A

PROJECT REPORT ON

E – VOTING SYSTEM

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In

Electronics and Telecommunication Engineering

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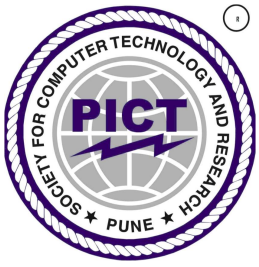
GUIDE

PROF S.K.MOON



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CERTIFICATE

This is to certify that the report entitled

E-VOTING SYSTEM

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towards the partial fulfillment of the degree of **Bachelor of Engineering** in **Electronics and Telecommunication** as awarded by the **Savitribai Phule Pune University**, at **Pune Institute of Computer Technology** during the academic year 2019-20.

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Thanking You
Chetan Magar
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ABSTRACT

In today's world of growing advanced technologies, the traditional voting method can be changed to a newer and effective approach termed as e-voting system (online voting). The E-voting system provides a convenient, easy and efficient way to vote eliminating the shortcomings of traditional approach. In this project we propose to build an E-Voting system which is basically an online voting system through which people can cast their vote through their smart phones or by using an e-voting website. To achieve the required security we are using verified text mobile message approach, which is most commonly on the web to tell the difference between a human using a web service and an automated bot thus making the website more secure against spam-bot attacks. If the results of the matching algorithm are two point match then checks whether this person own voter ID after that it will check with AADHAAR ID, If he has the right to vote then a voting form is presented to him. The AADHARCARD ID principle emphasizes that each time the user tries to log on to the online voting form. The result shows that the proposed algorithm capable of finding the people's information in database and allows their voter to vote in approximately few seconds. Choices regarding exact issues, pieces of rule, citizen initiatives, constitutional amendments, recalls and/or to select their government and political representatives. Nowadays Technology is being used more and more as a tool to contribution voters to cast their votes.

Abbreviation and Acronyms

EVM	Electronic voting machine
HTML	Hypertext markup language
SQL	Structured query language
SS	Snap Shot

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CHAPTER 1

Introduction

1.1 Background

Making the electronic voting system has an obligation of security and of acquiring user confidence, usually user can access to the electronic voting system and voting on the text without security system, that any client can access to the electronic democratic framework through the ID number for another client and he/she can cast a ballot more than one time at a similar book, The clients could know the consequence of casting a ballot during the way toward casting a ballot which make the framework sketchy and question, , The user can dominate the result of voting by the access that he or she has of the result before the end of election day.

1.2 The Online Voting should:

i. Be ready to show every single enrolled voter in the database to the SYSTEM ADMIN(s) according to their entrance rights and benefits.
ii. Have an easy to use interface and client guides reasonable by individuals of normal PC abilities.
iii. Be sufficiently hearty with the goal that clients don't degenerate it in case of casting a ballot.
iv. Be ready to deal with different clients simultaneously and with a similar effectiveness, this will provide food for the huge and consistently developing populace of voters.

The Flow outline of the portable democratic shows the consecutive progression of how the information goes starting with one action then onto the next. It begins from Registration, Login and Forgot secret word .The Fig 2 shows the underlying screen when the application begins. It has the login structure, enlistment and overlooked secret word and afterward proceeds

Enlistment: This alternative is utilized when the client is first enrolling through the application. It will take them to an enlistment screen.

Login: This alternative enables us to log us in for democratic.

Result Activity: The undertaking of voter enrollment is carefully saved for the framework head. In this manner on the off chance that you are signed in as an insignificant client/voter, you don't have this benefit, in this way, the enlistment page connect is impaired for you.

Casting a ballot Activity: - After casting a ballot, a voter is permitted to check the outcomes by visiting the outcomes page.

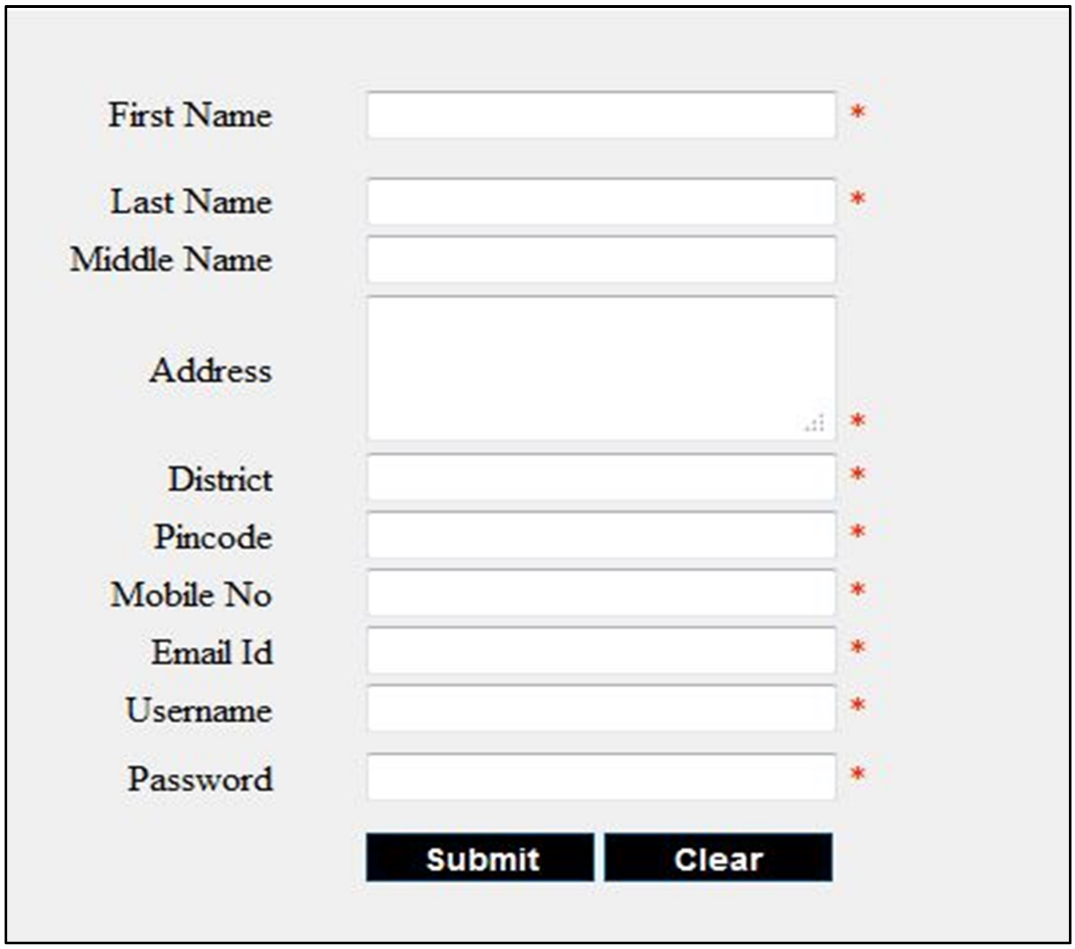

Fig 1.1: Voter Registration Form

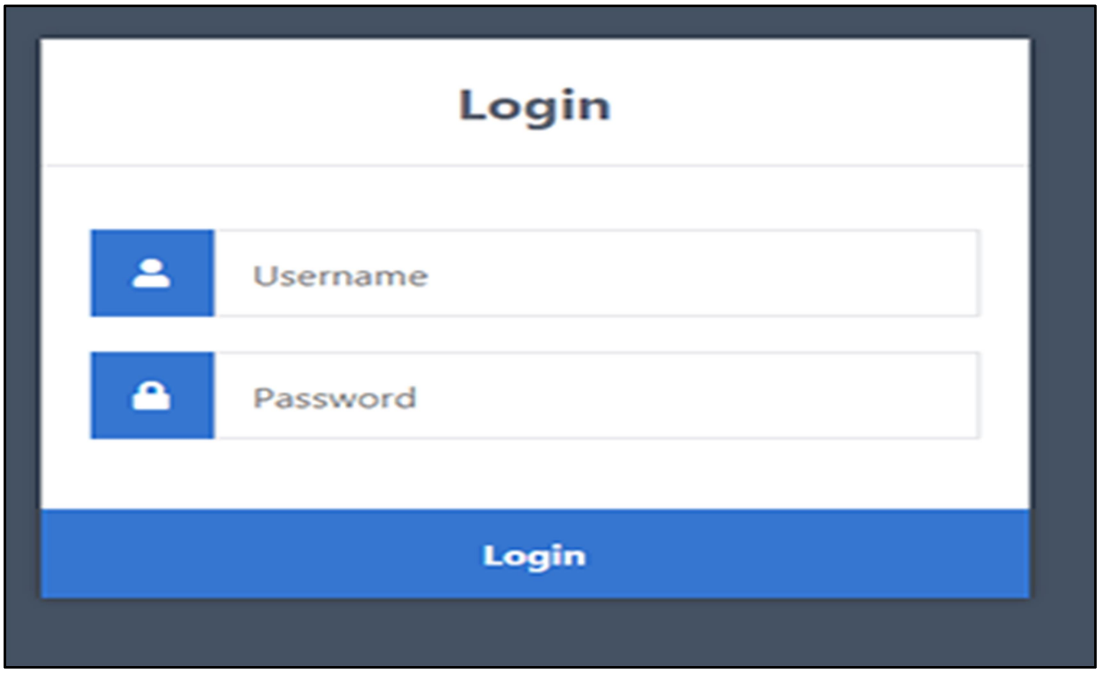

Fig.1.2: Admin Log-in Form

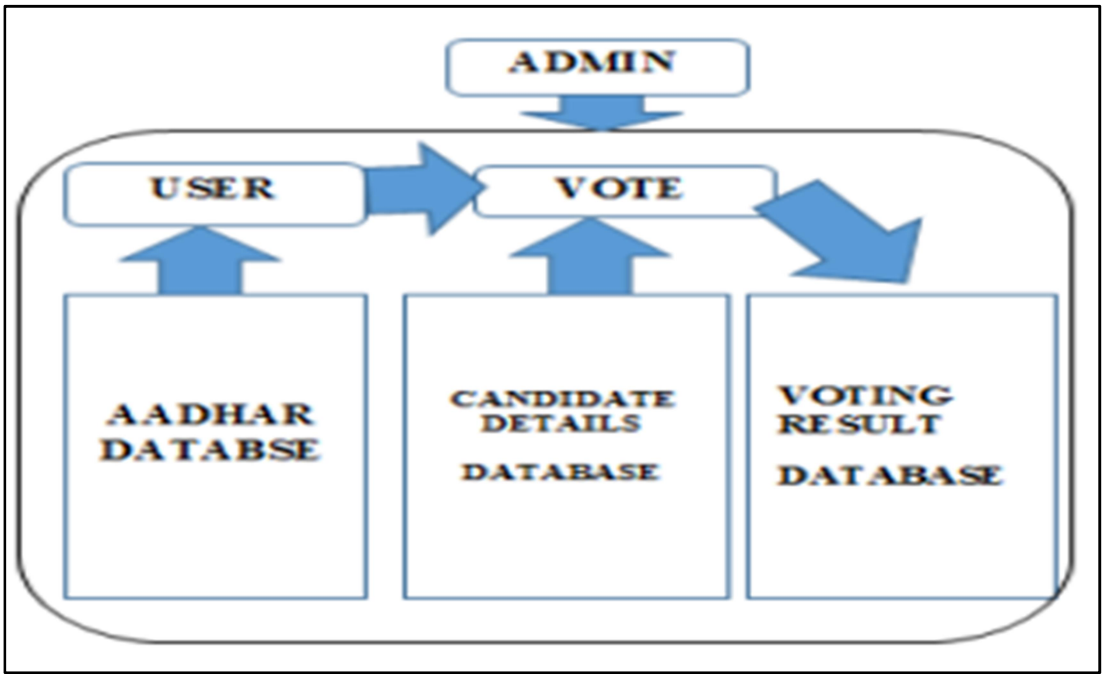

Fig. 1.3: System flow

Fig.1.4: New voter login form with authorized voter id, AADHAAR id and password

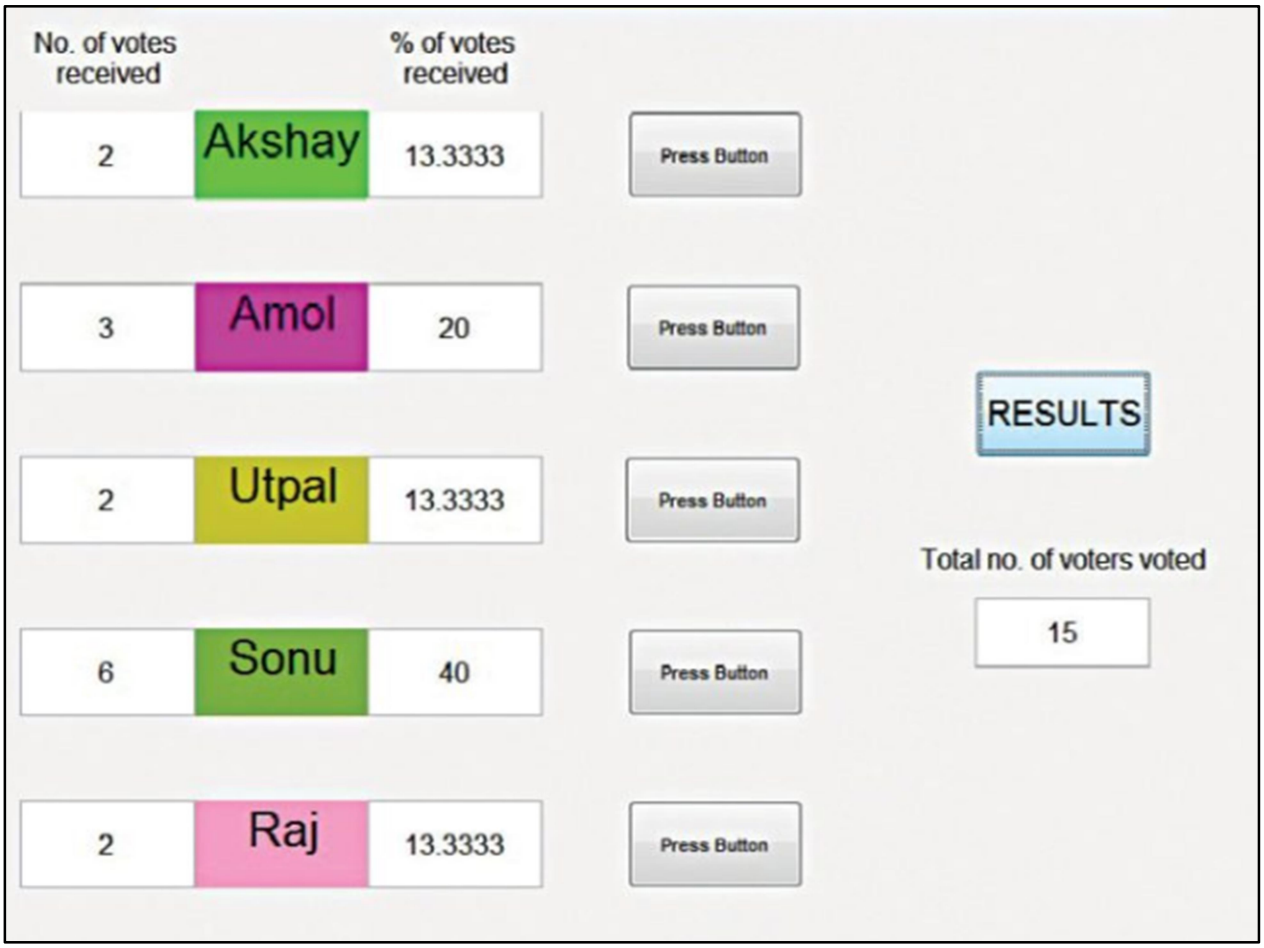

Fig. 1.5: Final Result

1.2 Literature Survey

In the creator Kohno T., Stubblefield A., Rubin A. also, Wallach D. S, (2004), portrays the security highlights of the electronic democratic framework and e-casting a ballot framework is superior to manual democratic framework. Likewise, the creator shows that voters, with no insider benefits can cast boundless votes without being recognized by any instruments inside the democratic terminal programming.

In the creator CiprianStanica-Ezeanu (2008) inspected e-casting a ballot system by depicting its focal points and drawbacks. His work was significantly on the safety efforts, for example, firewalls or SSL interchanges which are important however not adequate to ensure the particular security necessities of e-casting a ballot. Likewise, the creator depicts the extra layer of practice security innovation to address the particular dangers presented by electronic democratic and ensure basic security necessities, for example, voters' protection, vote respectability and voter-obviousness. The creator similarly recommended the utilization of Biometrics and smartcard for verifying clients. One significant issue the creator worried is the contrast among biometric and "great" verification like savvy cards. The e-casting a ballot framework proposed in doesn't interface in any capacity with the biometric qualities of the real clients, yet at the same time confirms the client with the assistance of the client's validation authentication on the shrewd card.

1.3 Motivation

This undertaking manages configuration, assemble and test an internet casting a ballot framework that encourages client (the individual who is qualified for casting a ballot), applicant (Candidate are the clients who are going to remain in decisions for their separate gathering), Election Commission Officer (Election Commission Officer who will check whether enrolled client and competitors are credible or not) to partake in web based democratic. This web based democratic framework is exceptionally verified, and its plan is basic, usability and furthermore solid. The proposed programming is created and tried to take a shot at Ethernet and permits web based democratic. It additionally makes and oversees casting a ballot and a political decision

detail as every one of the clients must login by client name and secret key and snap on his positive possibility to enroll vote. This will build the democratic rate in India. By applying high security it will decrease bogus votes.

1.4 Problem Definition

Web based Voting are straightforward, alluring and straightforwardness to utilize. It lessens manual endeavors and majority of data can be taken care of effectively. Be that as it may, out of every one of these highlights there are a few downsides with this framework are, there can be programming disappointment issue, shaky access of web and furthermore voter ought to be acquainted with web.

1.5 Scope and Objectives

The principle target of this investigation is a significant advance towards streamlining this exertion is to build up a structure and recognize fundamental properties that a safe and believed internet casting a ballot framework must fulfill to diminish revelation repetition. Such a structure will enable us to assess just as look at the benefits of existing and future competitor web based democratic plans. Framework should bolster multi-client condition. Framework ought to be completely mechanized. Framework ought to give solid security highlights like making clients and doling out benefits to clients of the framework. Framework ought to be fit to monitor all the point by point depictions of the customer and the entire subtleties of administrations offered by the customer association. Different yields (reports) ought to be accessible online whenever. Framework ought to have the option to deal with very enormous volumes of information (for example enormous database support).

1.6 Technical Approach

1.Front-End :

Front-End is made up of HTML, CSS, JavaScript where HTML is responsible for the structure of the website, CSS is responsible for the styling our website & JavaScript the behvaiour to our website. Also we have Bootstrap framework to ensure great-looking content no matter the device.

2. Back-End :

In order to make the server, application, and database communicate with each other, at the back-end we have use server-side languages like PHP & Java. MySQL & SQL Server to find, save, or change data and serve it back to the user in front-end code.

3.OTP verification on Registered mobile Number :

The Concept has been implemented to add high level of security to our voting application.

1.7 Organization of Report

Chapter 1

In the first chapter, we have introduced the theme of our project, the key factors such as background, relevance and motivation. The literature survey has helped in getting information about some important aspects that are required for the project. Getting more practical, we have discussed the problem definition, objectives, scope and also how we are going to deal with it in a technical manner.

Chapter 2

In the second chapter, we introduced the project more briefly with its technical background and perquisites.

Chapter 3

In this chapter we introduced Framework model & also the flow of data throughout the system with the help of a flow diagram & block diagram.

Chapter 4

This chapter includes the implementation, testing & debugging results with the help of screen shots which showcase the development stages of our project.

Chapter 5

This chapter includes the end result of our project. We have attached the result we achieved through our project.

Chapter 6

This chapter is about the conclusion of ourproject, also we will summarize the project and will see what improvements we can further make.

Chapter 7

In this chapter, we have discussed about our future aims & scope of our project.

CHAPTER 2

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E-Voting System

2.1.1 Introduction

Making the electronic fair structure has a responsibility of security and of acquiring customer assurance, when in doubt customer can access to the electronic law based system and settling on the substance without security structure, that any customer can access to the electronic popularity based system through the ID number for another customer and he/she can cast a voting form more than one time at a comparable book, The customers could know the result of throwing a voting form during the route toward throwing a voting form which make the system erratic and question, The customer can overpower the delayed consequence of throwing a polling form by the passageway that the individual being referred to has of the result before the completion of political choice day. To extend voter sureness, a couple of states have proposed and from time to time, directed the development of printers to throwing a polling form machines. This allows voters to check their equitable decisions on paper records; specialists by then couple the electronic record of each vote with a printed paper record. Using DREs with voter-checked paper-record systems (VVPRSs) should present full open trust in the constituent strategy.

To affirm such a structure, in any case, specialists ought to warily survey a printer's show and its getting together with the general popularity based system. Government and state political race commissions have made different recommendations for surveying and affirming e-throwing a voting form systems. In the US, states have made different requirements that attention on their particular needs. The Attorney General's Office of New Jersey gave criteria for e-throwing a polling form machines outfitted with printers and requested the New Jersey Institute from Technology to test the various structures against these criteria. As we look at here, in the testing and examination process, we encountered a couple of issues of concern and characterized recommendations for watching out for some of them.

2.2 Prerequisites

2.2.1 System prerequisites

A DRE casting a ballot machine with VVPRS capacity incorporates a polling form show unit, a democratic board, inside and outer recollections, a printer, a paper-record show unit, and a paper-record stockpiling unit. The democratic frameworks we tried all utilization warm printers and embrace one of two strategies: In cut-and-drop VVPRS, the individual printed paper records are cut and dropped into a capacity unit; in consistent spool VVPRS, the vote choices are imprinted on a paper roll that moves persistently starting with one spool then onto the next.New Jersey's criteria characterize the framework's segment functionalities.

2.2.2 Verification prerequisites

Prior to making a choice, voters must have the option to audit and confirm their choices on the DRE framework and the comparing paper records. New Jersey's criteria let voters dismiss and recast the voting form up to two extra occasions. Official specialists should likewise have the chance to think about the electronic and paper records after the political decision for review and relate purposes. Subsequently, the electronic and paper records must be connected through an interesting identifier.

2.2.3 Honesty prerequisites

There are discrete trustworthiness prerequisites for the paper and electronic records. The paper record must incorporate each challenge the voter throws on the DRE framework, including compose ins and under votes. It should likewise recognize the political race, the political race area, and the democratic machine. In addition, the paper record's substance must be machine meaningful (utilizing standardized identifications, for instance) on the off chance that a describe and review is required. As noted before, the paper record must contain mistake redressing codes to distinguish read blunders.

CHAPTER 3

Framework Model

Electric Election structures can check the vote based system progressively controlled, secure and convenient. E-Election system makes open pick their operators even more securely and express their tendencies for how they should be spoken to. Election improvement has strong media incorporation generally, if something turns out severely .This system will manufacture the level of security and make the trust and trust in voters. The wellspring of Maoist brutality and presented that open need a continuously secure procedure for settling on their decision. To make the majority rule system trust genial is incredibly hard considering the way that it needs high security essentials: assurance and genuineness. Mystery infers all voters make secure with the security of votes and neutralize charge of votes. Reliability suggests introduction of perfect outcomes of races and the privilege including of votes. Reliability is definitely not hard to become through an open showcase of endorsement, yet this disperses security and arrangement begins from the puzzle surveying structures, yet this bombs the trustworthiness. The full E-Election system offers people to cast a voting form in a protected way with no fear. The web throwing a voting form system similarly parting with the security to the voter's by placing the vote in an ensured propelled structure, if the voter cast a voting form neighboring irate applicant. This structure likewise ensures not to release.

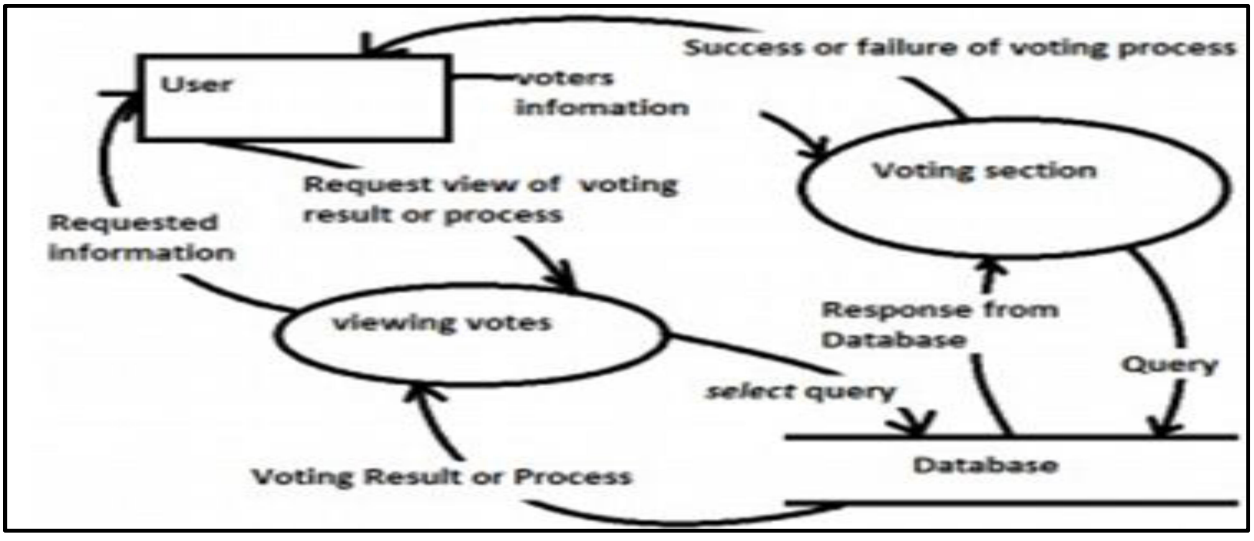

Figure 3.1: Diagram of analyzing voters section.

The Main Security utilization of our undertaking is the possibility of One Time Password for instance each time another mystery word is created and sent to the customer on his mobile phone. When Password is a Random 6 Digit Number that changes definitely, at whatever point customer signs on to the structure and plays out some trade. The Concept has been executed with the goal that it adds huge degree of security to our voting related Application. The Flow diagram of the flexible just shows the progressive movement of how the data goes beginning with one development then onto the following. It starts from Registration, Login and Forgot mystery key .The Fig 2 shows the fundamental screen when the application starts. It has the login structure, enrollment and neglected mystery word and a short time later continues.

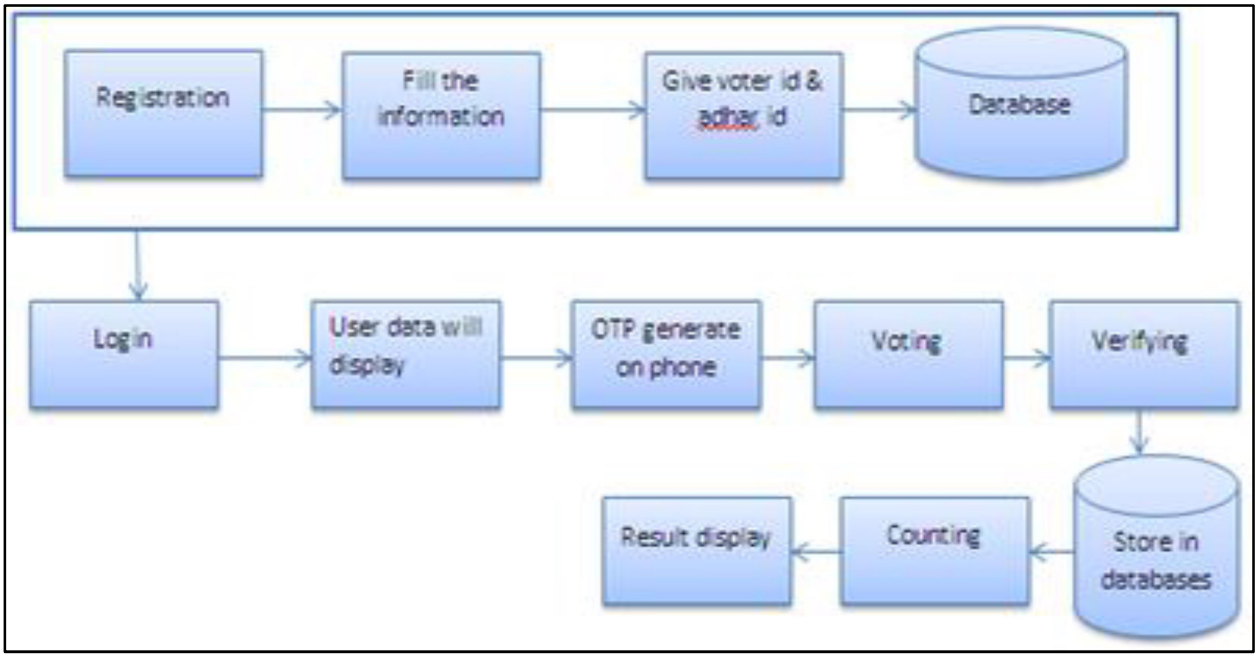

Fig. 3.2 Block diagram of voting system.

CHAPTER 4

Implementation, Testing & Debugging.

1. Implementation

Fig. 4.1 Home Page of the Voting System.

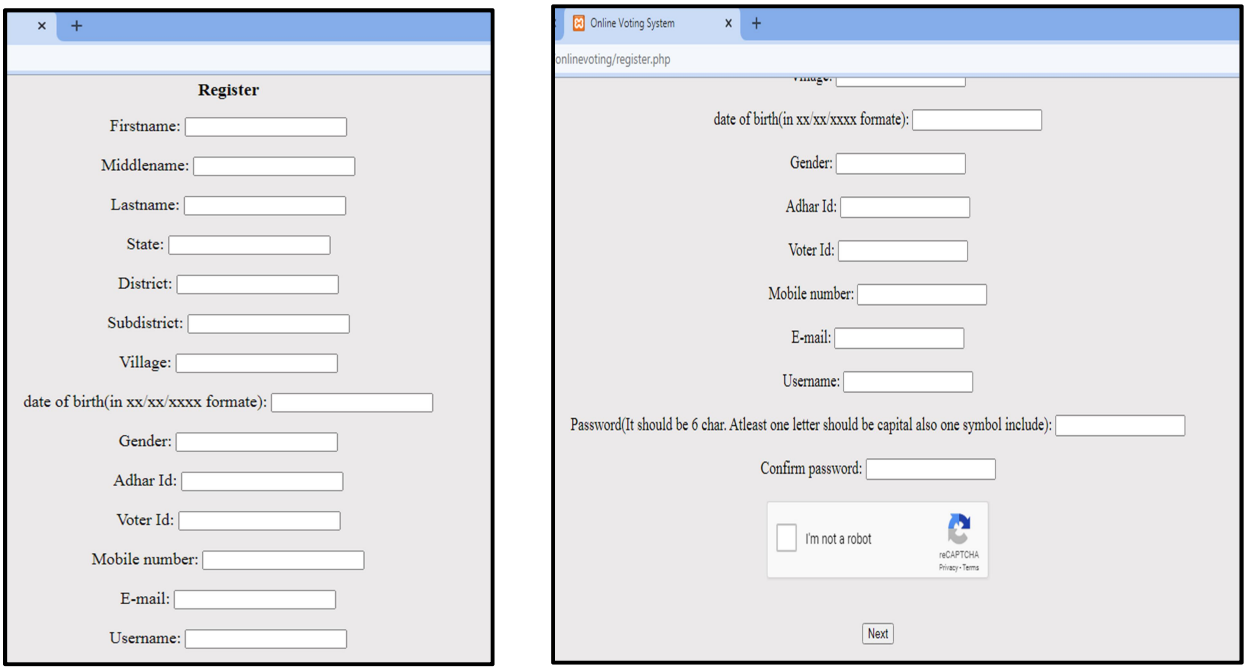

Fig. 4.2 Registration Form for the new voter.

2. Testing

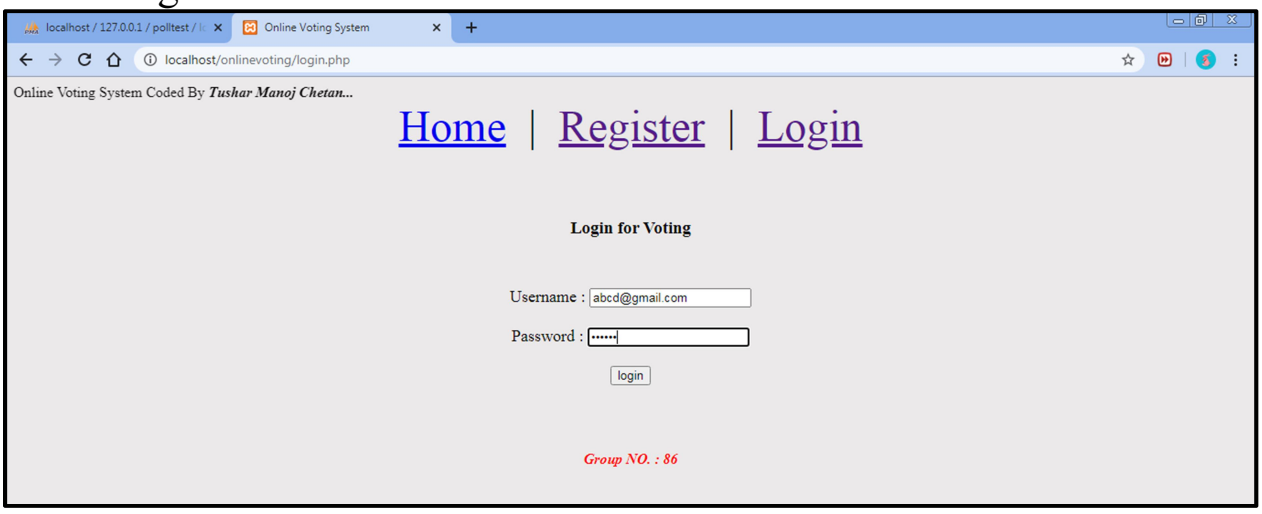

Fig. 4.3 SS of Login Page.

Fig. 4.4 SS of after successfully Login

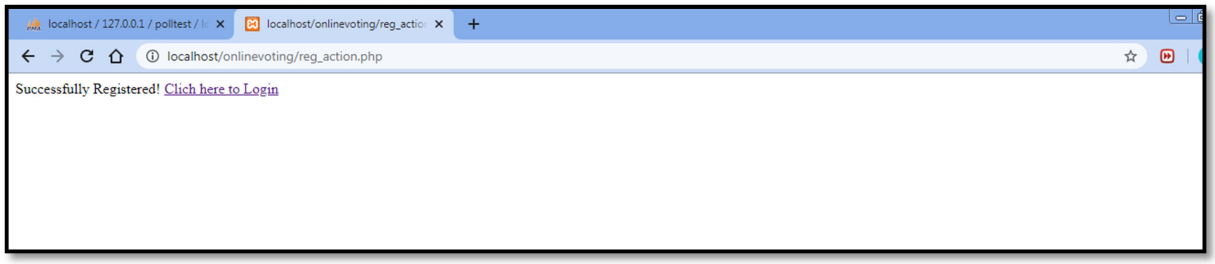

Fig. 4.5 SS of after successfully Registration.

3. Debugging

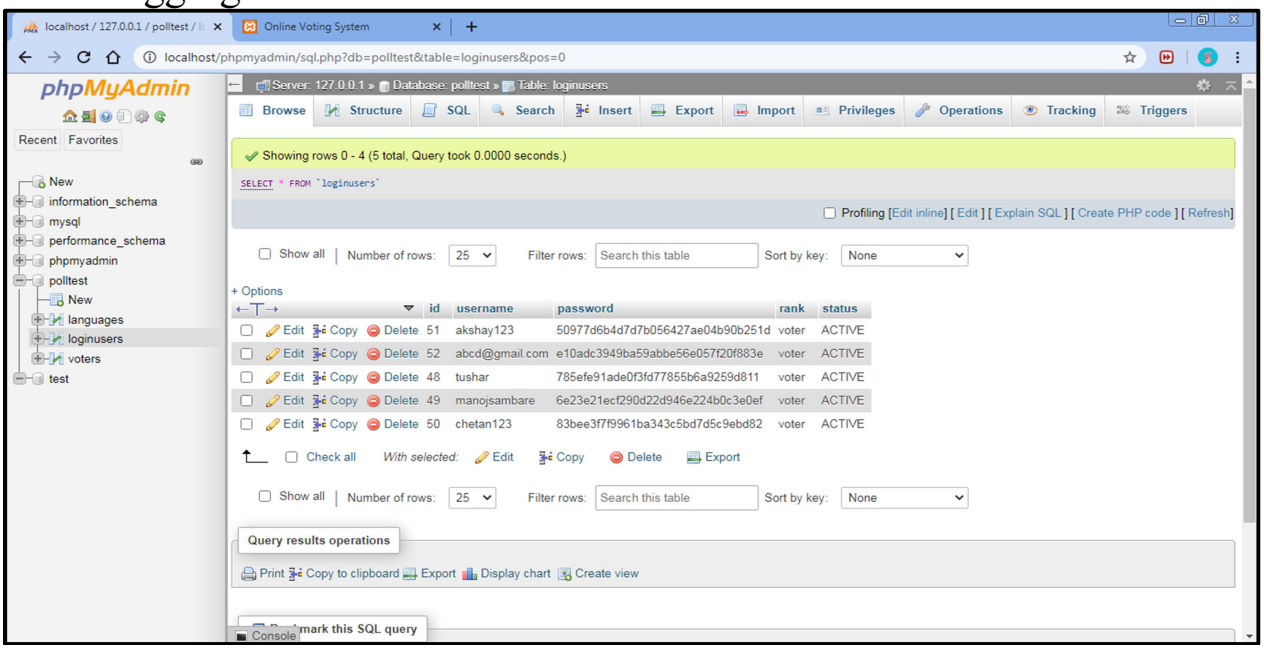

Fig. 4.6 SS of updated table at server

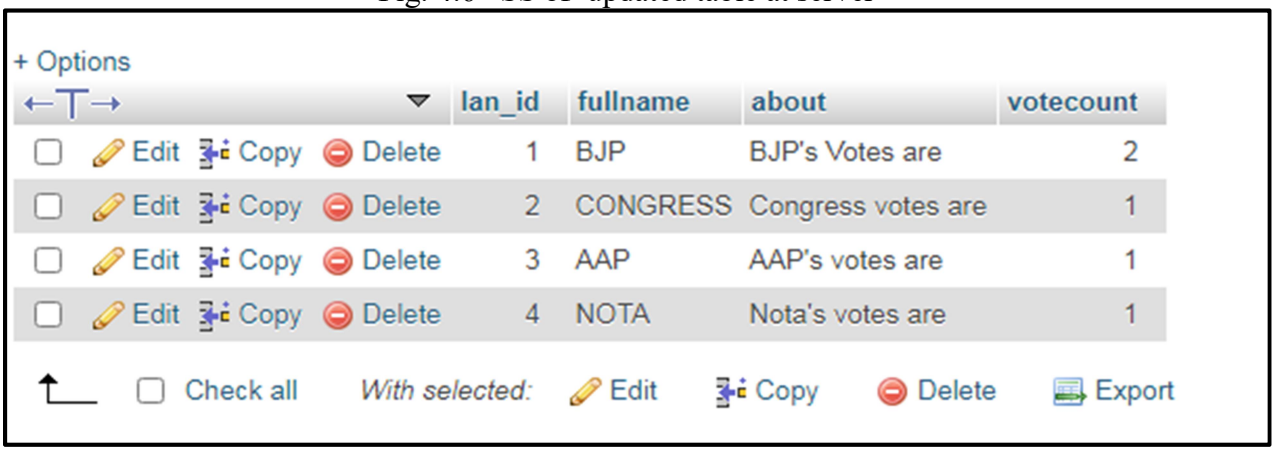

Fig. 4.7 SS of updated table of voting parties

Fig. 4.8 SS of updated table of voters & their respective votes

CHAPTER 5

Result & Discussion

Result

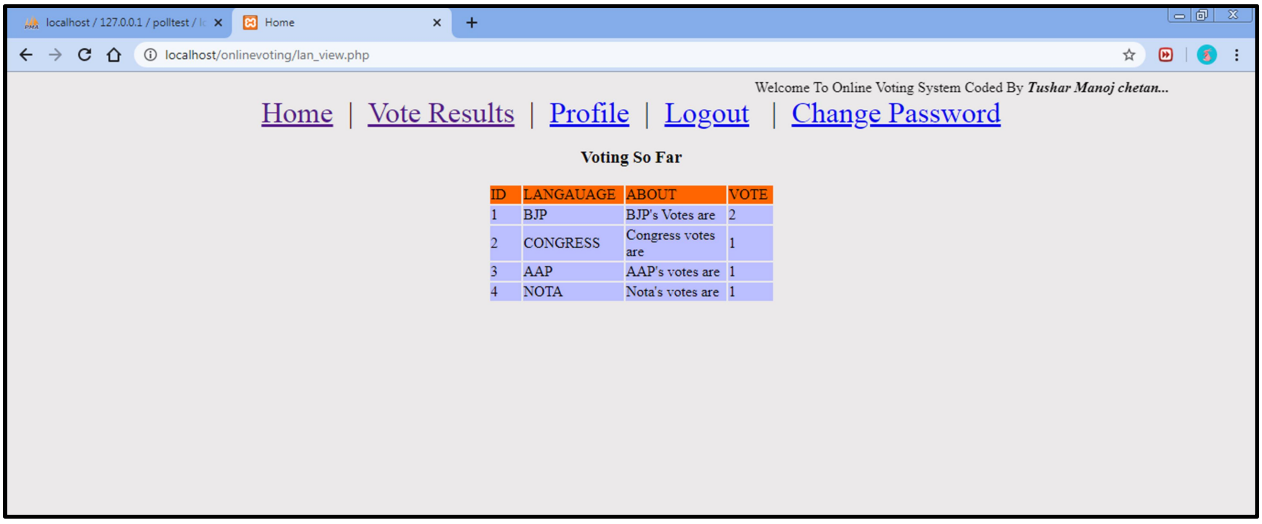

Fig. 5.1 SS of result of successful voting

Fig. 5.2 SS of successful casting a vote

CHAPTER 6

Conclusion

In Present time, message based applications are expanded. Security is a significant issue for taking care of such administrations. Current framework give security card based office to verify client yet this isn't verify enough and may not be accessible on whenever or circumstance. To conquer such kind of issues we propose online e-Voting validation framework utilizing OTP with aadhar id and pseudorandom number generator that distinguishing proof is too unpredictable which is improving the security for beast power assault. The practicable future extent of the task remembers the improvement for the security level of the framework. In addition to that it is intriguing to meet some other private natives to improve the security level of web based democratic framework.

CHAPTER 7

Future Plan

Through the arrangement of improved democratic framework, administrations to the voters by quick, auspicious and advantageous democratic is conceivable. So there is no likelihood to experience on the framework as we improves the framework in much better manner with the office comprising information confirmation, check and some more.

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