A PROJECT REPORT ON
"ONLINE VOTING SYSTEM"

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE
IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF THE DEGREE
OF

BACHELOR OF ENGINEERING

IN

COMPUTER ENGINEERING

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UNDER THE GUIDANCE OF

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DEPARTMENT OF COMPUTER ENGINEERING

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Batch of 2021-22

CERTIFICATE

This is to certify that the project report entitles,

"ONLINE VOTING SYSTEM"

Submitted By

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are bonafide student of this institute and the work has been carried out by them under the supervision of **Prof.G.B.Yadav** and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (COMPUTER ENGINEERING).

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Date :

ACKNOWLEDGMENTS

It gives us great pleasure in presenting the project report , We would like to take this opportunity to thank my internal guide **Prof A. R. Nawadkar** for giving me all the help and guidance we needed. we are really grateful to them for their kind support. Their valuable suggestions were very helpful.

We are also grateful to **Prof B. D. Thorat**, Head of Computer Engineering Department, **RDTC'S SCSCOE, Pune** for his indispensable support, suggestions.

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CHAPTER 1

INTRODUCTION

INTRODUCTION

"ONLINE VOTING SYSTEM" is an online voting technique. In this system people who have been in an organization and those who participated in election can give his\her vote online without going to any physical polling station. There is a database which is maintained in which all the names of voters with complete information are stored.

In "ONLINE VOTING SYSTEM" a voter can use his\her voting right online without any difficulty. He\She has to be registered first for him/her to vote. Registration is mainly done by the system administrator for security reasons. The system Administrator registers the voters on a special site of the system visited by him only by simply filling a registration form to register voter. Employees seeking registration are expected to contact the system administrator to submit their details. After the validity of them being employees of organization has been confirmed by the system administrator by comparing their details submitted with those in existing databases such as those as the Registrar of Persons, the citizen is then registered as a voter. After registration, the voter is assigned a secret Voter ID with which he/she can use to log into the system and enjoy services provided by the system such as voting. If invalid/wrong details are submitted, then the citizen is not registered to vote.

The Online voting system (OVS) also known as e-voting is a term encompassing several different types of voting embracing both electronic means of counting votes. Electronic voting technology can include punched cards, optical scan voting systems and specialized voting kiosks (including self-contained direct-recording electronic voting systems or DRE). It can also involve transmission of ballots and votes via telephones, private computer networks, or the internet.

Online voting is an electronic way of choosing leaders via a web driven application. The advantage of online voting over the common "queue method" 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. This system is geared towards increasing the voting percentage in Nepal since it has been noted that with the old voting method {the Queue System}, the voter turnout has been a wanting case. With system in place also, if high security is applied, cases of false votes shall be reduced.

With the "ONLINE VOTING SYSTEM", a voter can use his\her voting right online without any difficulty. He\She has to register as a voter first before being authorized to vote. The registration should be done prior to the voting date to enable data update in the database. However, not just anybody can vote. For one to participate in the elections, he/she user have the requirements. For instance, he/she must be a registered citizen i.e., must be 18 and above years old. As already stated, the project

‘Online Voting' provides means for fast and convenient voting and access to this system is limited only to registered voters.

2) Problem statement:

Our System is to solve the issues of digital voting by using block chain technology. Block chain enabled e-voting could reduce voter fraud and increase voter access.

3) Features:

- Require a smaller number of staff during the election.
- This system is a lot easier to independently moderate the elections and subsequently reinforce its transparency and fairness.
- Less capital, less effort, and less labor intensive, as the primary cost and effort will focus primarily on creating, managing, and running a secure online portal.
- Increased number of voters as individual will find it easier and more convenient to vote, especially those abroad.

4) Goals And Objectives:

Goals: It is focused on studying the existing system of voting in and to make sure that the peoples vote is counts, for fairness in the elective positions. This is also will produce:

- Less effort and less labor intensive, as the primary cost and focus primary on creating, managing, and running a secure web voting portal.
- Increasing number of voters as individuals will find it easier and more convenient to vote, especially those who are abroad having name on voter list

Objectives:

The specific objectives of the project include:

- Reviewing the existing/current voting process or approach in Organization ;
- Coming up with an automated voting system in Organization;
- Implementing a an automated/online voting system;
- Validating the system to ensure that only legible voters are allowed to vote.

CHAPTER: 2

REQUIREMENTS

2. REQUIREMENTS

2.1 HARDWARE REQUIREMENTS

Component	Minimum Requirements
Processor	Intel p4
RAM	512 MB
Hard Disk	10 GB

Table 2.1.1: Hardware Requirement

2.2 SOFTWARE REQUIREMENTS

Software	Minimum Requirements
Operating System	Windows 10
WAMP	V 4.0
MS SQL	V 5.5.8
Web Browser	Internet Explorer, Chrome

Table 2.2.1: Software Requirement

CHAPTER 3

SYSTEM DESIGN AND ARCHITECTUTE

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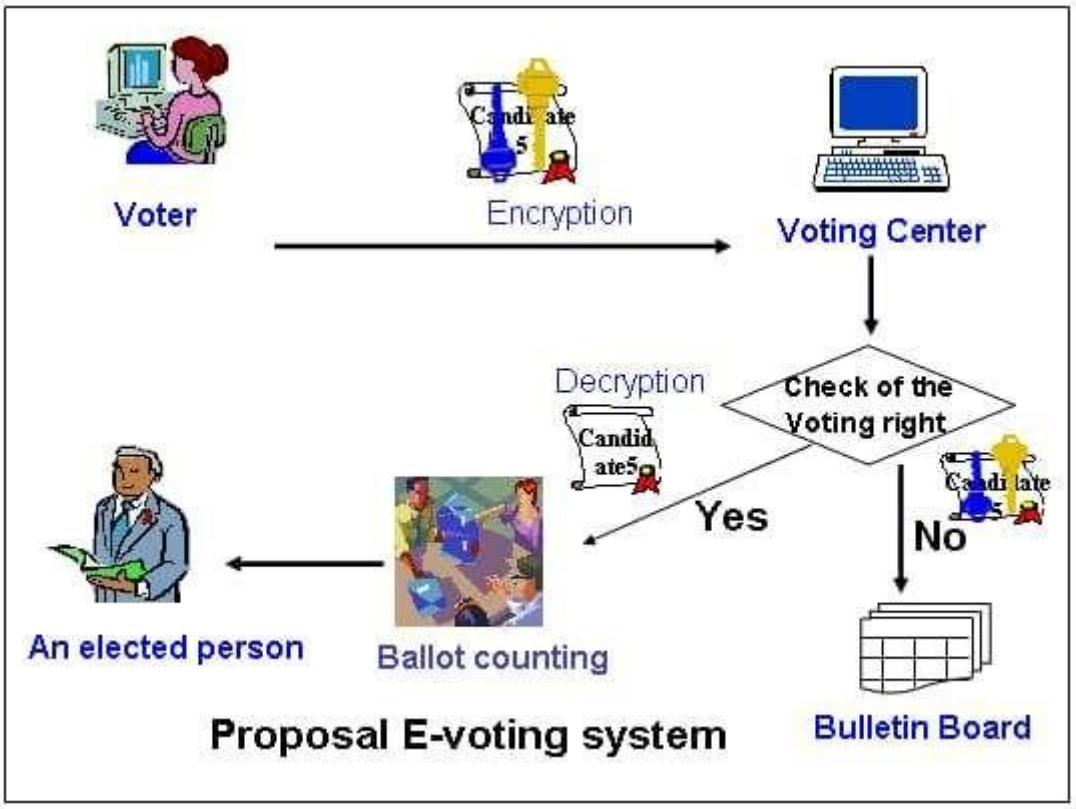

Fig 3.1: Architecture

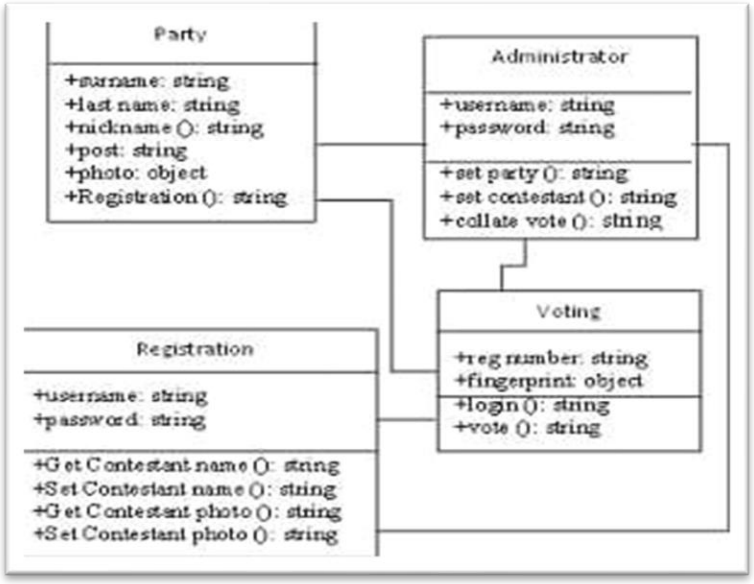

Fig 3.2: Class Diagram

Admin:

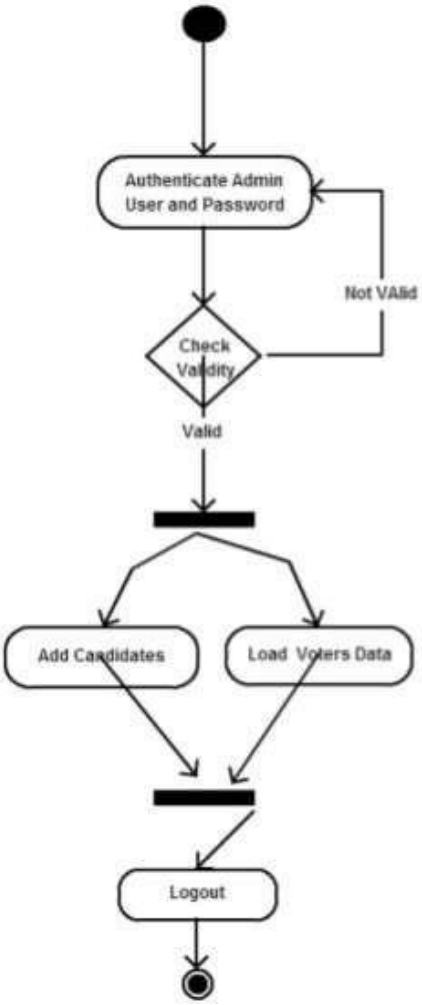

Fig3.3.Activity Diagram

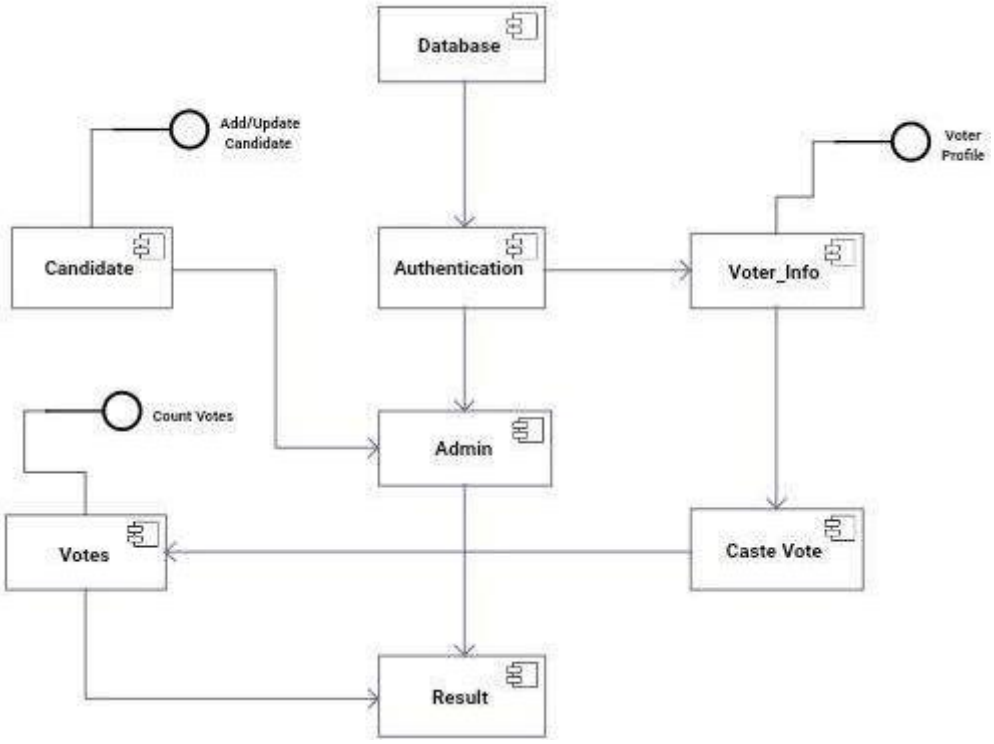

Fig3.4: Component Diagram

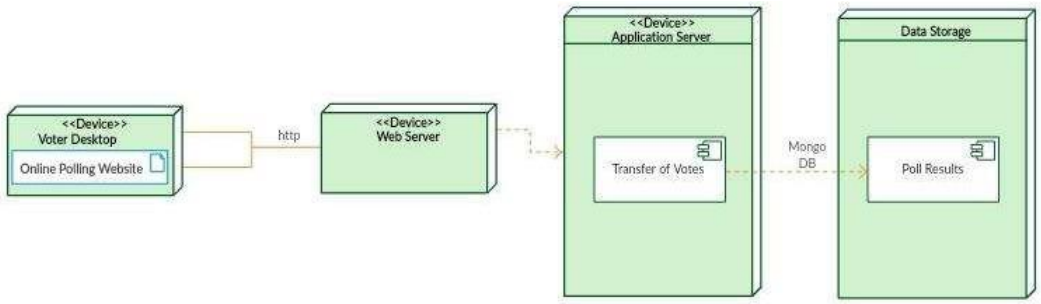

Fig3.5: Deployment Diagram

Applicability :

Use the Builder pattern when

- the algorithm for creating a complex object should be independent of the parts that make up the object and how they're assembled.

- The construction process must allow different representations for the object that's constructed.

Tools Used :

- **WAMP:**
  - **Apache:**(Application Server) Apache , often referred to as Server, is an open- source Java Servlet Container developed by the Apache Software Foundation.

- **MySqlServer:** It handles large databases much faster than existing solutions. It consists of multi-threaded SQL server that supports different back ends, several different client programs and libraries, administrative tools, and application programming interfaces (APIs) Its connectivity, speed, and security make MySQL Server highly suited for accessing databases on the Internet
  .

- **Web browsers**:

  Google Chrome, Mozilla Firefox, Opera and Internet Explorer.

- **Git Hub**:
  GitHub Inc. is a web-based hosting service for version control using Git. It is mostly used for computer code. It offers all of the distributed version control and source code management functionality of Git as well as adding its own features.

CHAPTER 4

PROJECT IMPLEMENTATION AND TESTING

TEST CASE:

Test case ID	Test Scenario	Action	Expected Result	Actual Result	Status
TCS_PRS_001	Verify the login functionality	Enter a valid Admin username & valid password	Login Successful	Login Successful	Pass
TCS_PRS_002	Verify the login functionality	Enter a valid Admin username & invalid Password	Error: Invalid Admin username or Password	Login Successful	Fail
TCS_PRS_003	Verify the login functionality	Enter an invalid Admin username & valid password	Error: Invalid Admin username or Password	Error: Invalid Admin username or Password	Pass
TCS_PRS_004	Verify the login functionality	Enter an invalid Admin username & invalid Password	Error: Invalid Admin username or Password	Error: Invalid Admin username or Password	Pass
TCS_PRS_005	Verify the login functionality	Enter none of the credentials	Message: Please fill out this field	Login Successful	Fail
TCS_PRS_006	Verify the login functionality	Enter only password	Message: Please fill out this field	Error: Please fill out this field	Pass
TCS_PRS_007	Verify the login functionality	Enter only Admin username	Message: Please fill out this field	Error: Please fill out this field	Pass

SCREENSHOT

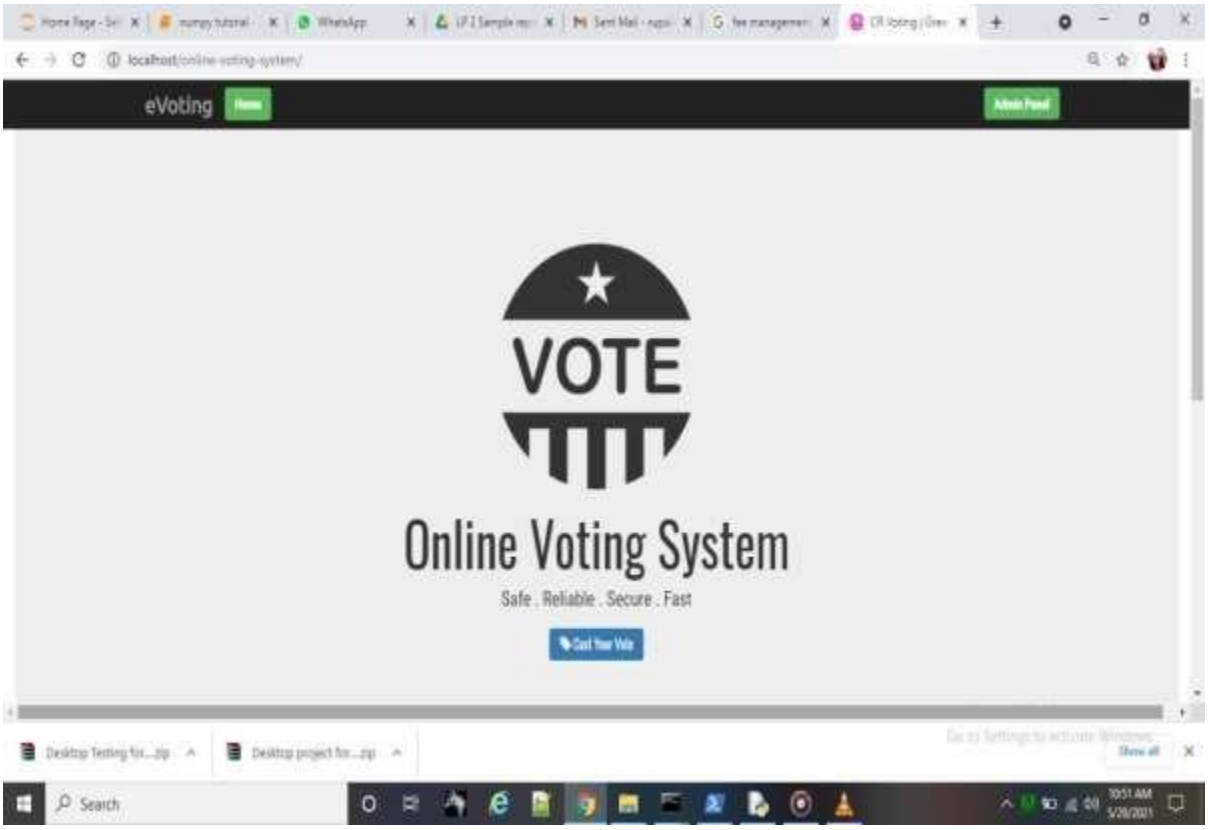

Fig.1

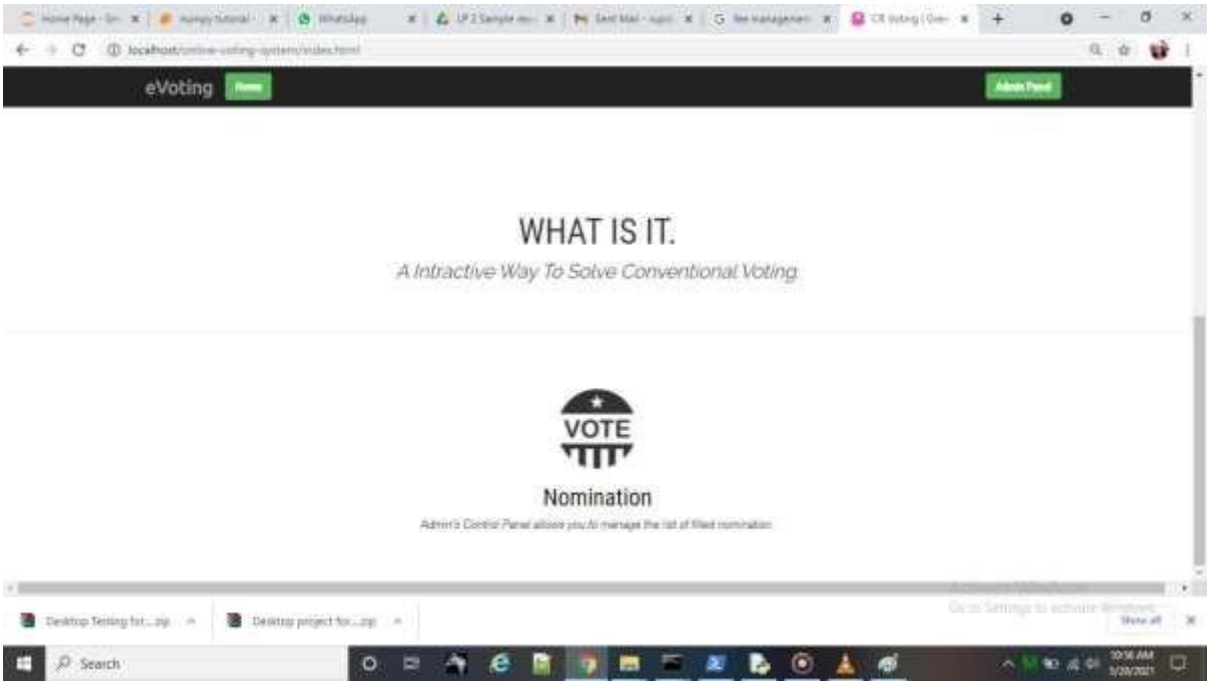

Fig .2

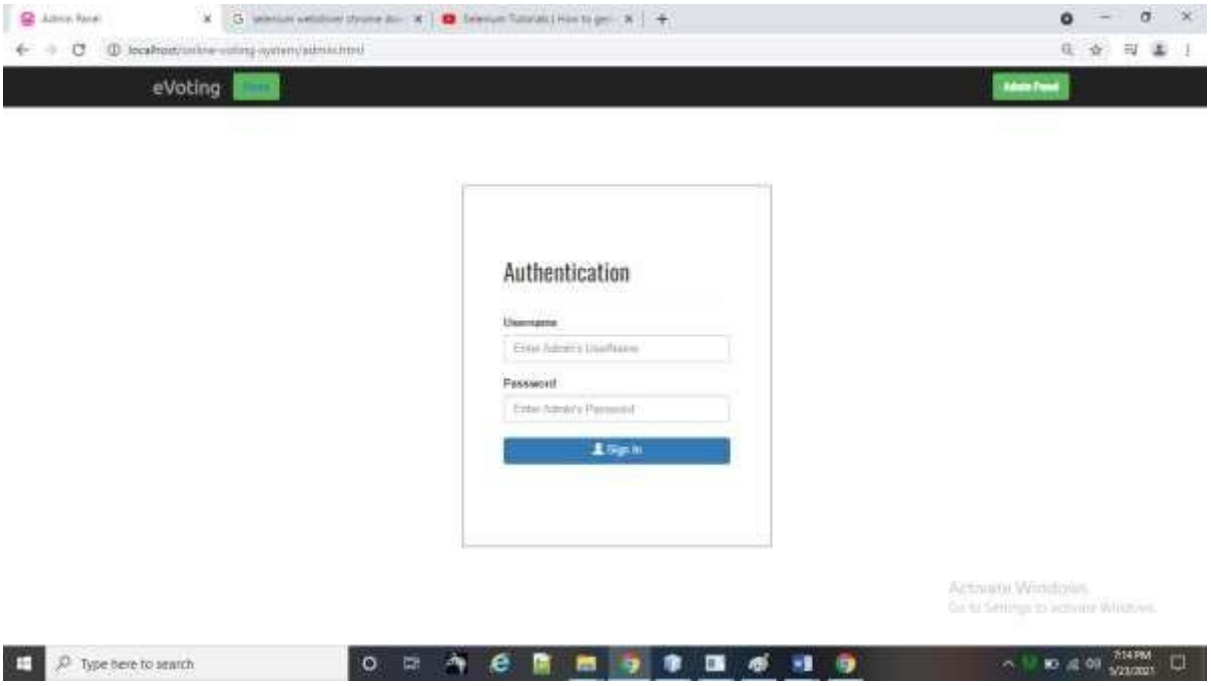
eVoting
Authentication
Password
Type here to search

Fig.3

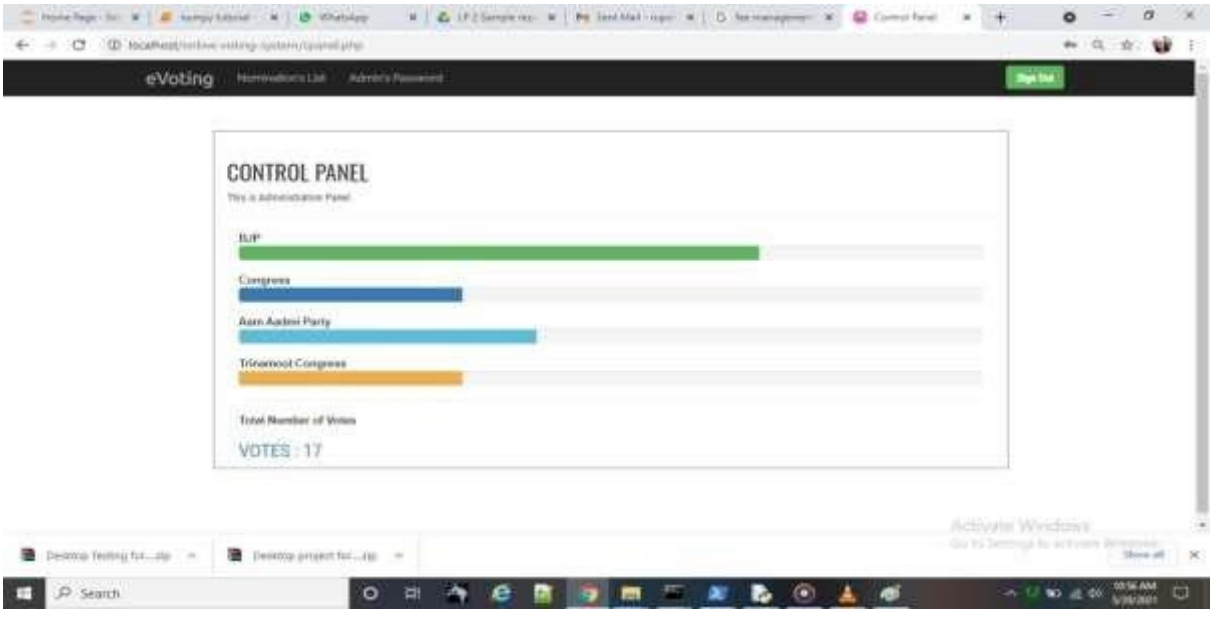
eVoting
CONTROL PANEL
BJP
Congress
Aam Aadmi Party
Trinamool Congress
VOTES : 17
Search

Fig.4

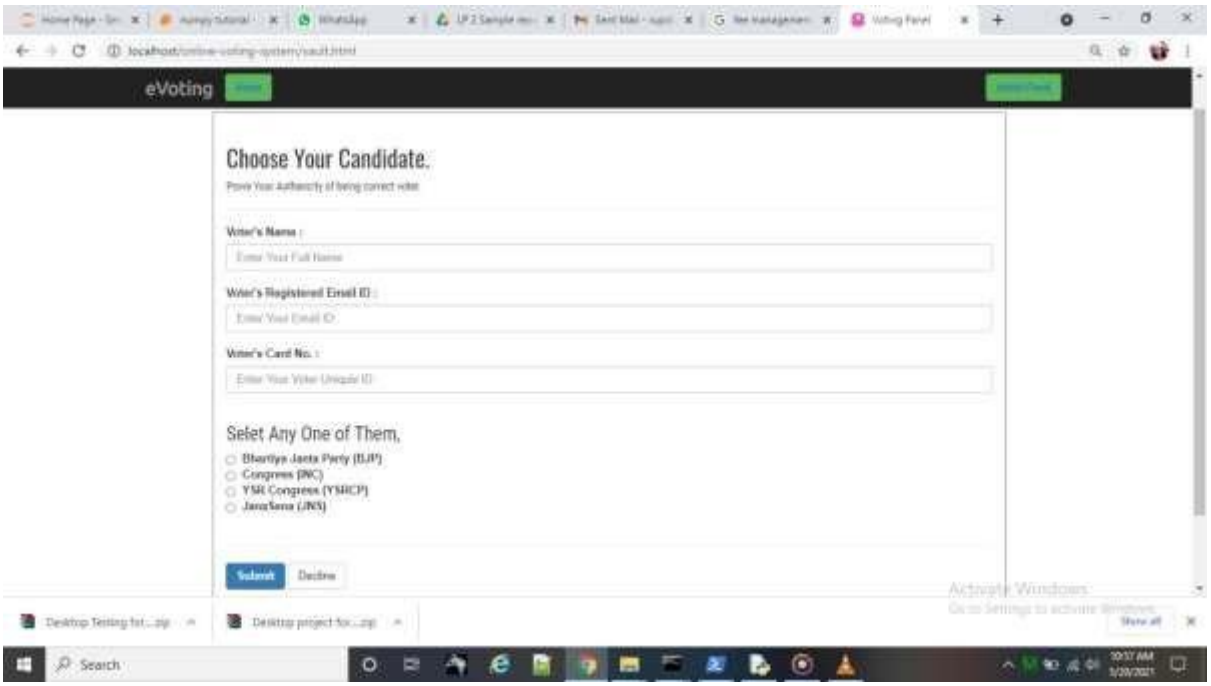
eVoting
Choose Your Candidate.
Voter's Name :
Voter's Registered Email ID :
Voter's Card No. :
Select Any One of Them,
Bhartiya Janta Party (BJP)
Congress (INC)
YSR Congress (YSRCP)
Jana Sena (JNS)
Submit
Decline
Search

Fig.5

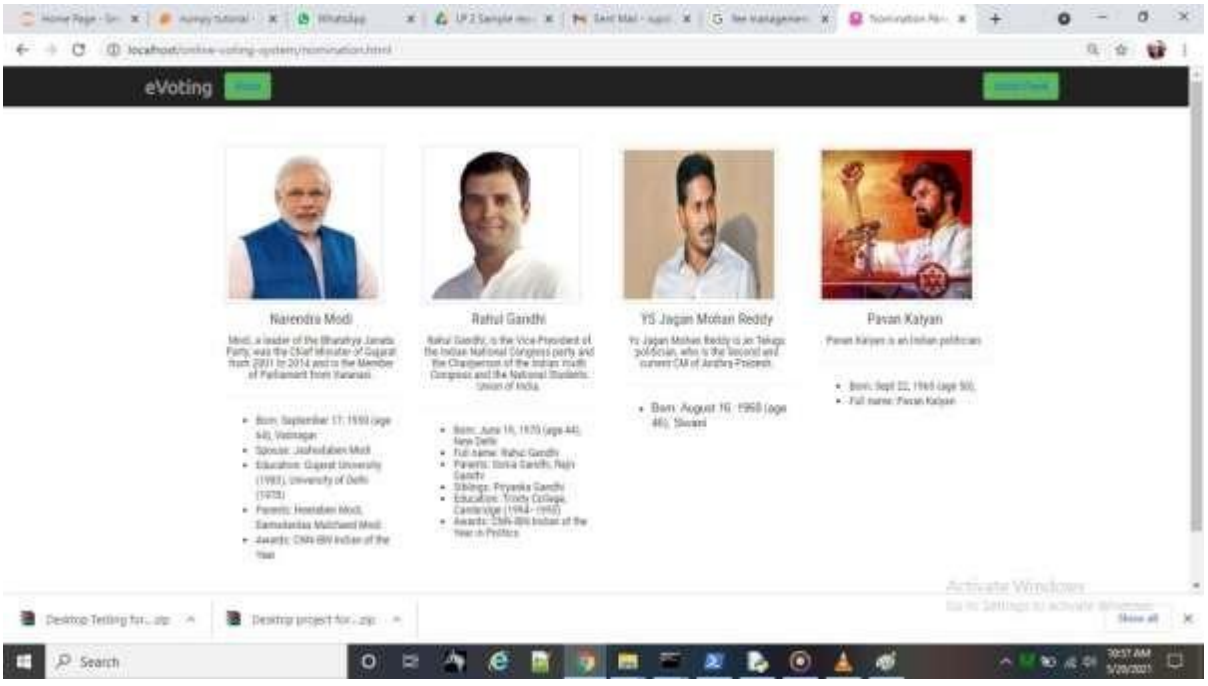
eVoting
Narendra Modi
Rahul Gandhi
YS Jagan Mohan Reddy
Pavan Kalyan
Search

Fig.6

CHAPTER 5

APPLICATIONS

APPLICATIONS

- Online voting system is web based voting system that will help you manage your elections securely.
- Use for counting votes during the elections held in colleges, etc.
- In this system the voter does not have to go to the polling booth to cast their vote. They can use their personal computer to cast their votes.

CHAPTER 6

CONCLUSION

AND

FUTURE SCOPE

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. In this member who had registered his/her information on the database and when he/she want to vote he/she has to login by his email and password and can vote to any candidate 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 varying less time consuming. It is very easy to debug.

FUTURE SCOPE

With the existing constraints, the developed systems is not what was planned initially. The primary aim of this project has been met. All the objectives that were set out have been completed and giving positive results in the ends. In the future some features that can be added will be about the two-factor authentication. Although the user requirements were successfully met the application is not yet fully utilized because the users of this website are just learning about the benefits and working of the website. The user testing and evaluation of the application did however highlight rooms for the expansion. The application could therefore be developed further as soon as the user is fully aware of its working.

CHAPTER 8

REFERENCES

REFERENCES:

http://www.tizag.com/cssT/ (for css coding reference)
http://www.tizag.com/mysqlTutorial/ (for the use of tables)