1. INTRODUCTION

The "**COLLEGE VOTING SYSTEM**" is an online voting technique. In this system students who have joined the college and eligible by registering can give their vote online without going to any physical polling station. Where there is a database which is maintained in which all the names of voters with complete information is stored.

In "COLLEGE VOTING SYSTEM" a voter can vote right through online without any difficulty. They have to register first to cast vote. Registration is mainly done by visiting website and entering your details in registration section. After the validity of them being student of the college, registration has been confirmed by the system administrator by comparing their details submitted with those in existing databases such as the register id of the persons', then the student is registered as a voter.

After registration, the voter is assigned an ID created by administrator which they can use to login to the system and enjoy services provided by the system such as voting. If invalid/wrong details are submitted then the student is not registered to vote.

2. SYSTEM ANALYSIS

2.1 EXISTING SYSTEM

The problems with the existing manual system of voting include among others the following:

1. Expensive and Time consuming:

The process of collecting data and entering data into the database takes too much time and is expensive to conduct, for example, time and money spent in printing data capture forms, in preparing registration stations together with human resources and there after advertising the days set for registration process including sensitising voters on the need for registration, as well as time spent on entering this data to the database.

2. Too much paper work:

The process involves too much paper work and paper storage which is difficult as papers become bulky with the population size

3. Errors during data entry:

Errors are part of all human beings; it is very unlikely for humans to be 100 percent efficient in data entry.

4. Loss of registration forms:

Sometimes, registration forms get lost after being filled in with voters' details, in most cases these are difficult to follow-up and therefore many remain unregistered even though they are voting age nationals and interested in exercising their right to vote.

5. Short time provided to view the voter register:

This is a very big problem since not all people have free time daring the given short period of time to check and update the vote register.

6. Above all, a number of voters end up being locked. out from voting.

2.2 PROPOSED SYSTEM

Electronic voting maximizes participation Easy and Efficient takes only a minute or two to vote Convenient people can vote online when evite them there's no ballot to mail or meeting to attend Higher response rates email reminders and online convenience host participation for busy owners.

Voting online saves money:

No supply costs - no paper ballots, no postage and no printing.

No equipment - 100% hosted and electronic.

Automated - no time of resources needed for manual hand counts.

Cost - effective conduct multiple votes annually.

Voting online saves time and eases vote management:

Quick and easy - full-service setup and management saves you time, so you can work on other projects.

Automatic vote tallying - no manual counts of paper ballots.

Accurate - no duplicate or invalidated ballots.

No waiting for results - real time results, no waiting for ballots in the mail.

Print the results - print out the results and use it to help tally physical ballots if they exist.

Electronic voting is private and secure:

Private - our third-party service provides a layer of separation between the voting process and individuals involved.

Secure - no unsecured paper ballots.

Authentication each vote is captured with a date and timestamp along with the voter's internet address.

Electronic voting is environment friendly:

100% Green Friendly - not a single tree is harmed in this easy to use electronic voting process.

2.3 FEASIBILITY STUDY

A feasibility study, also known as feasibility analysis, is an analysis of the viability of an idea. The results of this analysis are used in making the decision whether to proceed with the project or not.

Feasibility Considerations

Two key considerations are involved in the feasibility study.

1. Economic feasibility
2. Technical feasibility

2.3.1 Economic feasibility

Economic analysis could also be referred to as cost/benefit analysis. In economic analysis the procedure is to determine the benefits and savings that are expected from a candidate system and compare them with costs. If benefits outweigh costs, then the decision is made to design and implement the system.

- The system is cost effective.
- Estimated cost of hardware is feasible.
- Estimated cost of software development is feasible

2.3.2 Technical feasibility

The systems project is considered technically feasible if the internal technical capability is sufficient to support the project requirements. The analyst must find out whether current technical resources can be upgraded or added to in a manner that fulfils the request under consideration.

- The project is feasible within the limits of current technology.
- It is available within given resources constraints.
- It is a practical proposition.
- The current technical resources sufficient for the new system.
- The technology can be easily applied to the current problems.

2.4 SYSTEM REQUIREMENTS

2.4.1 SOFTWARE REQUIREMENTS

- Operating system : Windows v7 or later versions
- Front End : HTML, CSS
- Back End : PHP, SQL
- Tools Used : Visual Studio, Notepad, Notepad++, Xampp for database and server
- Browser : Google Chrome, Mozilla Firefox, Microsoft Edge

2.4.2 HARDWARE REQUIREMENTS

- Processor : 1 GHz
- RAM : 512MB
- Hard Disk : 3GB

3. SYSTEM DESIGN

3.1 MODULES

The system includes two modules:

❖ **ADMIN MODULE**

- Login
- Manages Candidates
- Manages Positions
- Manages Voters
- View Results
- Logout

❖ **USER MODULE**

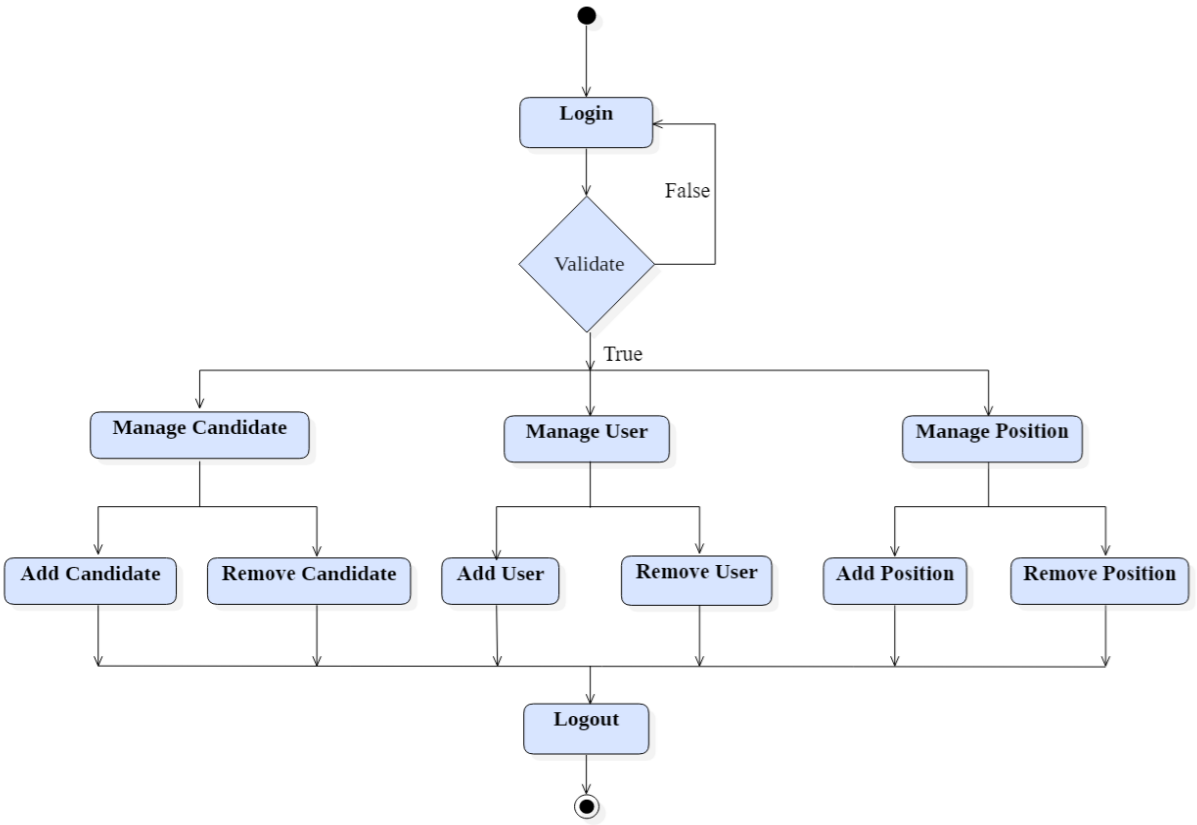
- Register
- Login
- Cast Vote
- View Results
- Logout

3.2 DIAGRAMS

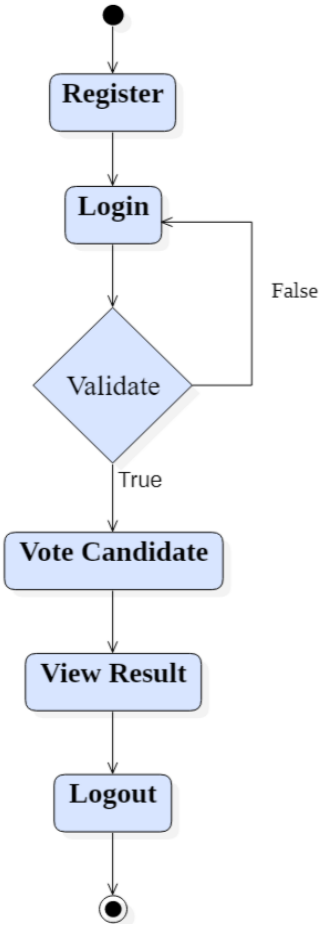
This project deals with the various software diagrams.

3.2.1 Activity Diagram

Activity diagram is another important diagram in UML to describe dynamic aspects of the system. Activity diagram is basically a flow chart to represent the flow from one activity to another activity. The activity can be described as an operation of the system. So the control flow is drawn from one operation to another. This flow can be sequentially branched or concurrent.



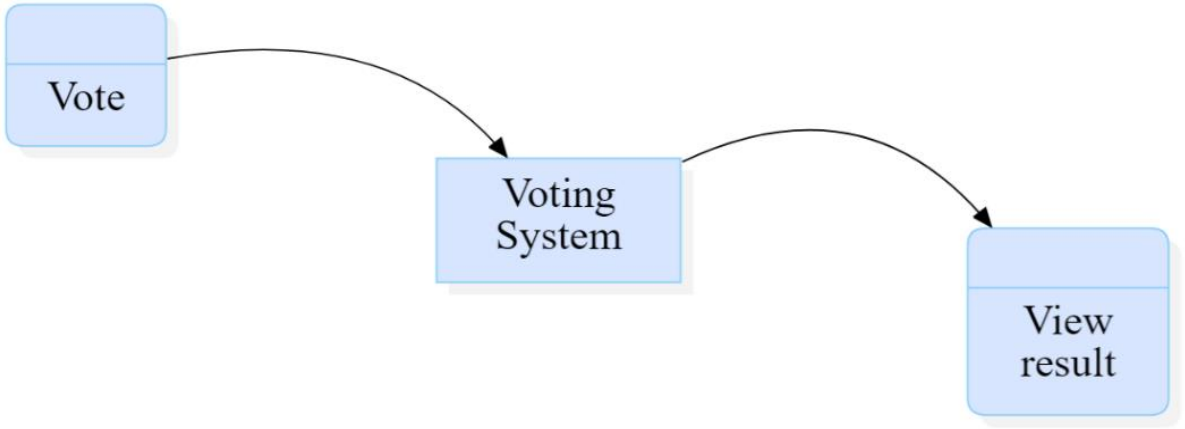
Activity Diagram for Admin



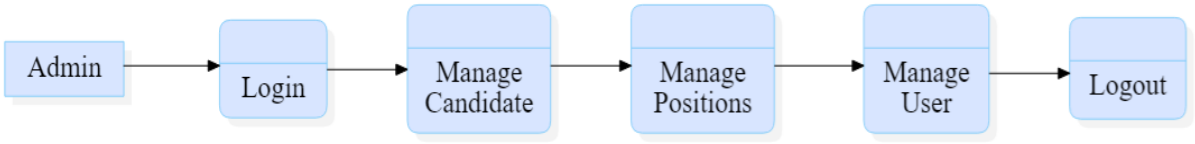
Activity Diagram for User

3.2.2 Data Flow Diagram

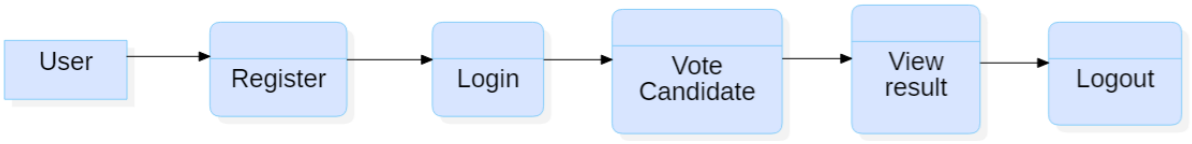
A Data Flow Diagram is a diagram that describes the flow of data and processes that change data throughout a system. It's a structured analysis and design tool that can be used for flowcharting or in association with information. When analysts prepare the Data Flow Diagram, they specify the user needs at a level of detail that virtually determines the information flow into and out of the system and the required data resources. This network is constructed by using a set of symbols that do not imply physical implementation.



Level 0 DFD



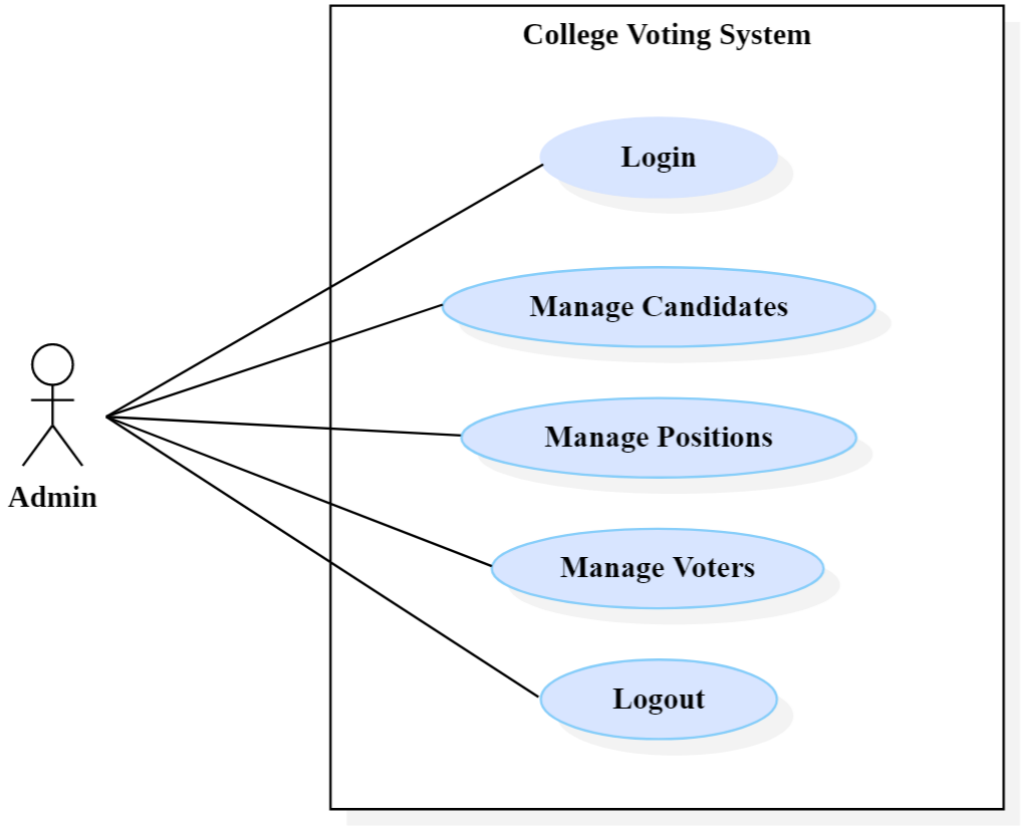
Level 1 DFD for Admin



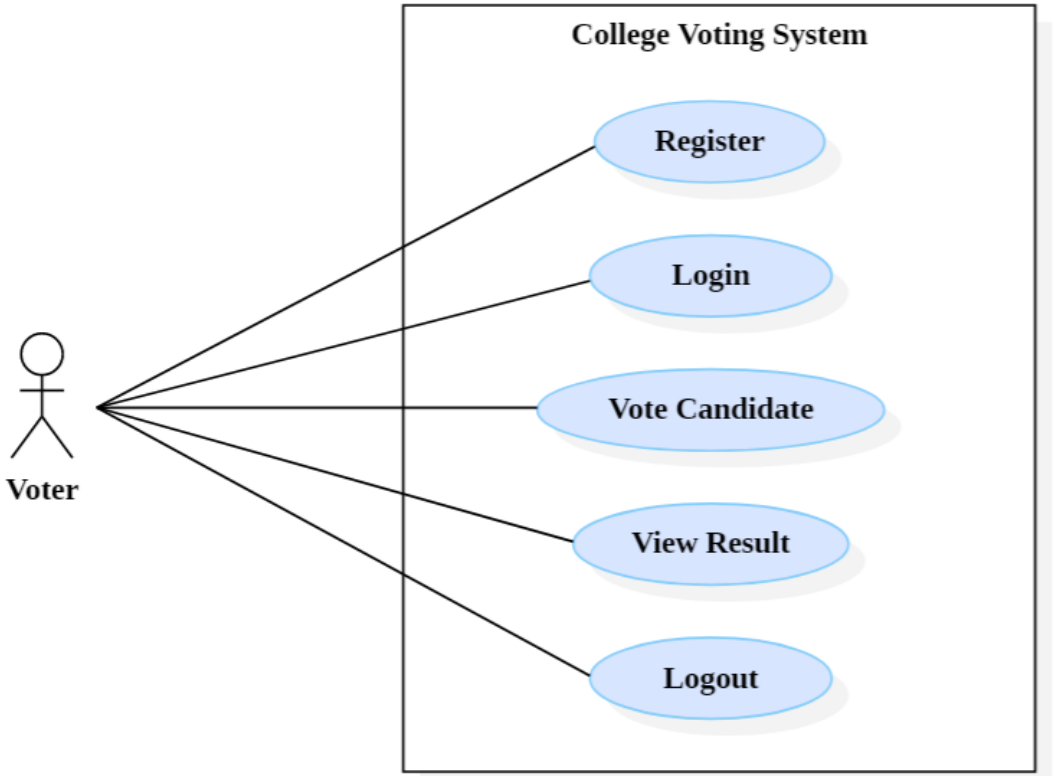
Level 1 DFD for User

3.2.3 Use Case Diagram

Use case diagram is a graph of actors, a set of use cases enclosed by a system boundary, communication associations between the actor and the use case. The use case diagram describes how a system interacts with outside actors; each use case represents a piece of functionality that a system provides to its users. A use case is known as an ellipse containing the name of the use case and an actor.



Use Case Diagram for Admin



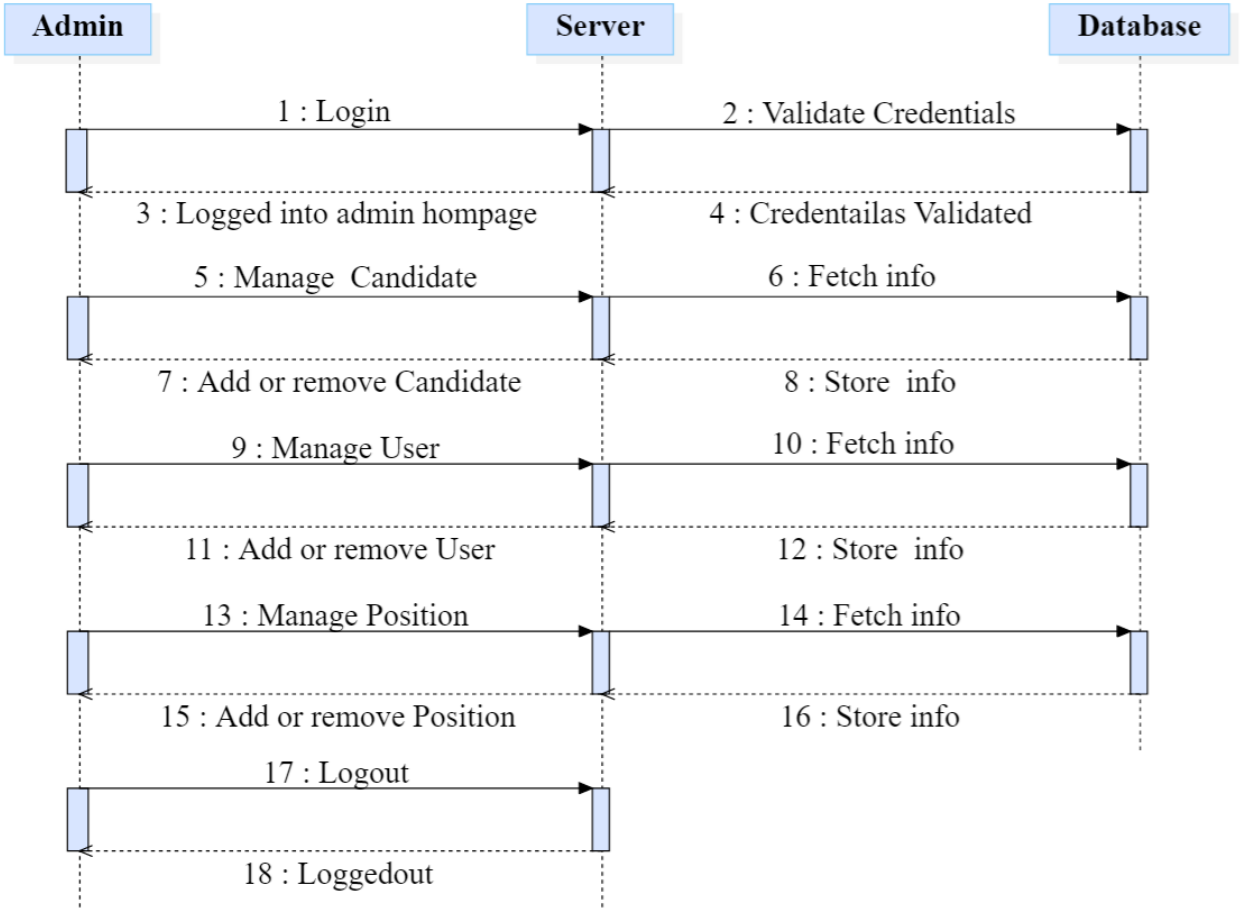
Use Case Diagram for User

3.2.4 Sequence Diagram

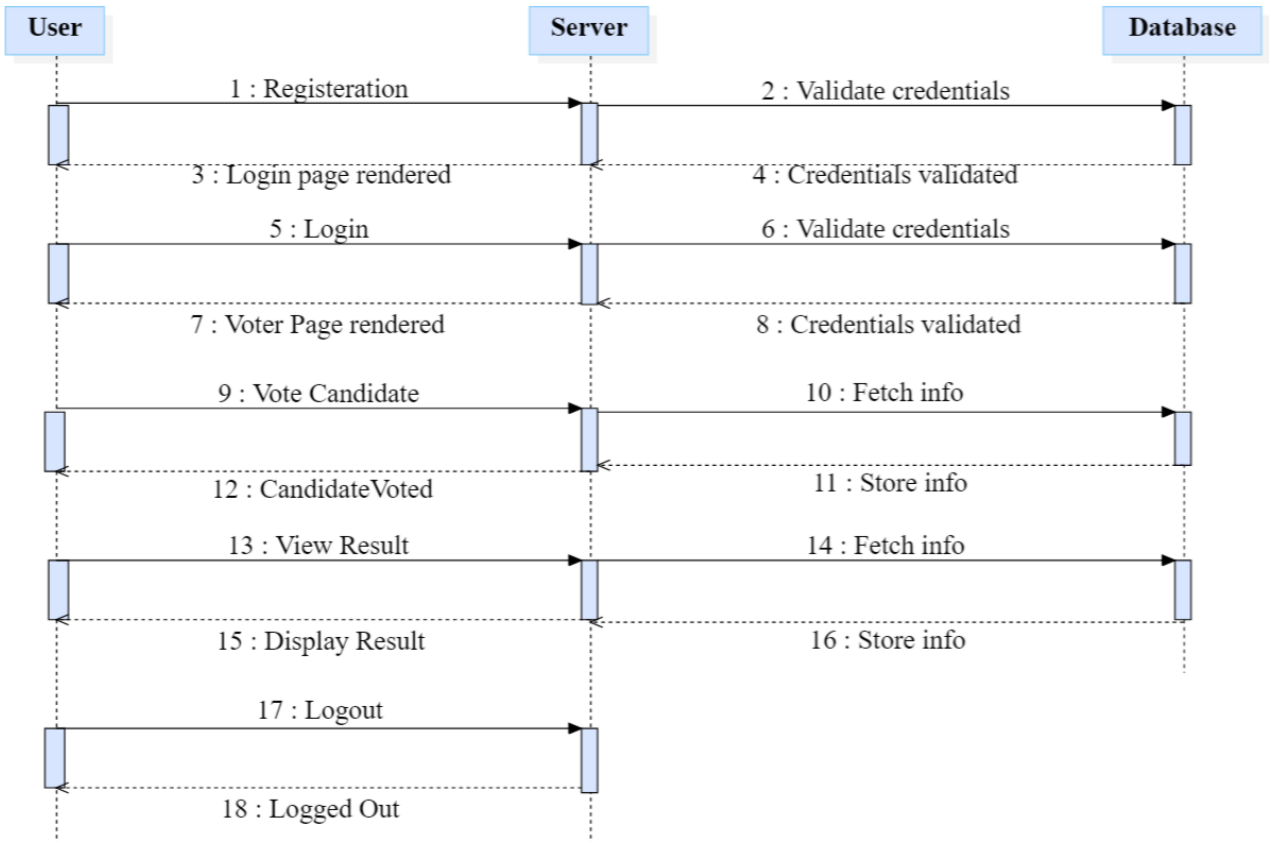
A Sequence diagram shows object interaction arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario.

Sequence diagrams are sometimes called event diagrams, event scenarios.

Sequence Diagram for Admin

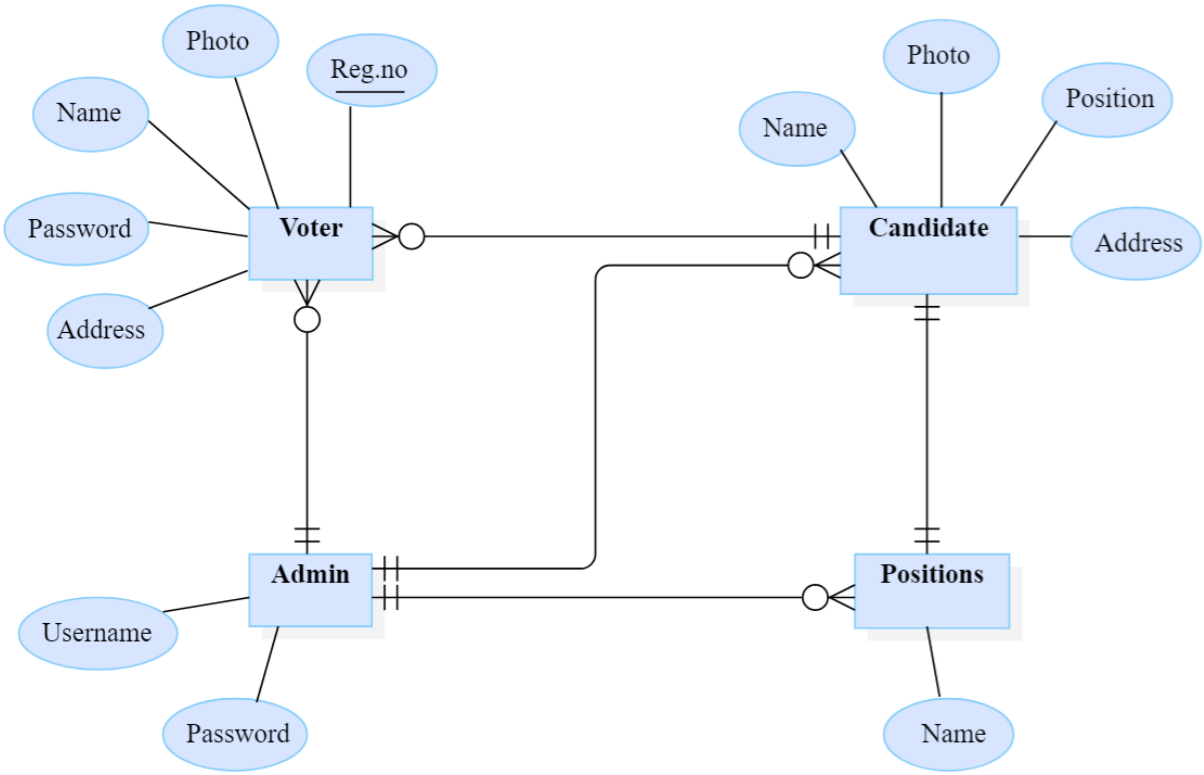


Sequence Diagram for User



3.2.5 Entity-Relationship Diagram

Entity Relationship depicts the various relationship among entities, considering each objective as entity. Entity relationship are described by their dependence on each other, as well as the extent of the relationship between the data stores. It depicts the relationship between the data objects. The E-R diagram is a notation that is used to conduct the data modelling activity.



4. CODING

……..Index Page……

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
  <head>
    <meta charset="utf-8">
    <title>Login Form</title>
    <link rel="stylesheet" href="style.css">
  </head>
  <body>
    <div class="center">
      <h1>Login</h1>
      <form method="post" action="api/login.php">
        <div class="txt_field">
          <input type="text" name="reg" required>
          <span></span>
          <label>Register Number</label>
        </div>
        <div class="txt_field">
          <input type="password" name="pass" required>
          <span></span>
          <label>Password</label>
        </div>
<div class="signup_link">
     <a href="routes/forget.php"><div class="pass">Forgot Password?</div></a>
        <input type="submit" value="Login">
          Not Registered? <a href="routes/register.php">Register Here</a><br><br>
                <a href="Alogin.php">Admin Login Here</a>
```

```
        </div>
      </form>
    </div>
  </body>
</html>
```

……..Forgot Password page…….……

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Register Page</title>
<link rel="stylesheet" href="../css/vcss.css">
</head>
<body>
  <div class="wrapper">
  <div class="registration_form">
  <div class="title">
          Forgot password
  </div>
  <form action="../api/forgot.php" method="POST" enctype="multipart/form-data">
  <div class="form_wrap">
  <div class="input_grp">
  <div class="input_wrap">
<label for="rid">Register Number</label>
  <input type="text" id="rid" name="reg" required>
```

```
  </div>
  </div>
  <div class="input_wrap">              </div>
  <div class="input_wrap">              </div>
<div class="input_wrap">                </div>
   <div id="upload" style="width: 100%">    </div><br>
<div id="upload" style="width: 100%">
    Secrete question:
        <select name="qtn">
            <option value="">select qestion</option>
            <option value="1">your pet name</option>
            <option value="2">favroite Book</option>
           <option value="3">favorite movie</option>
       </select><br>
 </div><br>
  <div id="upload" style="width: 100%">
         Your answer: <input type="text"  name="ans" required>
   </div><br>
  <div class="input_wrap">
 <input type="submit" value="Submit" class="submit_btn">
  </div>
  </div><br>
                    <center>
              </form>
          </div>
     </div>
</body>
</html>
```

5. TESTING

Software testing is the process of evaluating a software item to detect differences between given Input and expected output. Software testing is a process that should be done during the development process.

5.1 Unit Testing

While coding, the programmer performs some tests on that unit of program to know if it is error free. Testing is performed under white-box testing approach. Unit testing helps developers decide that individual units of the program are working as per requirements and are error free.

5.2 System Testing

The software is compared as product and then it is tested as a whole. This can be accomplished using one or more of the following tests:

- ✓ Functionality testing: Tests all functionalities of the software against the requirements.

- ✓ Performance testing: This test proves how efficient the software is. It tests the effectiveness and average time taken by the software to do desired task.

- ✓ Security & Portability: These tests are done when the software is meant to work on various platforms and accessed by number of persons.

5.3 TEST CASES

5.3.1 Test case for Login Page

Sl. No.	Description	Input	Expected Output
1	Launch application	localhost/in any browser	The login page should be displayed
2	Login using valid credentials	Enter correct register no. and password in textbox and hit login button	Login success
3	Login using invalid credentials	Enter incorrect register no. and password in textbox and hit login button	Message should appear displaying “Invalid credentials”
4	To check the ‘forgot password’ link	Click on “forgot password” link	Forgot password page should be displayed
5	To check the ‘admin login page’ link	Click on “admin login page” link	Admin login page should be displayed

No bugs are found.

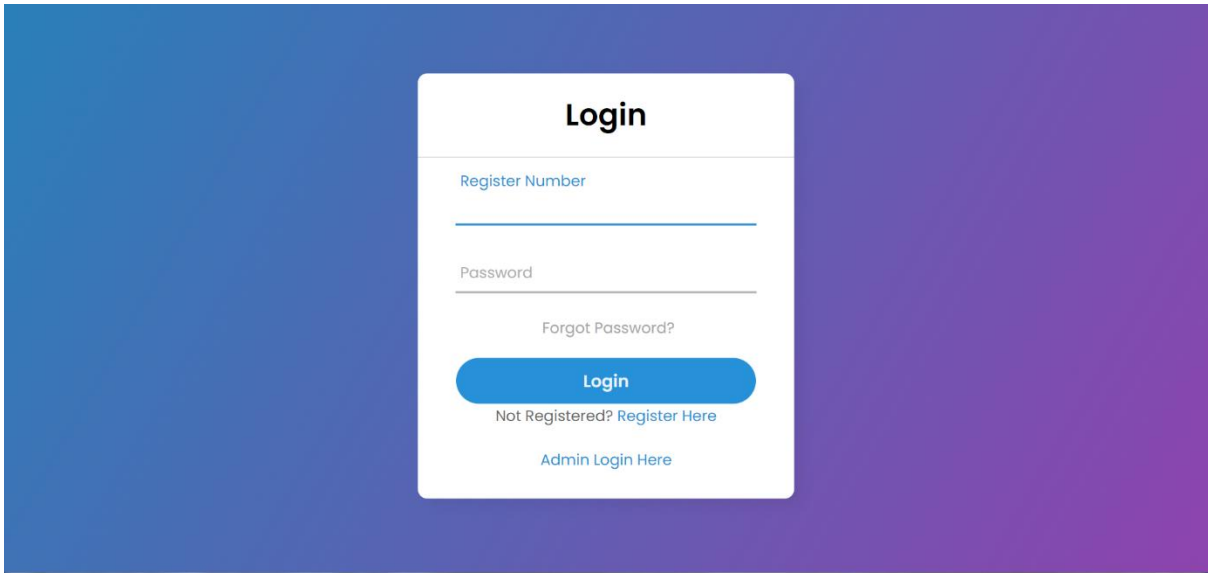
5.3.2 Test for Forgot Password Page

Sl. No.	Description	Input	Expected Output
1	To check the ‘forgot password’ link	Click on “forgot password” link	Forgot password page should be displayed
2	To check using valid credentials	Select the register no. textbox and fill with correct register no., then select an option in secret question drop down list and place the answer in the next textbox and click submit button	“New Password” page should be displayed
3	To check using invalid credentials	Select the register no. textbox and fill with incorrect register no., then select an option in secret question drop down list and place the answer in the next textbox and click submit button	Message should appear displaying “Invalid credentials”

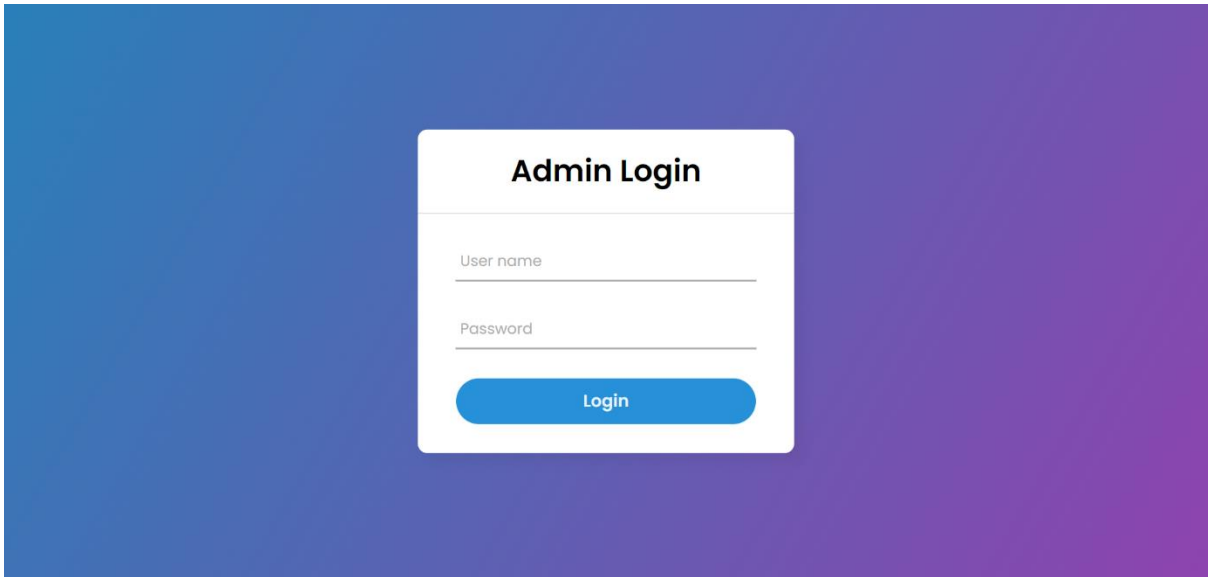
No bugs are found.

6. SNAPSHOTS

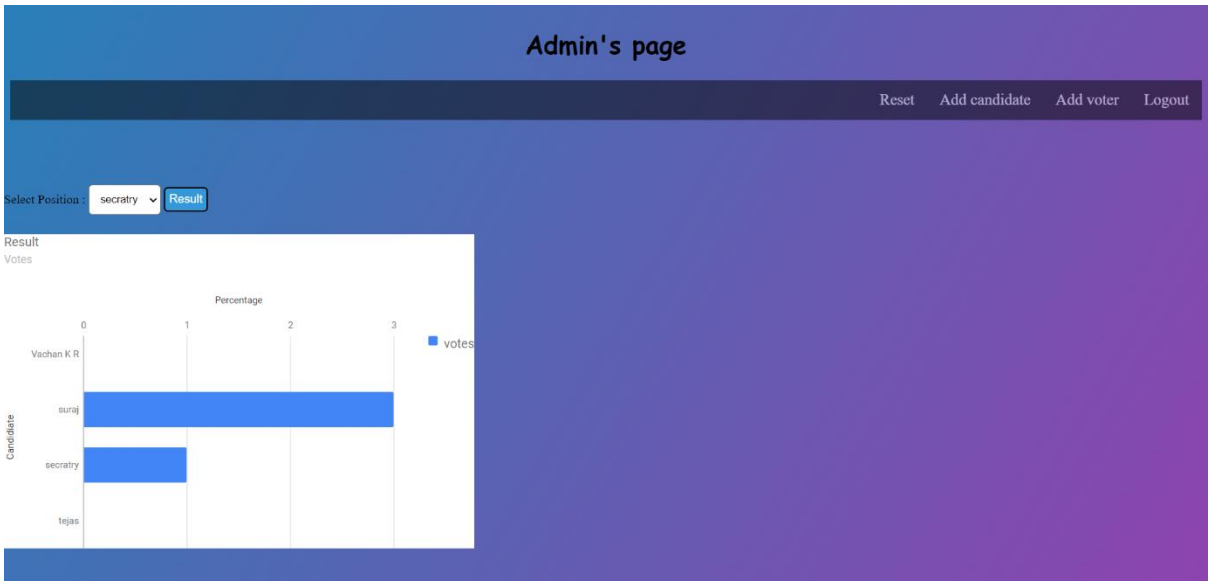
Index:



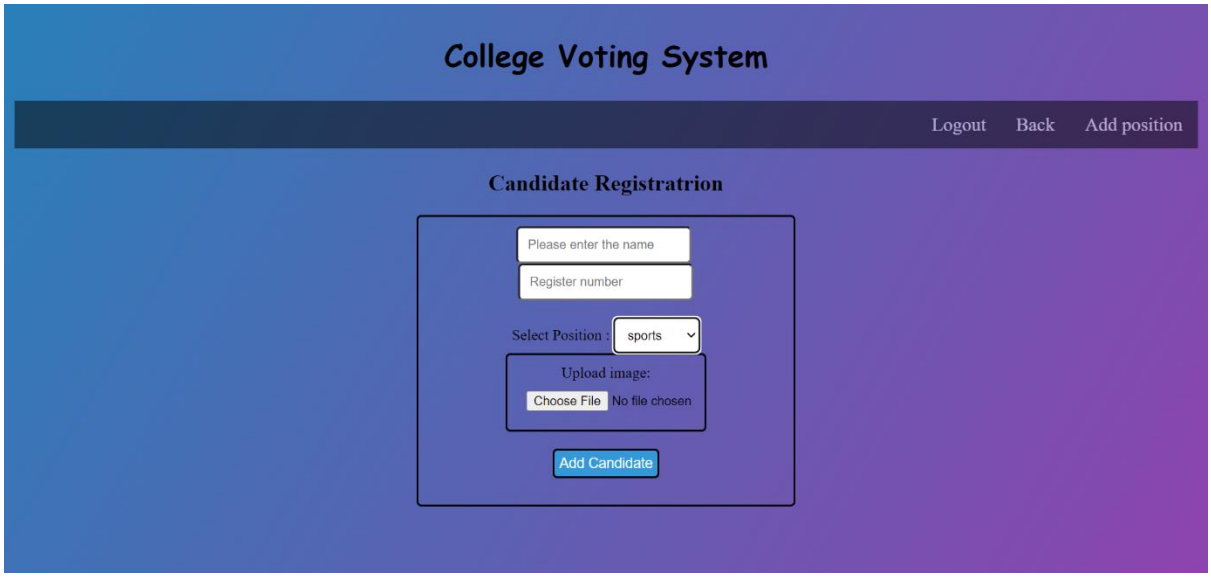
Admin Login:



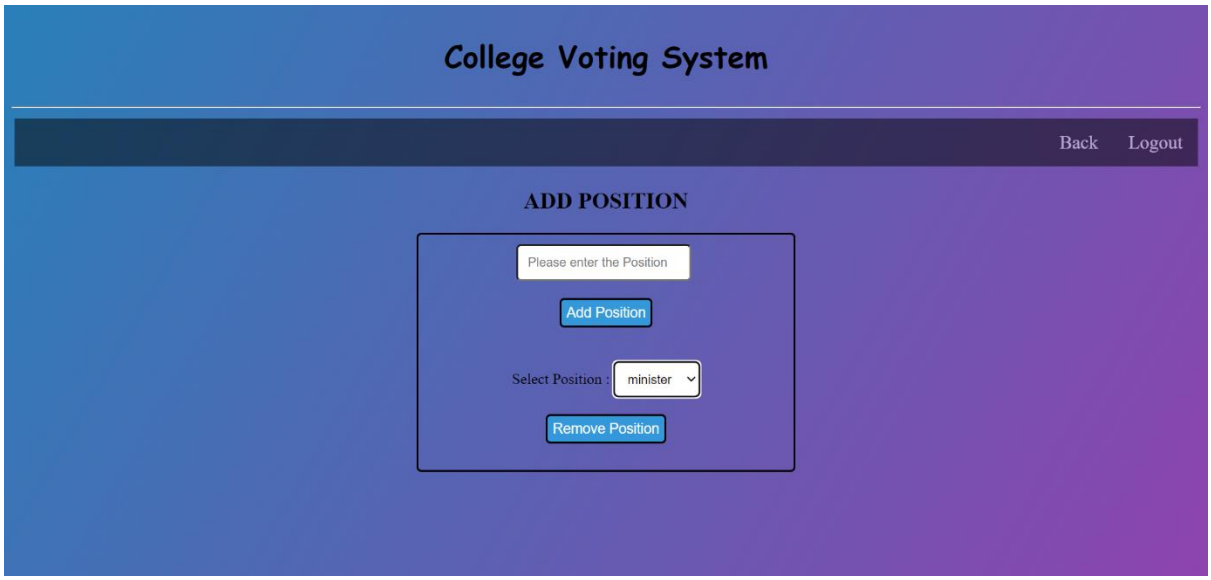
Admin Dashboard:



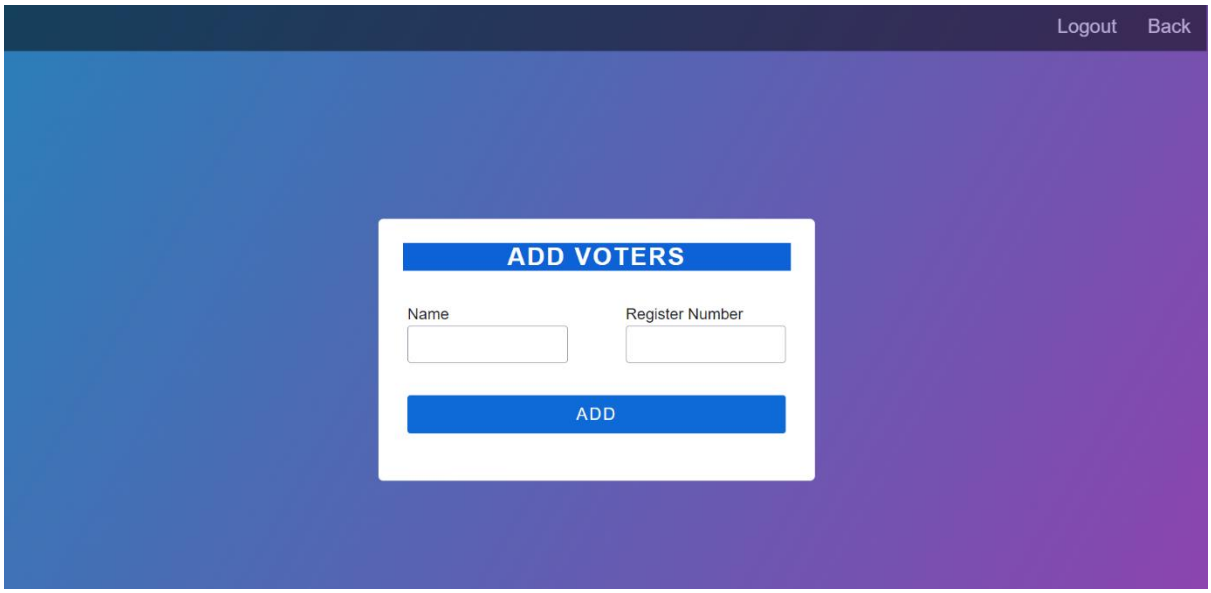
Add Candidate:



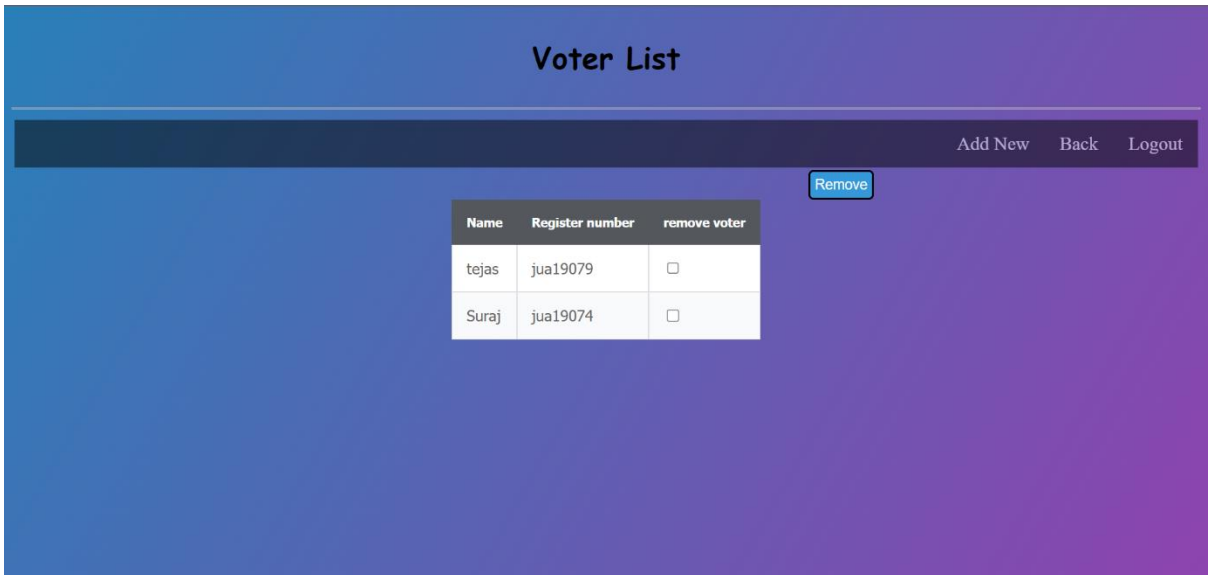
Add Position:



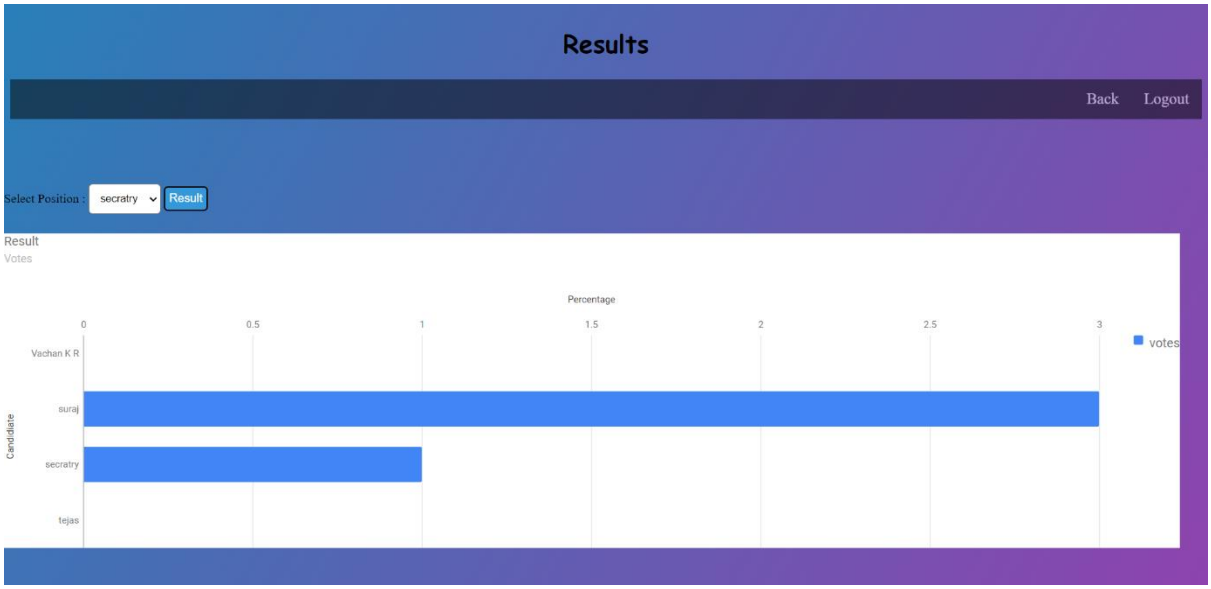
Add Voter:



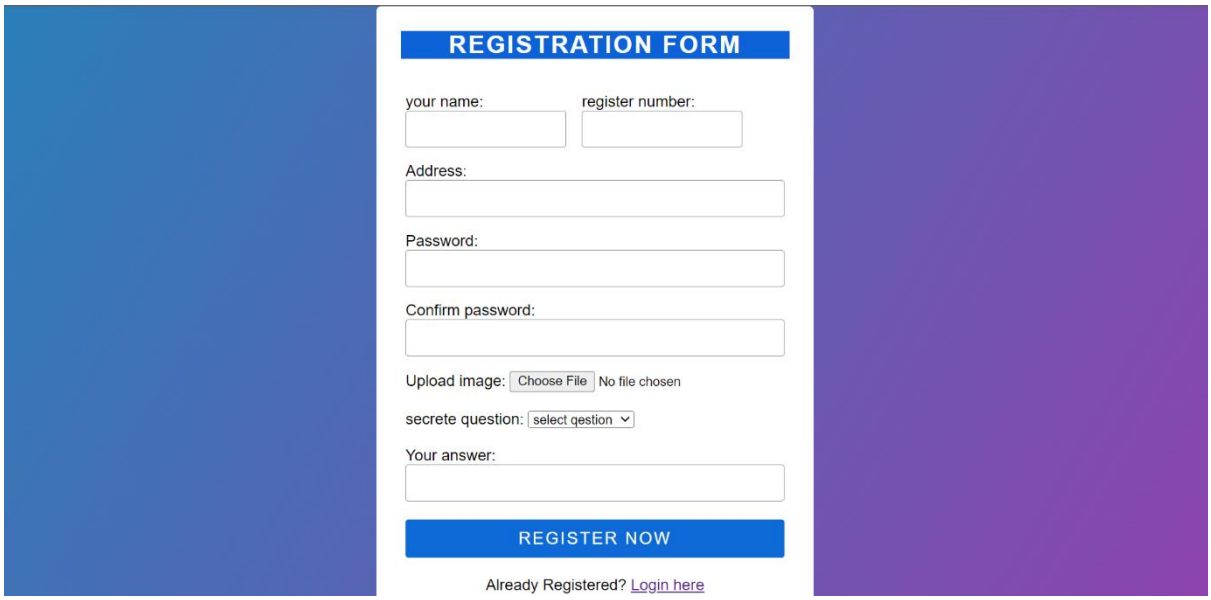
Voter List:



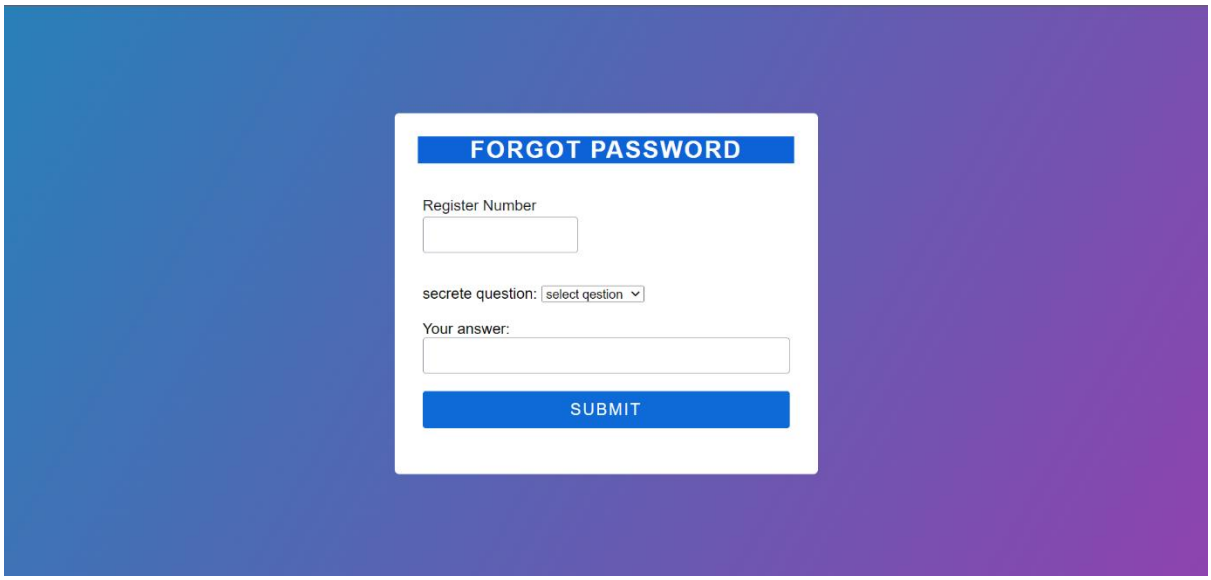
Result:



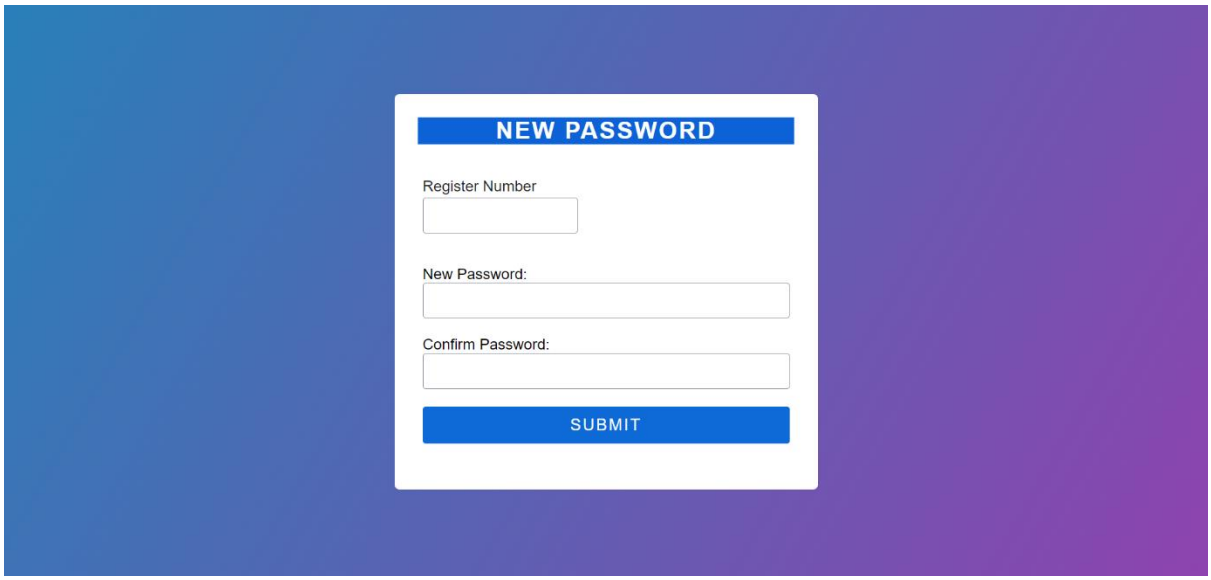
Register Page:



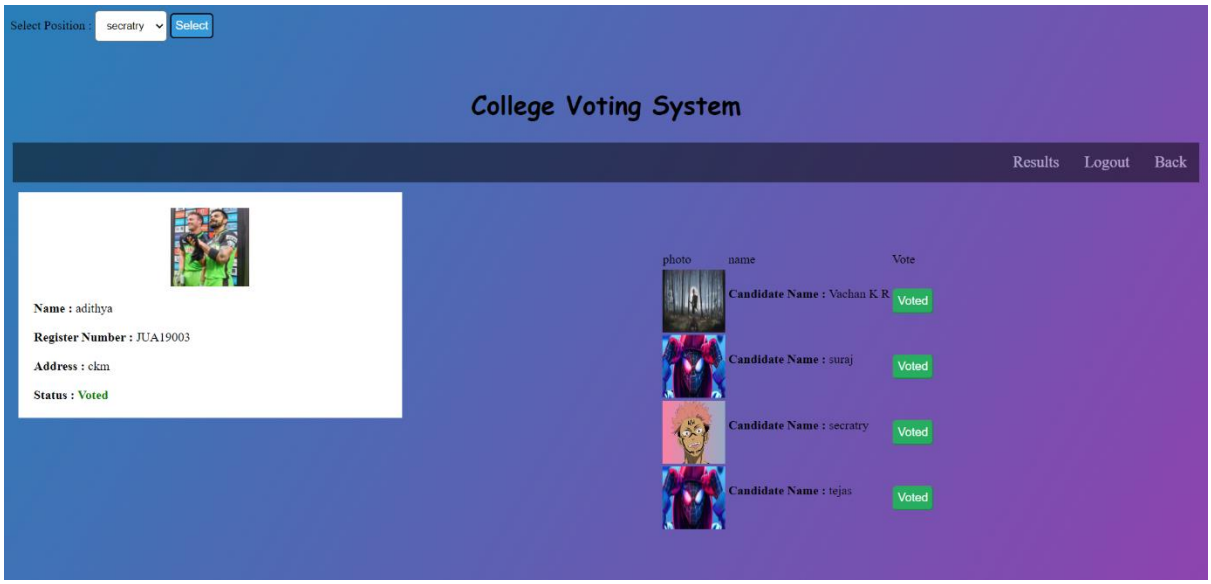
Forgot Password:



Set New Password:



User Dashboard:



7. CONCLUSION

The main ideology of this project is to maximize participation of voting because it is easy and efficient and it takes only one or two minutes to cast a vote. This project will manage the voters' information by which voter can login and use their voting rights. The system will incorporate all features of voting system.

Voting details are stored in database and result is displayed by calculation. By college voting system, percentage of voting increases, it decreases the cost and time of voting process. It is easy to use and less time consuming.

8. FUTURE ENHANCEMENT

- Improving the theme of the website to give a more appealing look.
- Improving the privacy and security by adding the OTP verification system, biometric for better authentication.

9. REFERENCES

1. **YouTube.com**
2. **GeeksforGeeks.org**
3. **JavaPoint.com**
4. **TechTarget.com**
5. **Komodo Platform.com**
6. **Research Gate.net**