D.K.T.E. Society's Textile and Engineering Institute, Ichalkaranji

(An Autonomous Institute, Affiliated to Shivaji University, Kolhapur)

Accredited with 'A 'Grade by NAAC

Department of Computer Science & Engineering
2022-2023

THE SRS AND DESIGN DOCUMENT ON

"Secure-Vote"

Under the guidance

Of

Mrs. Prof. Jayamala Madam

Submitted By:

Rushikesh Giri	20UCS055
Rohnit Kabade	20UCS062
Pranav Kamble	20UCS065
Pranav Karadage	20UCS070

Have successfully completed the SRS and Design work, of the mini project entitled

"Secure-Vote"

In partial fulfillment for T.Y. B. Tech CSE academics. This is the record of their work carried out during academic year 2022-2023.

Date:

Place: Ichalkaranji

Mrs. Prof. Jayamala Madam   Prof. Dr. D.V. Kodavade

[Project Guide]   **[HOD]**

DECLARATION

We the undersigned students of T.Y.C.S.E. declare that the Project work report entitled "Secure-Vote" written and submitted under the guidance of Mrs. Prof. Jayamala isour original work. The empirical findings in this report are based on the data collected byus. The matter assimilated in this report is not reproduction from any readymade report.

Date:

Place: Ichalkaranji

Name   Signature

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SYNOPSIS

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INTRODUCTION

India has democratic government. As now all Indian citizens become a part of the growing digital India. They have a digital ID that is Aadhaar card. Voting schemes have evolved from counting hands in early days to systems that include paper, punch card, electronic voting machine. An electronic voting system which is used nowadays provide some characteristic different from the traditional voting technique, and also it provides improved features of voting system over traditional voting system such as accuracy, convenience, flexibility, privacy, verifiability and mobility.

But Electronic voting systems suffers from various drawbacks such as time consuming, consumes large volume of paperwork, no direct role for the higher officials, damage of machines due to lack of attention, mass update doesn't allow users to update and edit many items simultaneously etc. These drawbacks can overcome by Online Voting System. This is a voting system by which any voter can use his/her voting rights from anywhere in the country. Voter can cast their votes from anywhere in the country without visiting to voting booths, in highly secured way. That makes voting a fearless of violence and that increases the percentage of voting.

LITERATURE REVIEW

To make the voting process very easy and efficient wireless and web technologies are used. The online- voting system has the possibility of secure, easy and safe way to capture and count the votes in the election. The author in online voting system based on Aadhaar id" uses Aadhaar id as key of authentication, system is efficient in terms of time and provides security the system is great improvement over traditional system, but the main problem resides in this system is that of authentication, the authentication technique used is not that efficient as biometric is not used.

Sr. No	System	Communication Interface	User Interface	Applications	Benefits
1.	Web-Based-Voting. handy Hussein, et al.IEEE 2013.	Web-Browser	Web-Based Application	Online	a) Eligibility b) Uniqueness c) Efficient
2.	Blockchain-voting Geetanjali Rathee March 4,2021	Server-Client Interface	IOT oriented smart devices	Online	a) All the entities involved have access b) Reliable
3.	E-Voting system Faisalabad 2019	window based application	GUI	Online suggestions.	a)Ease of access b)Remote Availability
4.	E-voting	Server-client Interface	Web-Based Application	Online	a) Easyto use b) Simpler Interface

PROBLEM STATEMENT/OBJECTIVE

a) **Problem Statement: -**

       The Existing System of Election is running manually. The Voter has to Visit to Booths to Vote a Candidate so there is. wastage of Time. The Voter has to manually register into the Voter List. Also, Vote counting has to be done manually. All the Information of the Voter or Candidate is to be filling in manually. Voter must be present in his/her Constituency to give his/her Vote.

b) **Objective: -**

- Increasing number of voters as individuals will find it easier and more convenient to vote.

- Less effort and less labor intensive, as the primary cost and focus primary on creating,managing, and running a secure web voting portal.

- The system can be used anytime and from anywhere by the Voters.

- No one can cast votes on behalf of others and multiple times.

- Saves time and reduces human intervention.

- The system is flexible and secured to be used.

- Unique Identification of voter through Aadhar number.

- Improves voting with friendly Interface.

- No fraud vote can be submitted.

PROPOSED METHODOLOGY

- **Login**: - Candidate need to login with their Registered Account to start using our system.

- **Vote**: - Candidate is needed to click on vote for being in voting process.

- **Aadhaar number**: Candidate needs to write their Aadhaar number.

- **Submit**: -When they try to enter Aadhaar number, their credentials will be stored in our existing database.

- **Reset**: Back to Login portal.
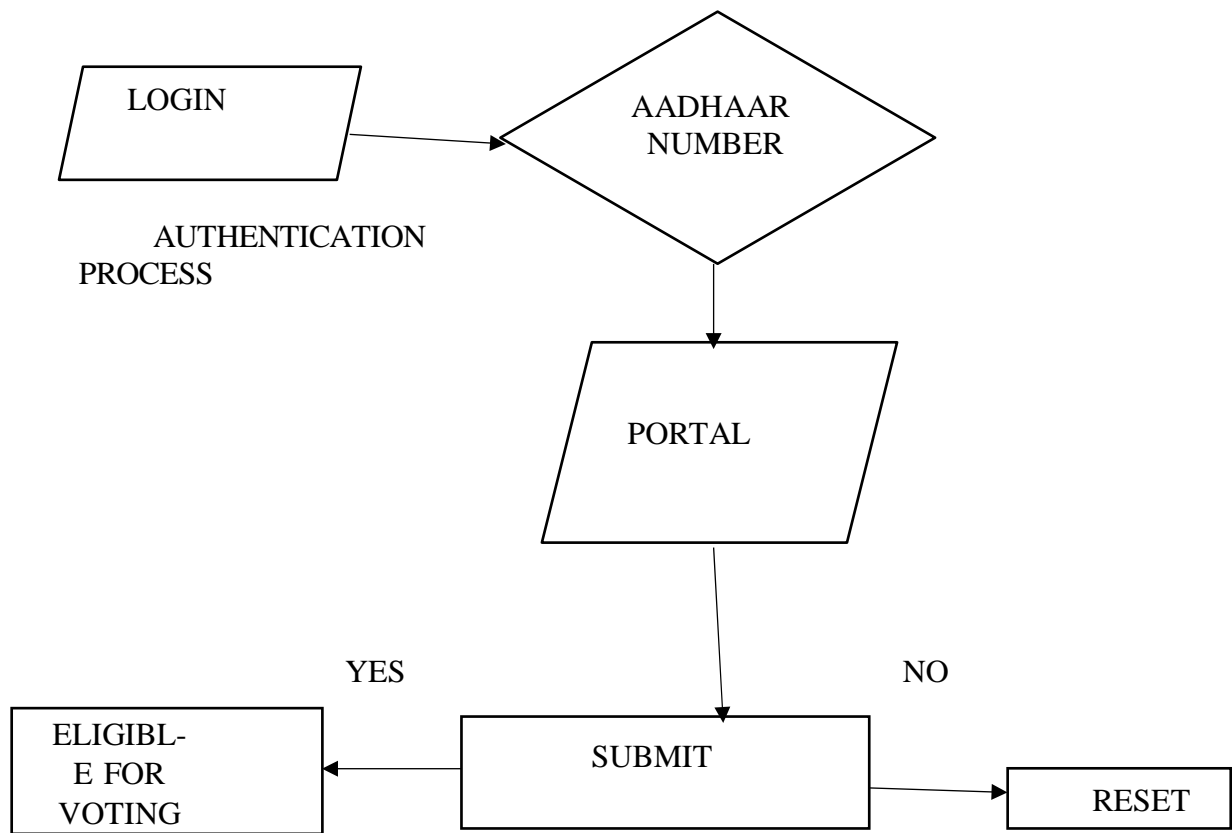
- **Eligible for voting**: -Candidate voted successfully.

BLOCK DIAGRAM

LOGIN

AADHAAR
NUMBER

AUTHENTICATION
PROCESS

PORTAL

YES   NO

ELIGIBL-
E FOR
VOTING

SUBMIT

RESET

Fig: - Block diagram of Secure Vote

FACILITIES REQUIRED FOR PROPOSED WORK

a) **Hardware:**

- Microsoft Windows Professional/Windows 10:
- Processor: 800MHz Intel Pentium III or equivalent Memory: 512 MB
- Disk space: 750 MB of free disk space

b) **Software:**

1. Operating System: Windows 10

2. Language: HTML

3. Database: Oracle

4. Tool: HTML and CSS, Notepad

CONCLUSION

Online Voting Systems have many advantages over the traditional voting system. Some of these advantages are less cost, faster generation results, easy accessibility, accuracy, and low risk of human and mechanical errors. It is very difficult to develop online voting system which can allow security and privacy on the high level.

Future development focused to design a system which can be easy to use and will provide security and privacy of votes on acceptable level by proper authentication and processing section. It is easy to use and it is less time consuming. It is very easy to debug.

REFERENCES

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ABSTRACT

The project is mainly aimed at providing a secured and user-friendly Online Voting System. The problem of voting is still critical in terms of safety and security. This system deals with the design and development of a web-based voting system using fingerprint and Aadhaar card in order to provide a high performance with high security to the voting system.

The proposed Online Voting System allows the voters to scan their fingerprint, which is then matched with an already saved image within a database that is retrieved from Aadhaar card database of the government. The voting system is managed in a simpler way as all the users must login by Aadhaar card number and click on his/her favorable candidates to cast the vote by using biometric fingerprint it provides enough security which reduces the dummy votes.

Keywords: Online voting system, Online election system, AADHAAR based online election.

INTRODUCTION

India has democratic government. As now all Indian citizens become a part of the growing digital India. They have a digital ID that is Aadhaar card. Voting schemes have evolved from counting hands in early days to systems that include paper, punch card, electronic voting machine. An electronic voting system which is used nowadays provide some characteristic different from the traditional voting technique, and also it provides improved features of voting system over traditional voting system such as accuracy, convenience, flexibility, privacy, verifiability and mobility.

But Electronic voting systems suffers from various drawbacks such as time consuming, consumes large volume of paperwork, no direct role for the higher officials, damage of machines due to lack of attention, mass update doesn't allow users to update and edit many item simultaneously etc. These drawbacks can overcome by Online Voting System. This is a voting system by which any voter can use his/her voting rights from anywhere in the country. Voter can cast their votes from anywhere in the country without visiting to voting booths, in highly secured way. That makes voting a fearless of violence and that increases the percentage of voting.

PROBLEM STATEMENT

Build a Secure Vote Website System through which Voters can Vote Anywhere, anytime.

PROBLEM DESCRIPION

The Problem is that voters are unable to vote from anywhere they have to go different government centers for voting purpose.

Voter faces problems like:

- Have to travel long distance for voting.
- Have to give specific time for voting not of their desired time.
- Tempering of voters may occur.
- Forced vote may occur.

-

INPUT

Voters Details and vote for Candidate.

OUTPUT

Voting Process Successfully Executed.

REQUIREMENT SPECIFICATION

a) Hardware:

- Microsoft Windows Professional/Windows 10:

- Processor: 800MHz Intel Pentium III or equivalent Memory: 512 MB
- Disk space: 750 MB of free disk space

b) Software:

1. Operating System: Windows 11

2. Language: HTML

3. Database: Oracle

4. Tool: HTML and CSS, Notepad

REQUIREMENT ANALYSIS

STEP 1: Enter Details Below

STEP 2: Main Page
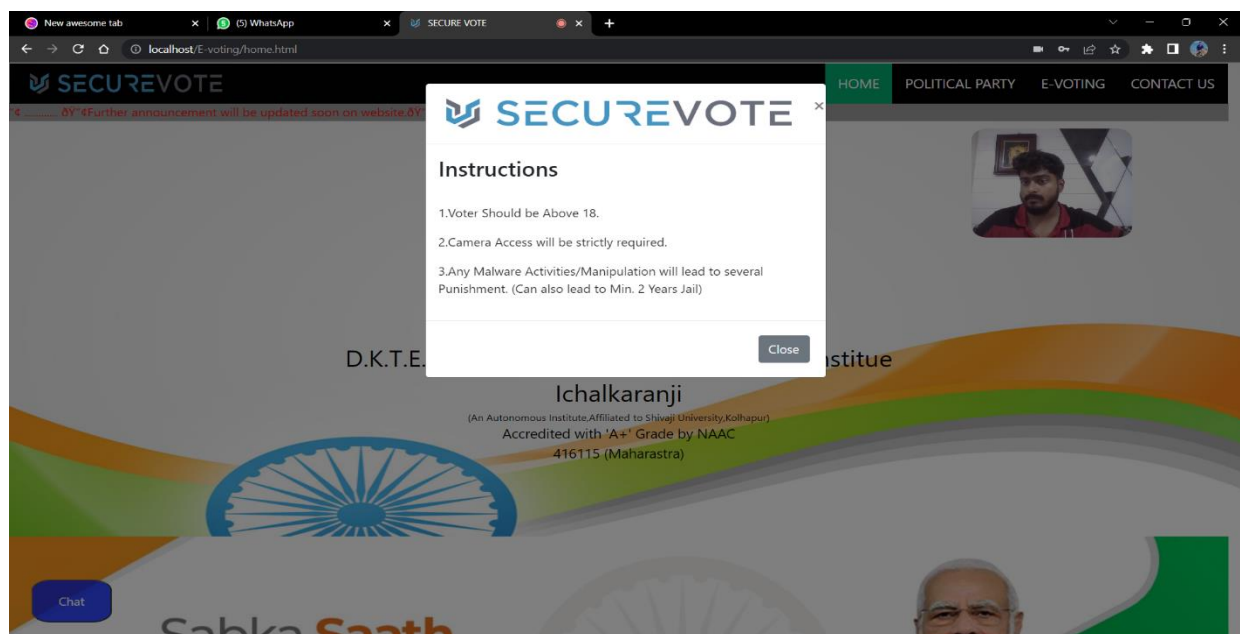
PROBLEM SOLUTION

Algorithm:

1. Begin

2. Open the website for Secure Vote.
.
3. Type Basic Information.

4. Select the candidate whom to vote.

5. Click on 'SUBMIT' Button if all the information and vote is correct.

6. If NO Click on 'RESET' Button.

7. If YES Click on 'SUBMIT'.

8. End.

UML DIAGRAM

LOGIN

DETAILS

VOTE

USER

ADMIN
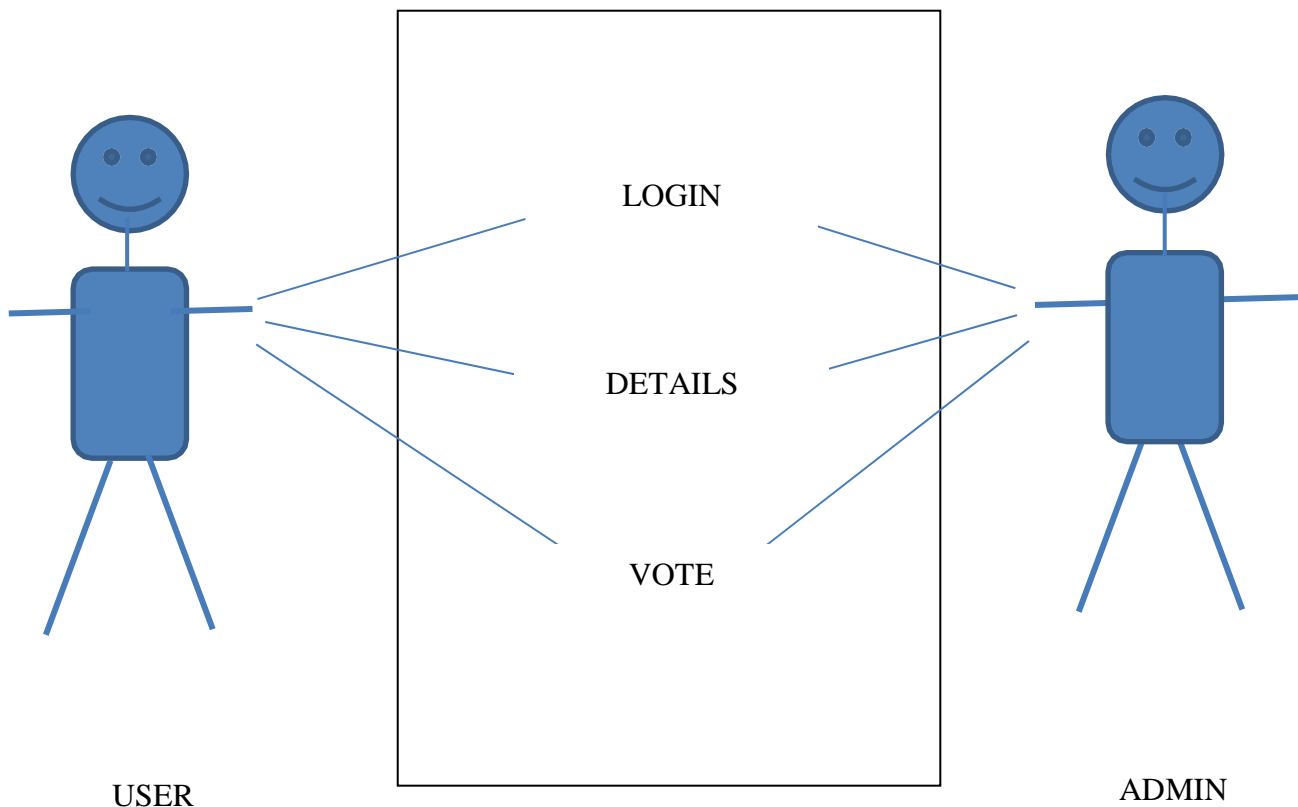
Fig: - UML Diagram of Secure Vote

ACTIVITY DIAGRAM
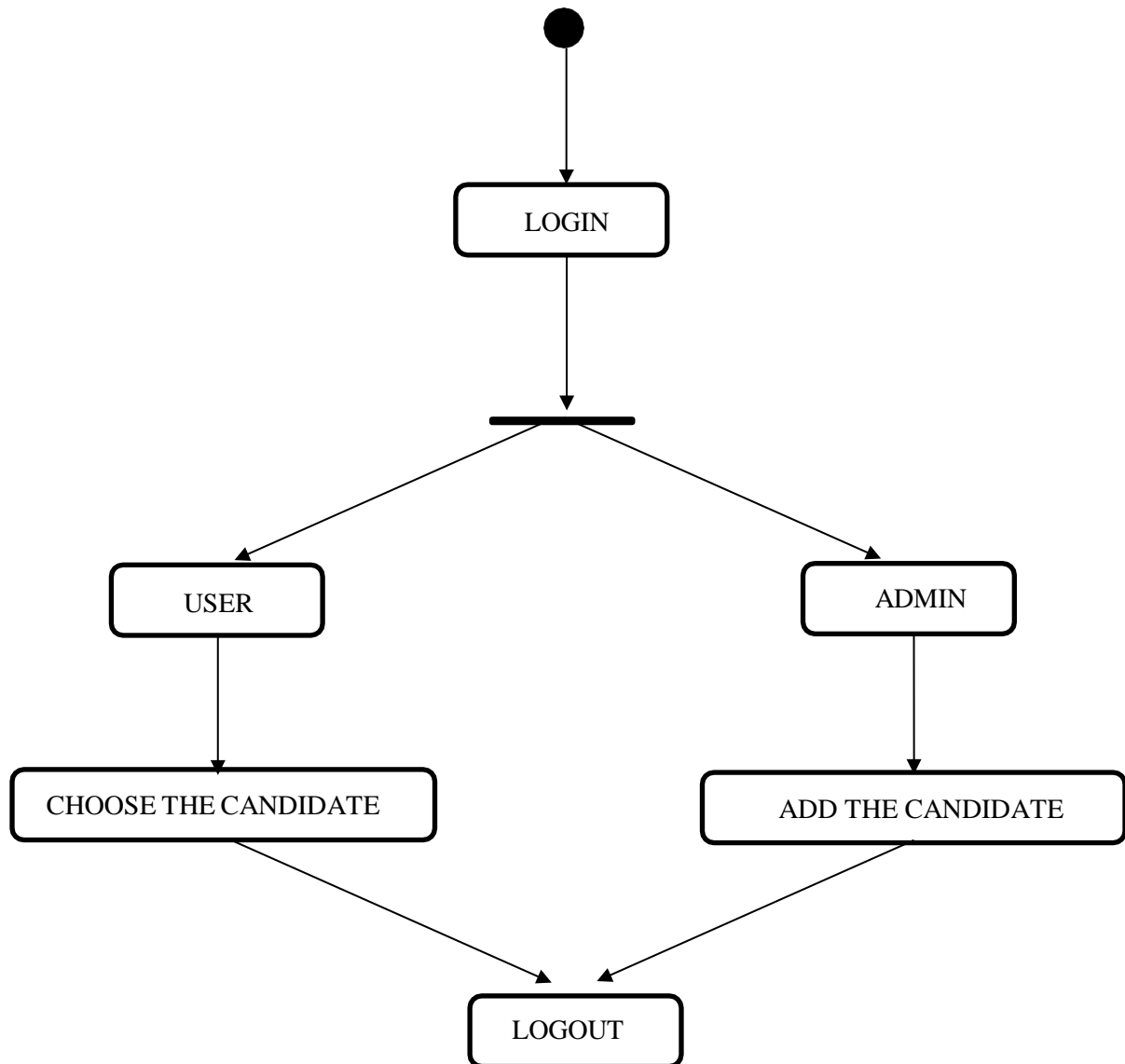
Fig: - Activity Diagram of Secure Vote

BLOCK DIAGRAM
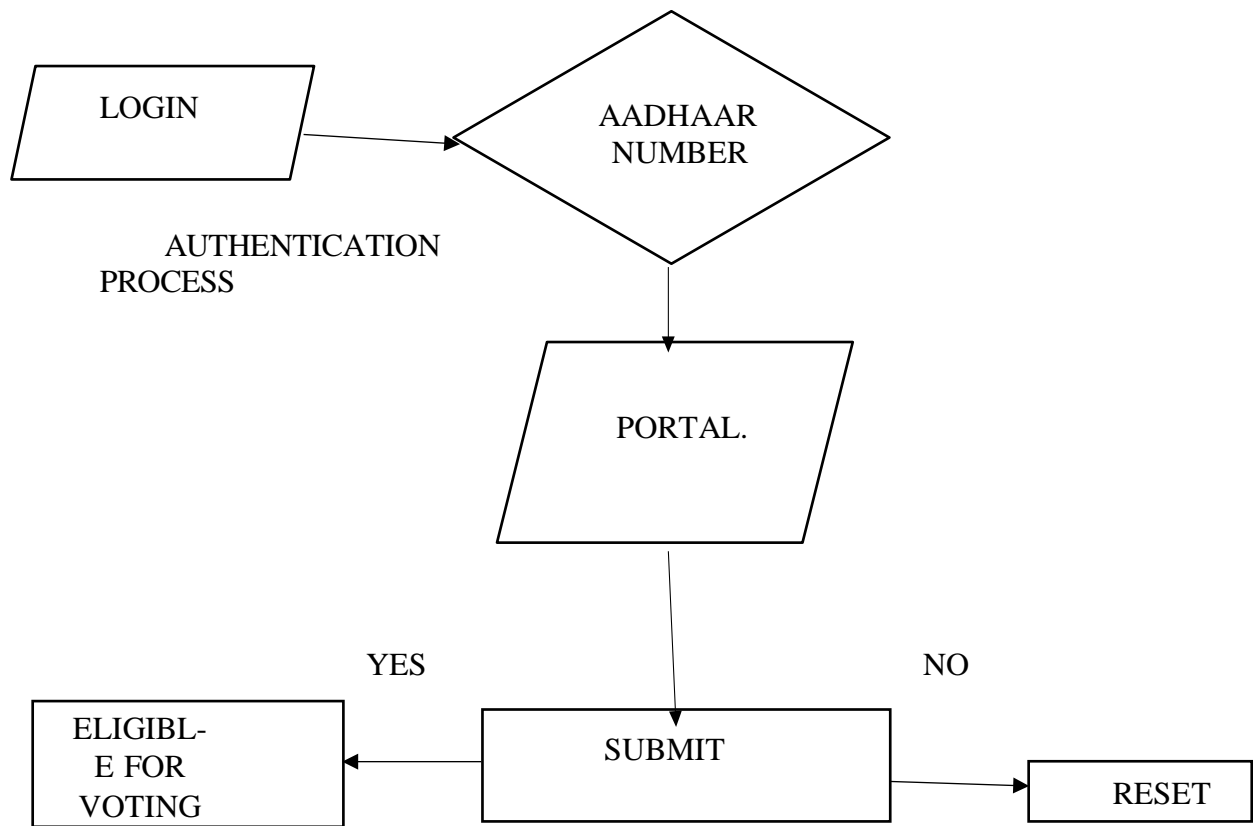
Fig: - Block diagram of Secure Vote

IMPLEMENTATION

```html
<html lang="en" dir="ltr">

<head>
    <meta charset="utf-8">
    <title> SECURE VOTE
    </title>
    <link rel="icon" href="images/logo.png">


    <style>
        .center {
            position: absolute;
            top: 50%;
            left: 50%;
            transform: translate(-50%, -50%);
            width: 400px;
            background: white;
            border-radius: 10px;
            box-shadow: 10px 10px 15px rgba(0, 0, 0, 0.05);
        }

        .center h1 {
            text-align: center;
            padding: 20px 0;
            border-bottom: 1px solid rgb(228, 8, 8);
        }

        .center form {
            padding: 0 40px;
            box-sizing: border-box;
        }

        form .txt {
            position: relative;
            border-bottom: 2px solid #adadad;
            margin: 30px 0;
        }

        .txt input {
            width: 100%;
            padding: 0 5px;
            height: 40px;
            font-size: 16px;
            border: none;
            background: none;
            outline: none;
        }

        .txt label {
```

```css
        position: absolute;
        top: 50%;
        left: 5px;
        color: #adadad;
        transform: translateY(-50%);
        font-size: 16px;
        pointer-events: none;
        transition: .5s;
    }
    .txt input:focus~label,
    .txt input:valid~label {
        top: -5px;
        color: #2691d9;
    }
    .txt input:focus~span::before,
    .txt input:valid~span::before {
        width: 100%;
    }

    .pass {
        margin: -5px 0 20px 5px;
        color: #a6a6a6;
        cursor: pointer;
    }

    .pass:hover {
        text-decoration: underline;
    }
    input[type="submit"] {
        width: 100%;
        height: 50px;
        border: 1px solid;
        background: #2691d9;
        border-radius: 25px;
        font-size: 18px;
        color: #e9f4fb;
        font-weight: 700;
        cursor: pointer;
        outline: none;
    }

    input[type="submit"]:hover {
        border-color: #2691d9;

    }
    .signup_link {
        margin: 30px 0;
        text-align: center;
        font-size: 16px;
        color: #666666;
    }
```

```css
        .signup_link a {
            color: #2691d9;
            text-decoration: none;
        }

        .signup_link a:hover {
            text-decoration: underline;
        }
        #container {
            margin: 0px auto;
            width: 500px;
            height: 375px;
            border: 10px#65656533;
        }
        #videoElement {
            width: 150px;
            height: 150px;
            background-color: #d2d2d2;
            border-radius: 50%;
            float: right;
            background-image: url('images/profile.png');
            background-size: cover;
            margin-right: 20px;
        }
    </style>
</head>

<body>
        <div id="container-fluid">


            <video autoplay="true" id="videoElement">


            </video>
        </div>
        <script>
            let video = document.querySelector("#videoElement");

            if (navigator.mediaDevices.getUserMedia) {

                navigator.mediaDevices.getUserMedia({ video: true })
                .then(function (stream) {

                    video.srcObject = stream;

                })
                .catch(function (error) {

                    console.log("Something went wrong!");

                })
```

```
                }else {
                        console.log("getUserMedia not supported!");
                }
            </script>
    <div class="center">
        <h1>Login</h1>
        <form action="login.php" method="post">
            <div class="txt">
                <input type="txt" id="Aadhaar" class="form-control" name="Aadhaar" required>

                <label for="Aadhaar" >Aadhaar number </label>
            </div>
            <div class="txt">
                <input type="password" id="password" class="form-control" name="password"
required>
                <label for="password">Password</label>
            </div>
            <div class="pass">Forgot Password?</div>
            <input type="submit" value="Login" name="">
            <div class="signup_link">
                Not an existing user? <a href="signup.html">Signup</a>
            </div>
        </form>
    </div>
    <center>
        <h4 style="margin-top: 25px; margin-bottom: 0px; margin-left: 11%;">POWERED BY</h4>
    </center>
    <center><img src="images/e-voting.png" height=8% width=30% style=" margin-left:
11%;margin: top 10px; ; margin-bottom: 5px;">
    </center>
</body>
</html>
```
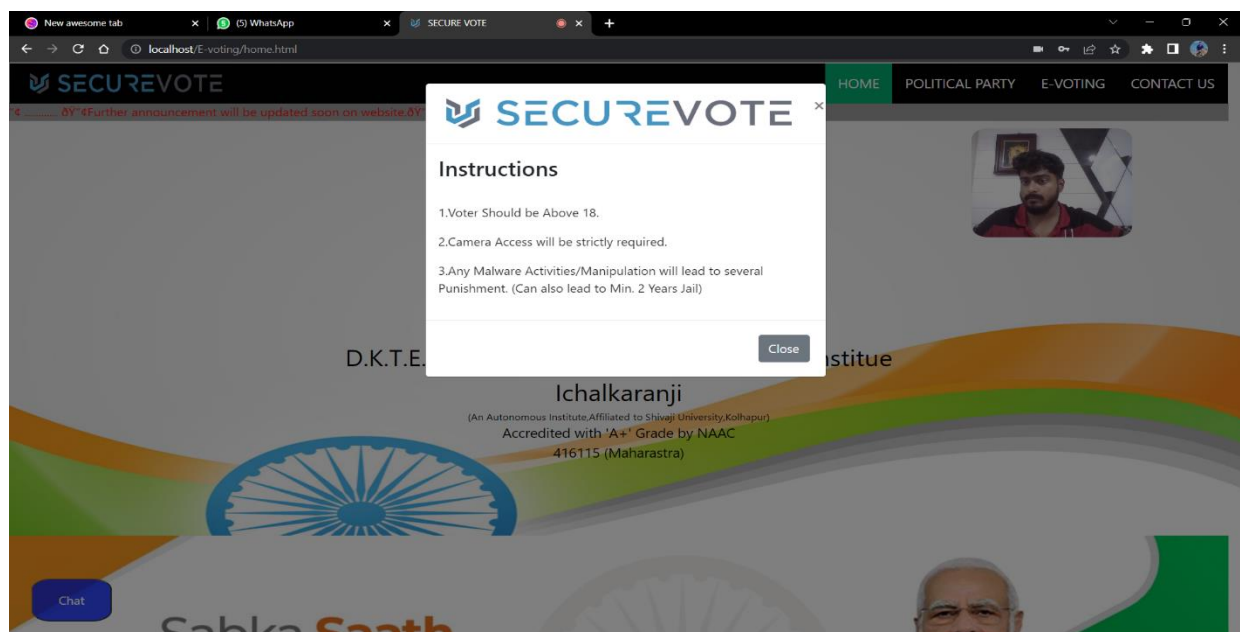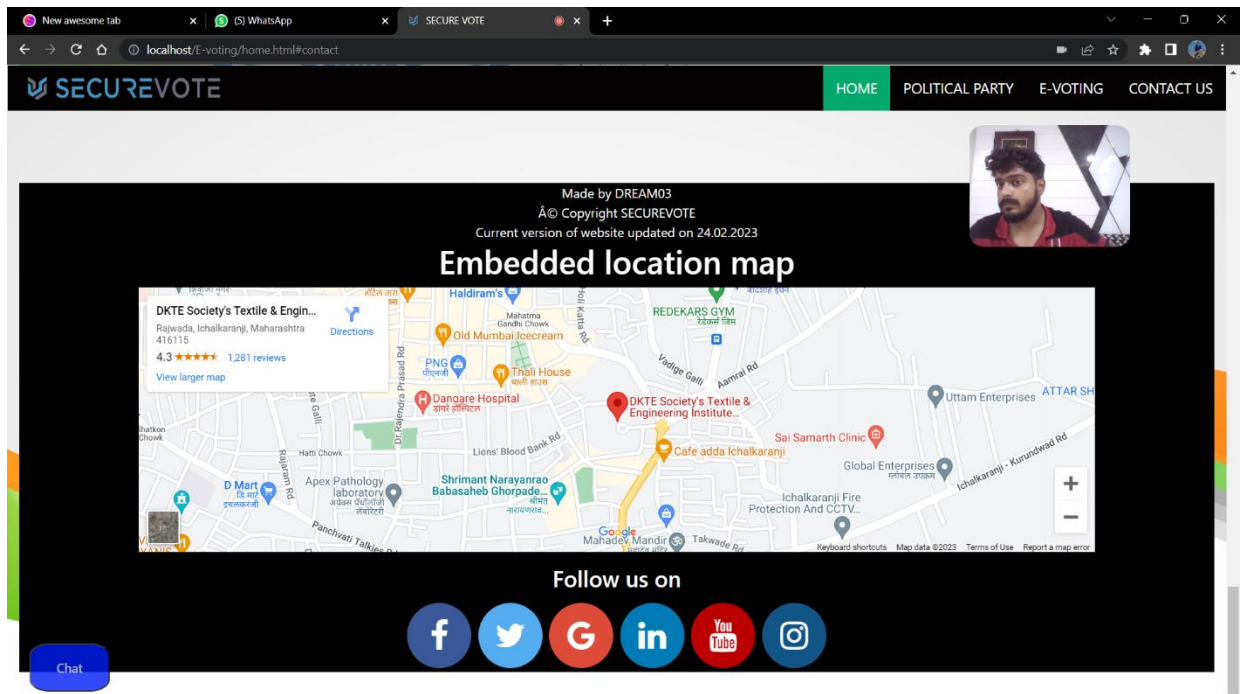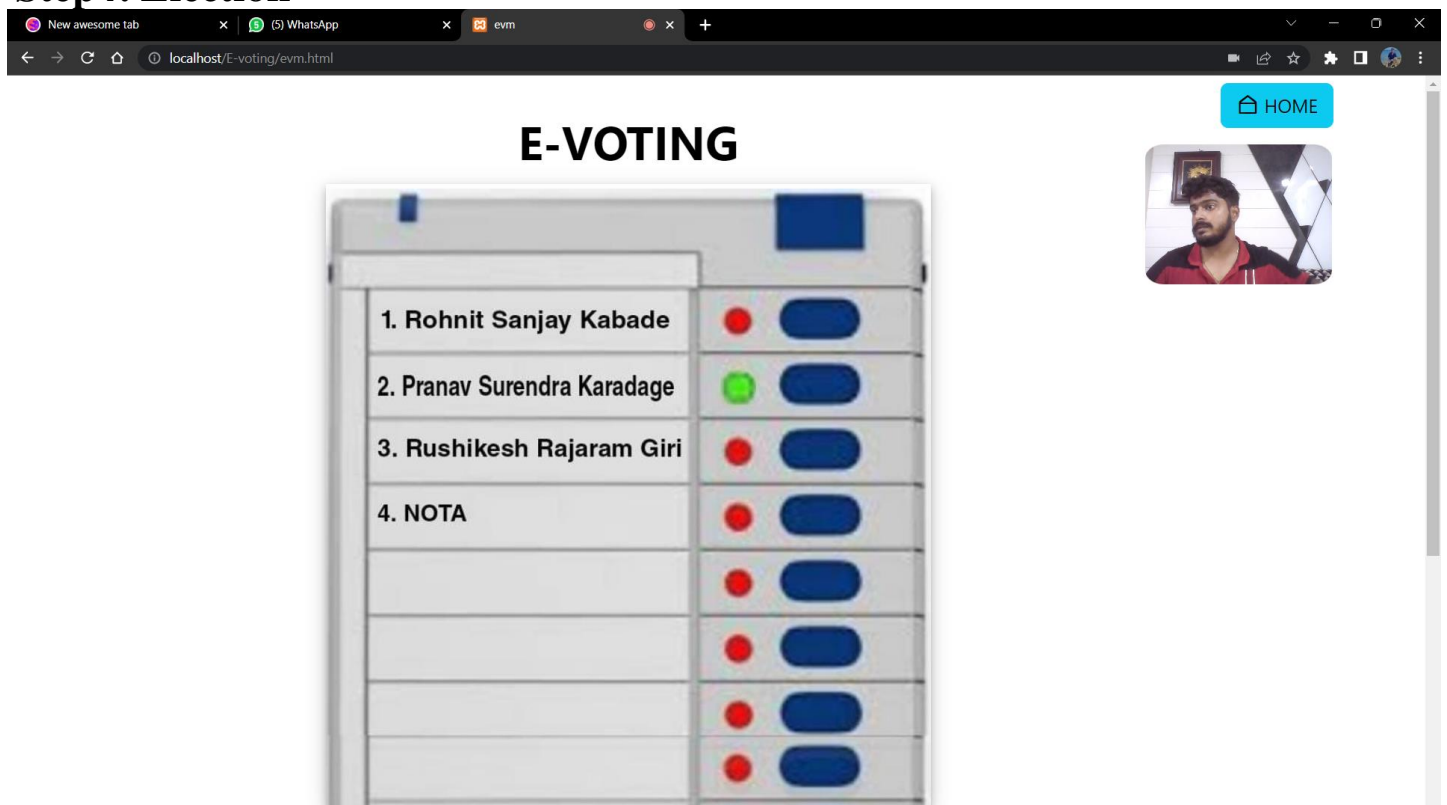
SNAP SHOT (Back-End)

SNAP SHOT (Front-End)

Step1: Login Details

Step2: Portal

Step3:service

Step4: Election

Step5: Database

CONCLUSION

Online Voting Systems have many advantages over the traditional voting system. Some of these advantages are less cost, faster generation results, easy accessibility, accuracy, and low risk of human and mechanical errors. It is very difficult to develop online voting system which can allow security and privacy on the high level.

Future development focused to design a system which can be easy to use and will provide security and privacy of votes on acceptable level by proper authentication and processing section. It is easy to use and it is less time consuming. It is very easy to debug.

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