

**Visvesvaraya Technological University, Belagavi – 590010**



**DBMS MINI PROJECT REPORT  
ON  
Online Voting System**

*Submitted by*

SHAUN CRASTA

4SO20CS144

**Under the guidance  
of Ms Shravya Shetty**  
(Assistant Professor, CSE Department)



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**ST JOSEPH ENGINEERING COLLEGE  
Vamanjoor, Mangaluru -575028, Karnataka  
2022-2023**

**ST JOSEPH ENGINEERING  
COLLEGE**

**Vamanjoor, Mangaluru- 575 028**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

*This is to certify that the Mini project entitled “Online Voting” is a bonafide work carried out by*

**SHAUN CRASTA**

**4SO20CS144**

*Student of fifth semester B.E. Computer Science & Engineering, and submitted as a part of the course DBMS Laboratory with Mini Project (18CSL58), during the academic year 2022-2023.*

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**Ms Shravya Shetty**

**Project Guide**

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**Dr Sridevi Saralaya**

**Head of the Department**

**Name of the Examiners**

1. -----

2. -----

**Signature with Date**

1. -----

2. -----

## ABSTRACT

A Database Management System is a software for creating and managing databases. The DBMS provides users and programmers with a systematic way to create, retrieve, update and manage data.

The Online Voting System is a web based application. The system has a centralized database to keep records of all the Voters and Candidates and Final Results. This web based system is time saving, work load reduced information available at time and it provides security for the data. During the election, the election commission of India has introduced a new method of polling by online voting system . The election commission will maintain this website. This is a simple, safe and secure method that takes minimum amount of time.

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.

### ACKNOWLEDGEMENT

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# CHAPTER 1-INTRODUCTION

## 1.1 PROBLEM DEFINITION

The existing manual Voting system consumes more time for Vote Casting. Voter has to wait for vote polling station to vote for a right candidate. The election officers has to be check the voter , this voter can vote in this booth then check voter ID present in voters list of booth those are information will be present then the voter can vote in that booth. The voter had to stand in the queue to cast his vote. All the work is done in paper ballot so it is very hard to locate a particular candidates, some voters cast their votes for all candidates. To overcome of all these problems we have to implement a web application, which is helpful for Voting from any where.

## 1.2 ABOUT PROJECT

The objective of the system is a replacement of the traditional system that is in existence. This smart system reduces the time for voting and also the system is reliable, and faster. In this system the voter username and password will be sent through . The voter cast their vote enter the confirmation sent their mobile number . Database maintained by this system usually contains the Voters information, Candidate information, The final Result of total votes

## 1.3 SCOPE & IMPORTANCE

The voting system currently being used by the association is a paper based system, in which the voter simply picks up ballots sheets from electoral officials, tick off who they would like to vote for, and then cast their votes by merely handing over the ballot sheet back to electoral official. The electoral officials gather all the votes being cast into a ballot box. At the end of the elections, he electoral officials converge and count the votes cast for each candidate and determine the winner of each election category.

# CHAPTER 2-FUNCTIONAL REQUIREMENT SPECIFICATION

### 2.1.1 LOGIN

: In this module

- Citizen or Admin can log into their accounts
- Admin and Citizen must login with his/her unique id, password.
- Admin Registers all citizens who can vote in the elections

### 2.1.2 ADMIN

: In this module:

- The Admin can login with his credentials.
- Admin manages citizens who are eligible to vote
- Admin oversees the number of votes a candidate got and results of the elections
- Admin creates the elections and picks the candidates for each elections
- Admin decides the start and end date of the elections

### 2.1.3 CITIZEN

: In this module:

- The Citizen can login with his credentials.
- Citizen can votes for the ongoing elections
- Citizen can only vote at once in each elections
- Citizen can sees the result of elections in notification page



## 2.2 SOFTWARE REQUIREMENTS SPECIFICATION

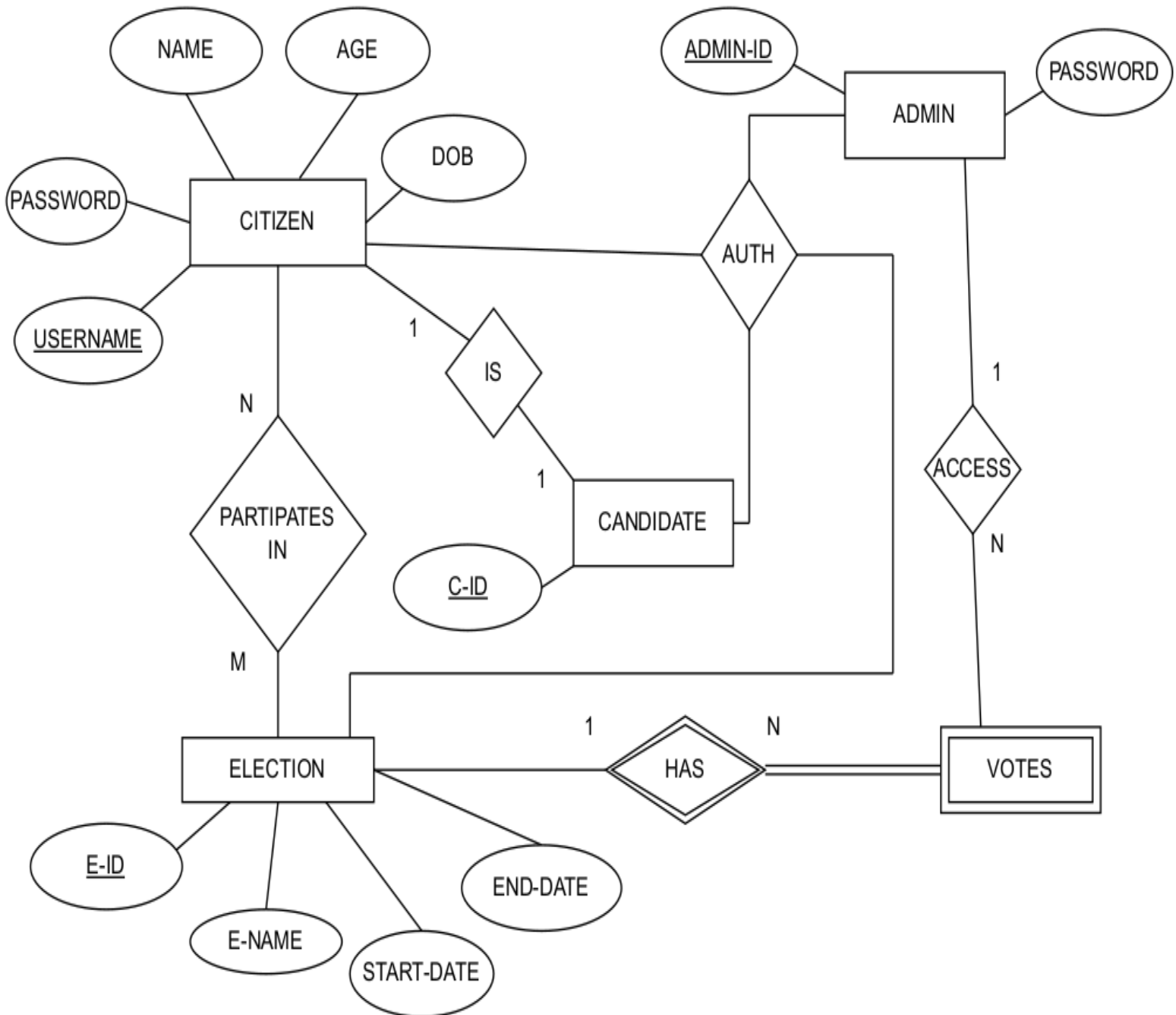
**Operating System:** Windows 7 or higher  
**Language:** HTML,CSS,Node.js, MYSQL  
**Database:** MYSQL  
**IDE:** VS Code

## 2.3 Hardware Requirements Specification

**Installed Memory (RAM):** 2GB or higher  
**Processor:** 1GHz or higher  
**Hard disk Space:** 20 GB availability  
**Display:** Standard output display

## CHAPTER-SYSTEM DESIGN

### 3.1 ER MODEL



### 3.2 SCHEMA DESCRIPTION

#### CITIZEN

|                 |          |      |     |     |
|-----------------|----------|------|-----|-----|
| <u>USERNAME</u> | PASSWORD | NAME | AGE | DOB |
|-----------------|----------|------|-----|-----|

#### ELECTION

|             |               |            |          |
|-------------|---------------|------------|----------|
| <u>E-ID</u> | ELECTION-NAME | START-DATE | END-DATE |
|-------------|---------------|------------|----------|

#### CANDIDATE

|                     |          |        |     |       |             |
|---------------------|----------|--------|-----|-------|-------------|
| <u>CANDIDATE-ID</u> | USERNAME | C_NAME | DOB | PH_NO | <u>E-ID</u> |
|---------------------|----------|--------|-----|-------|-------------|

#### VOTES

|             |             |                 |
|-------------|-------------|-----------------|
| <u>E-ID</u> | <u>C-ID</u> | <u>USERNAME</u> |
|-------------|-------------|-----------------|

#### ADMIN

|                 |          |
|-----------------|----------|
| <u>ADMIN-ID</u> | PASSWORD |
|-----------------|----------|

### 3.3 TABLE DESCRIPTION

**TABLE 3.3.1: CITIZEN**

| Field    | Type        | Null | Key | Default | Extra |
|----------|-------------|------|-----|---------|-------|
| username | varchar(30) | NO   | PRI | NULL    |       |
| password | varchar(30) | YES  |     | NULL    |       |
| name     | varchar(25) | YES  |     | NULL    |       |
| age      | int         | YES  |     | NULL    |       |
| dob      | date        | YES  |     | NULL    |       |

**TABLE 3.3.2: ADMIN**

| Field    | Type        | Null | Key | Default | Extra |
|----------|-------------|------|-----|---------|-------|
| admin_id | varchar(30) | NO   | PRI | NULL    |       |
| password | varchar(30) | YES  |     | NULL    |       |

**TABLE 3.3.3: CANDIDATE TABLE**

| Field         | Type        | Null | Key | Default | Extra |
|---------------|-------------|------|-----|---------|-------|
| candidate_id  | int         | NO   | PRI | NULL    |       |
| username      | varchar(30) | YES  | MUL | NULL    |       |
| c_name        | varchar(25) | YES  |     | NULL    |       |
| date_of_birth | date        | YES  |     | NULL    |       |
| ph_no         | varchar(15) | YES  |     | NULL    |       |
| e_id          | int         | YES  | MUL | NULL    |       |

**TABLE 3.3.4: ELECTION**

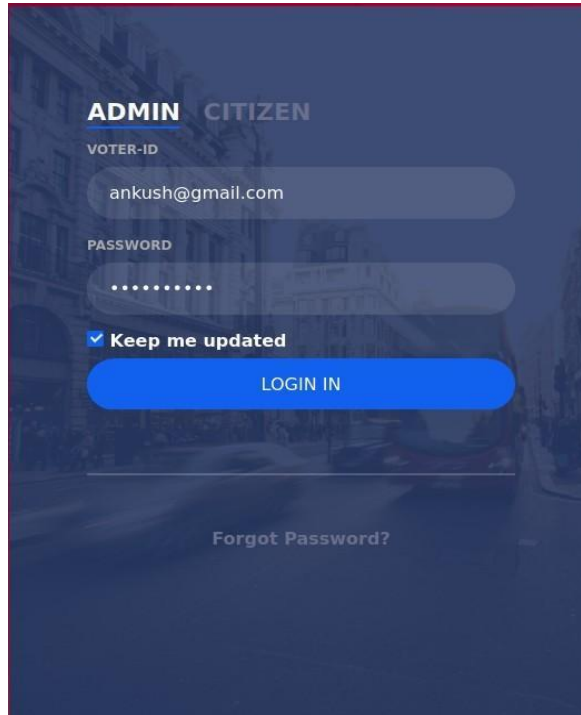
| Field                 | Type        | Null | Key | Default | Extra |
|-----------------------|-------------|------|-----|---------|-------|
| e_id                  | int         | NO   | PRI | NULL    |       |
| election_name         | varchar(30) | YES  |     | NULL    |       |
| start_dateadmin_login | date        | YES  |     | NULL    |       |
| end_date              | date        | YES  |     | NULL    |       |

**TABLE 3.3.5: VOTES**

| Field    | Type        | Null | Key | Default | Extra |
|----------|-------------|------|-----|---------|-------|
| e_id     | int         | YES  | MUL | NULL    |       |
| c_id     | int         | YES  | MUL | NULL    |       |
| username | varchar(30) | YES  | MUL | NULL    |       |

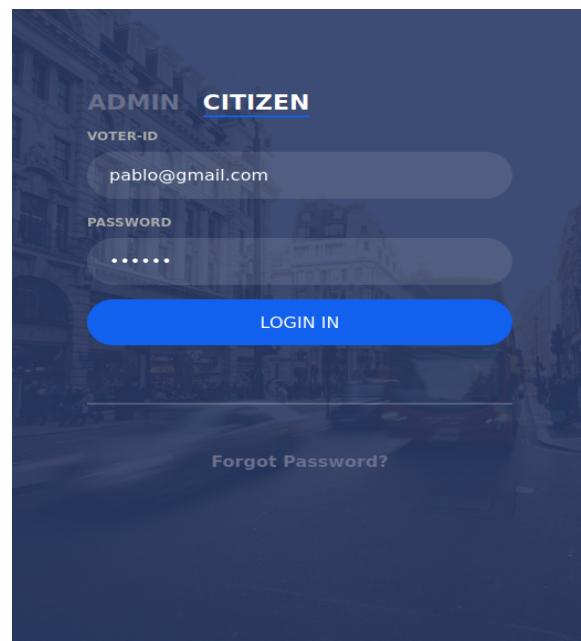
## CHAPTER 4 - SCREENSHOTS

### 4.1 - ADMIN LOGIN



The screenshot shows the Admin Login interface. At the top, there are two tabs: 'ADMIN' (selected) and 'CITIZEN'. Below the tabs, there are two input fields: 'VOTER-ID' with the value 'ankush@gmail.com' and 'PASSWORD' with masked characters '.....'. A checkbox labeled 'Keep me updated' is checked. Below the inputs is a blue 'LOGIN IN' button. At the bottom, there is a link 'Forgot Password?'. The background is a dark blue overlay on a city street image.

### 4.2 - CITIZEN LOGIN



The screenshot shows the Citizen Login interface. At the top, there are two tabs: 'ADMIN' and 'CITIZEN' (selected). Below the tabs, there are two input fields: 'VOTER-ID' with the value 'pablo@gmail.com' and 'PASSWORD' with masked characters '.....'. A blue 'LOGIN IN' button is present. At the bottom, there is a link 'Forgot Password?'. The background is a dark blue overlay on a city street image.

## 4.3 - CITIZEN REPORT

| CITIZENS REPORT |          |     |                    |               |  |
|-----------------|----------|-----|--------------------|---------------|--|
| Sr.No           | Name     | Age | Voter Id           | date of birth | action   |
| 1               | akash    | 21  | akash@gmail.com    | 2001-09-09    | <a href="#">edit</a><br><a href="#">delete</a> |
| 2               | awais    | 21  | awais@gmail.com    | 2001-09-07    | <a href="#">edit</a><br><a href="#">delete</a> |
| 3               | kruthika | 21  | kruthika@gmail.com | 2001-10-09    | <a href="#">edit</a><br><a href="#">delete</a> |
| 4               | neeraj   | 21  | neeraj@gmail.com   | 2001-11-08    | <a href="#">edit</a><br><a href="#">delete</a> |

## 4.4 - ELECTION CANDIDATE

| ELECTION CANDIDATE |                |            |                    |               |  |
|--------------------|----------------|------------|--------------------|---------------|--|
|                    |                |            |                    |               | <a href="#">ADD CANDIDATE</a>                  |
| Candidate ID       | Candidate Name | Phone No   | Voter Id           | date of birth | action   |
| 23                 | neeraj         | 9845673839 | neeraj@gmail.com   | 2001-09-09    | <a href="#">edit</a><br><a href="#">delete</a> |
| 1002               | kruthika       | 9980378292 | kruthika@gmail.com | 2001-10-09    | <a href="#">edit</a><br><a href="#">delete</a> |
| 1004               | pablo          | 6646134594 | pablo@gmail.com    | 2001-09-09    | <a href="#">edit</a><br><a href="#">delete</a> |

## 4.5 - VOTING RESULT

### VOTING RESULT

| Sr.No | Candidate Name | Election ID | date of birth | Vote Count |
|-------|----------------|-------------|---------------|------------|
| 1     | neeraj         | 3           | 2001-09-09    | 3          |
| 2     | kruthika       | 3           | 2001-10-09    | 2          |
| 3     | pablo          | 2           | 2001-09-09    | 2          |

## 4.6 - ELECTION

### ELECTION

ADD ELECTION

| Sr.No | ELECTION NAME | ELECTION ID | START DATE | END DATE   | action |
|-------|---------------|-------------|------------|------------|--------|
| 1     | BMC Election  | 2           | 2018-01-01 | 2018-01-02 | END    |
| 2     | Foo Bar       | 3           | 2018-02-02 | 2018-02-03 | END    |
| 3     | samson        | 88          | 2002-05-05 | 2002-02-01 | END    |



## 4.7 - NOTIFICATION

| NOTIFICATION  |             |        |
|---------------|-------------|--------|
| Election Name | Election ID | WINNER |
| BMC Election  | 2           | pablo  |
| Foo Bar       | 3           | neeraj |

## 4.8 - CURRENT ELECTION

ELECTION

BMC Election

Foo Bar

## 4.9 - VOTE

| VOTE  |       |            |              |               |                 |
|-------|-------|------------|--------------|---------------|-----------------|
| Sr.No | Name  | Mobile     | Candidate ID | date of birth | action          |
| 1     | pablo | 6646134594 | 1004         | 2001-09-09    | <div>VOTE</div> |

## 4.10 - NOTIFICATION

| NOTIFICATION  |             |        |
|---------------|-------------|--------|
| Election Name | Election ID | WINNER |
| BMC Election  | 2           | pablo  |
| Foo Bar       | 3           | neeraj |

### CHAPTER 5 – CONCLUSION & SCOPE

An online voting system offers numerous benefits over traditional offline voting methods. One of the biggest advantages is increased accessibility and convenience for voters, as they can cast their ballots from the comfort of their own homes at any time. This can lead to higher voter turnout and participation, especially for individuals who may face physical barriers or challenges with traditional in-person voting. Additionally, online voting systems can also improve the efficiency and accuracy of the voting process, as well as reduce the costs associated with printing and distributing paper ballots. Overall, an online voting system is a more modern and effective solution for conducting elections that can better serve the needs of all voters.

The future scope of an online voting system could include several potential developments.

- One possibility is the integration of advanced security measures to further ensure the integrity and confidentiality of the voting process. This could include the use of blockchain technology to create a tamper-proof, decentralized ledger for recording and tracking votes.
- Another area for future development could be the incorporation of more accessible design features for individuals with disabilities, such as screen readers or text-to-speech functionality.
- Additionally, the use of online voting could be expanded beyond just traditional elections to include other types of voting events such as company meetings, union elections, and referendums.
- Lastly, online voting systems could be linked with the national identification system to ensure voter identity and to eliminate the risk of multiple voting.

Overall, the future of online voting systems holds great potential for improving the accessibility, security, and efficiency of the democratic process.

### REFERENCES

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