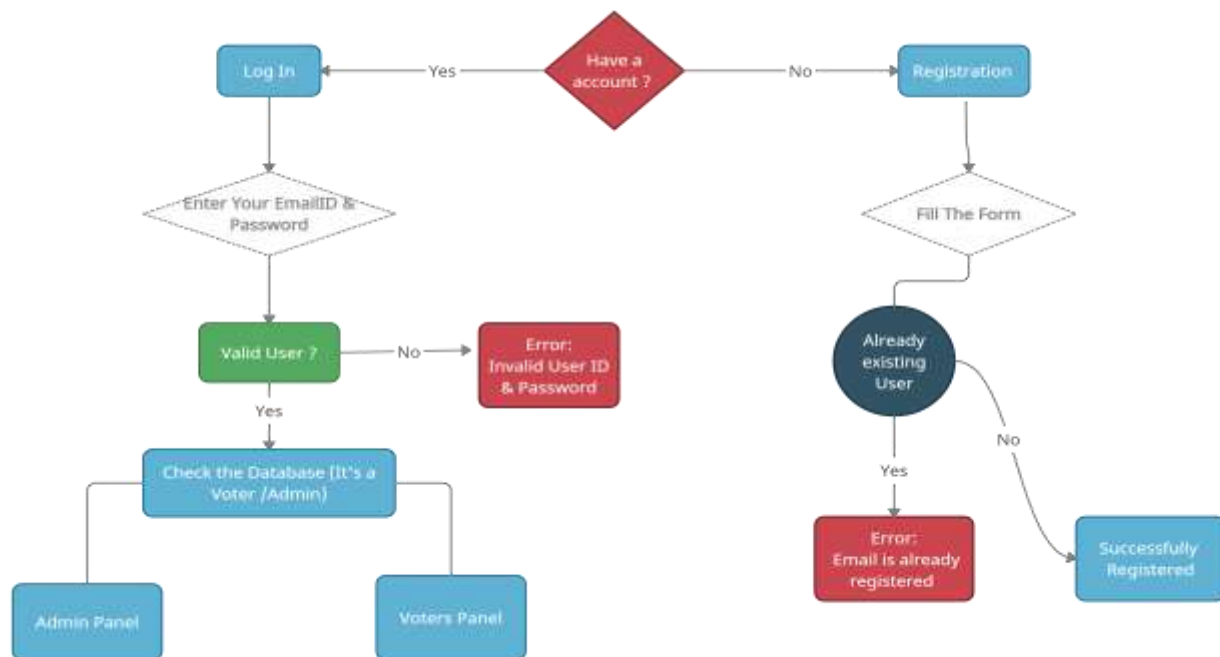
#### Advantages:

- Fast and easy service.
- The online voting system provides a less time consuming.
- It reduces the paper work and makes the work less tedious for election commission.
- It is a better way for voting.
- By this voting percentage will increase drastically

#### ADMIN FEATURE DIAGRAM



## FLOW CHART REPRESENTATION



## CONCLUSION

This Online Voting system will manage the Voter's information by which voter can login and use his voting rights. The system will incorporate all features of Voting system. It provides the tools for maintaining voter's vote to every party and it count total no. of votes of every party. There is a DATABASE which is maintained by the ELECTION COMMISSION OF INDIA in which all the names of voter with complete information is stored. In this user who is above 18 year's register his/her information on the database and when he/she want to vote he/she has to login by his id and password and can vote to any party only single time. Voting detail store in database and the result is displayed by calculation. By online voting system percentage of voting is increases. It decreases the cost and time of voting process. It is very easy to use and It is vary less time consuming. It is very easy to debug.

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