Online Majoritarian through Aadhar

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ABSTRACT:
In our country vote is most powerful weapon of the citizen. It is our right to vote for a right candidate. So, we need 100% voting in our country, but we are getting 60-70% of voting only. Until we get 100% voting we can't elect a right candidate for our country. When citizen want to vote he must be without fear of should vote from any place. In a democratic country like India, we are not 100% of voting. People are not ready to cast their vote because of many factors. These are some factors, people can't travel long distance and can't poll their vote, still there are some people who threaten the common people while voting with their men. People fear for poll their vote in terrorist areas. So, we want to develop a system where people can poll their vote without any fear. So, this proposed system is a web-based application where a common man can poll his/her vote from their home or anywhere else. By seeing above requirement, we developed an ONLINE POLL system where people can vote from any place if they have voter id. This is a web application which allows people to login with their Aadhar number and phone number which are predefined in Aadhar card. Once people login then the website checks the details of the voter and gives permission to cast their vote.
Keywords:Aadhar details, constituency, online poll, Voter details , Web application

I.   INTRODUCTION:
When it comes to voting in every country, the government conducts their own elections. In those elections it uses more man power, time consuming and voter needs to wait for hours in queue to cast his/her vote. The interest of E-Voting is spread at different level of the society, governments, parliaments, electorate, academic and industry are in different way attracted in this argument.There are many problems facing by the people in voting manually like it takes much time to the voter to cast their vote, as it has been observed that in some cases booth capturing has been reported, it also reduces the chances of conflicts, and also reduces the time for ballot counting and many others.The current system in today is highly insecure and prone to election malpractice.

II.   ORIGIN OF PROBLEM:
The aim of the study is to analyze the current election system and suggest an online election system which will allow people to cast votes in a more convenient way, by using available resources which could facilitate the voters during elections through their mobiles or desktops etc.The votes will be added to the nominal parties based on user voting.The details like particular user cast his/her vote to particular nominee will not be shown or stored in database.The user has to login through Aadhar number to vote.

III.   PROBLEM STATEMENT:
E-Voting has been attracting a lot of interest during the past years trained by the will of many countries to develop E-Government and E-Democracy systems. The interest of E-Voting is spread at different level of the society, governments, parliaments, electorate, academic and industry are in different way attracted in this argument.There are many problems facing by the people in voting manually like it takes much time to the voter to cast their vote, as it has been observed that in some cases booth capturing has been reported, it also reduces the chances of conflicts, and also reduces the time for ballot counting and many others.

IV.   LITERATURE REVIEW:
Paper – I:
Title: Online Voting System
Author: Mihir
Description: In this system the voter does not have to go to the polling booth to cast their vote. The

System Administrator registers the voters by simply filling a registration form to register the voters. After registration, the voter is assigned a secret voter ID with which he/she can use to login to the system and cast his/her vote. If invalid/wrong details are submitted, then the person is not registered to vote. After the user successfully registers themselves, a link is sent on their respective E-mail IDs. The link is a key for the activation of the account of the user. The account is activated only after the user clicks on that link.

Paper – II:
Title: ElectionBuddy
Author: Frud shahakian(President, ACMEA), Diane Jacobi
Description: ElectionBuddy is a result of frustrations running elections for student groups, associations, and the government. We spent many hours tallying paper ballots and kludgy spread sheets or scripts to tally and share results. ElectionBuddy is designed and developed by ElectionBuddy inc. It is a simple elegant technology solution to real world problems by listening to customer needs.To look at the security of the election system, we will consider three different aspects: the security of actual votes (both authenticity and secrecy), preventing the loss of valid votes, and preventing the addition of fraudulent votes.

Paper – III:
Title: Secure Voting Using Disconnected, Distributed Polling Devices
Author: David Clausen, Daryl Puryear, Adrian Rodriguez
Description: We present a system for secure electronic voting which does not rely on persistent network connections between the polling places and the vote tallying server.Our contribution is to repair this deficiency in existing systems by modifying them to work in a disconnected (or more accurately "intermittently connected") environment.voting, and tallying of votes. We are using this system for securing the votes without getting any persistent network connections.The first stage in the process is for a trusted authority to generate a public/private key pair and store these on an inexpensive, tamper−resistant, personal cryptographic device.At some point, a voter who wishes to participate will fill out a paper form containing his name, address, and a handwritten signature, and mail this to his voting district authority.Prior to election day, the voting district administrators establish one or more polling places in the community.

Paper – IV:
Title: Electronic Voting

Author: Lorrie Faith Cranor
Description: Electronic voting refers to the use of computers or computerized voting equipment to cast ballots in an election. Sometimes this term is used more specifically to refer to voting that takes place over the Internet. Electronic systems can be used to register voters, tally ballots, and record votes.While DRE machines may be easy to use, produce unambiguous results, and don't involve paper ballots that might be tampered with, they are not without problems. DRE machines must be trusted to accurately record each vote as the voter entered it. If the machines do not record a vote accurately, or fail to record it at all, there is no record to go back to for a recount (as with lever machines). Here we can reduce the fraudulent votes from the people by using the electronic voting.Electronic voting -- and especially Internet voting -- has the potential to reduce the costs associated with running elections and increase participation in elections. It may also make voting more accessible to people with disabilities, allowing them to vote from home and use equipment that can accommodate their special needs. However, ensuring the security and integrity of online elections poses many new challenges for election administrators.

Paper – V:
Title: Electronic Voting
Author: Ronald L. Rivest
Description: Over the years, with varying degrees of success, inventors have repeatedly tried to adapt the latest technology to the cause of improved voting.It was never adopted because it was allegedly "too fast" for then members of Congress.We start by noting that "electronic voting" includes a wide range of possible implementations. The California Internet Voting Task Force distinguished between voting at a supervised poll-site using electronic equipment, voting at an unsupervised electronic kiosk and "remote voting"— voting from home or business using the voter's equipment.Before proceeding to comment on the security of electronic voting systems, we should at least pause to consider the desirability of such systems.There is a fundamental problem we must face when trying to design remote electronic voting systems: the "secure platform problem."Electronic voting is unlike electronic commerce in several important ways, so it is insufficient to argue that secure electronic voting is merely a corollary to secure electronic commerce and that the same security mechanisms should apply.The primary purpose of a voting system is to correctly determine the will of the voter.Voting systems must be certified before they

are used. Election officials must have confidence that the voting system will prevent fraud and perform reliably

Paper - VI:
Title: California Internet Voting Task Force
Author: Bill Jones
Description: Internet Voting means the casting of a secure and secret electronic ballot that is transmitted to election officials using the Internet. The implementation of Internet voting would allow increased access to the voting process for millions of potential voters who do not regularly participate in our elections.The possibility of "Virus" and "Trojan Horse" software attacks on home and office computers used for voting is very real and, although they are preventable, could result in a number of problems ranging from a denial of service to the submission of electronically altered ballots. One of the most difficult tasks for an Internet voting system is the authentication of voters.An Internet Voting Machine is defined as the computer hardware that allows an electronic ballot to be cast over the Internet.

Paper – VII:
Title: Electronic Voting - A Survey
Author: Prashanth P. Bungale and Swaroop Sridhar
Description: .People all over the world soon started taking a hard look at their voting equipment and procedures, and trying to figure out how to improve them . There is a strong inclination towards moving to Remote Internet Voting – at least among the politicians – in order to enhance voter convenience, increase voter confidence and voter turnout.Electronic voting refers to the use of computers or computerized voting equipment to cast ballots in an election. Sometimes, this term is used more specifically to refer to voting that takes place over the Internet. Electronic systems can be used to register voters, tally ballots, and record votes .In "Electronic Voting" ,Rivest addresses some issues like the "secure platform problem" and the (im)possibility of giving a receipt to the voter. He also provides some personal opinions on a host of issues including the striking dissimilarity between e-commerce and e-voting, the dangers of adversaries performing automated, wide-scale attacks while voting from home, the need for extreme simplicity of voting equipment, the importance of audit-trails, support for disabled voters, security problems of absentee ballots, etc.

Paper – VIII:
Title: Online Voting System
Author: AkashSuryavanshi
Description: our online voting system is highly secured, and it has a simple and interactive user interface. The proposed online portal is secured and

have unique security feature such as unique id generation that adds another layer of security (except login id and password) and gives admin the ability to verify the user information and to decide whether he is eligible to vote or not.It also creates and manages voting and an election detail as all the users must login by user name and password and click on candidates to register vote.Our system is also equipped with a chat bot that works as a support or guide to the voters, this helps the users in the voting process.

NOVELTY:
In previous projects Login id and Password are there for verification where there may occur some difficulties whether that person is in voters list. Where as in our project we have Aadhar number and phone number to login every time. We don't have a register option which decreases the fraud activities. Unlike our project previous projects there is no different page for admin and voter which may involves some difficulties while election process is occurring.In the previous projects there is no edit polland party logos are also not present.

V.   DESIGN METHODOLOGY:
Mainly it consists of two main persons one is the admin; admin has a right to create a poll environment. We should add states and their emblem, and he should add all constituencies to their respective states. He will add respective polls and its candidates participating in that poll along with independent candidates with respect to the constituency. He can also end the poll at the end of the polling session. Another person who uses this platform is a voter and he doesn't not have any permission to create a polling or to change the structure of polling. He can only cast his vote in which he/she has eligibility in the list votes displayed.

System Architecture Diagram
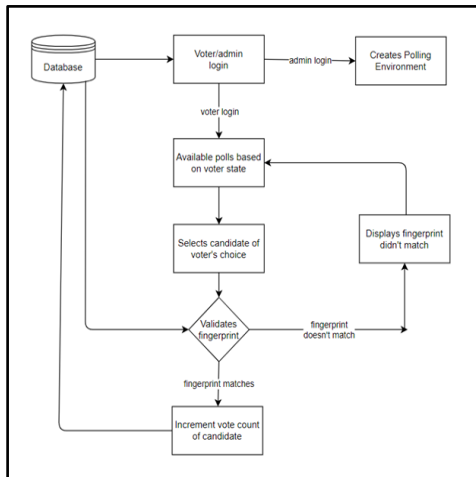
A system architecture is a conceptual model that defines the structure, behavior, and more views of a system. ... A system architecture can consist of system components and the sub-systems developed, that will work together to implement the overall system. In System architecture of our project first voter Or admin has to login. Voter will login to vote whereas admin logins to check all the activities occurred in the web application and creates the Polling Environment. When ever voter logins he/she would get the available polls based on their state and then he/she will select a candidate of their choice. In order to vote the voter must verify their finger print . If finger print mismatched then again the voter must have to verify their fingerprint. If fingerprint matches their will be an increment in the vote count of the candidate and it stored in the database . Here in our web application we only stores the count of each party voteswhereas we don't store the data of each individual person vote like to whom they voted.

VI.   ANALYSIS STEPS:
• Identify the problem.
• Search for research and similar projects
• Determine the purpose of the entire system.
• Read the available literature.
•Identify the individuals' requirements and preferences.
• Determine the entire project plan.
• Identify the user's Structure system requirements using Use Case.

VII.   IMPLEMENTATION:
Front End: HTML, CSS, Bootstrap, jQuery.
Backend: Django
Database: SQLite
Packages installed: Pillow

Python-Django:
·Python language constructs and object-oriented approach aims to help programmers write clear, logical code for small and large-scale projects. ·Django (Holovaty & Kaplan-Moss, 2008) is a high-level Python Web framework that encourages rapid development and clean, pragmatic design.
**SQLite:**
SQLite is a C-language library that implements a small, fast, self-contained, high-reliability, full-featured, SQL database engine

VIII.   DESCRIPTION OFRESULTS:
When the web application is launched login pages is opened·Admin has the rights to add all states in the country and also their respective constituencies.Admin creates the polling environment with candidates respective to their constituencies. Voter has to login with his/her Aadhaar number and phone number, if he has a voter card template that shows all available polls of that state and selects the candidate then authenticates with fingerprint and then increment vote count.
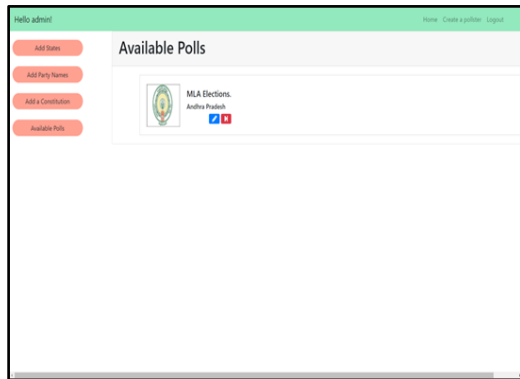
IX.   WORKING:
Login Page
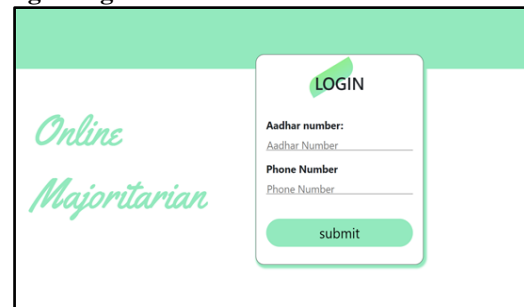
User has to login with their credentials with Aadhar number and phone number (linked with the Aadhar Number) and if the credentials are for admin then it redirects to the admin page.
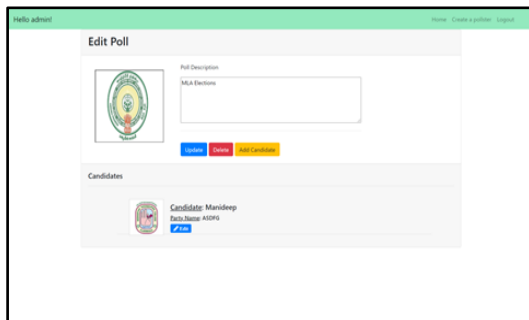
ADMIN MODULE :
Admin Home Page

This is the admin home page, here he/she can add States before he creates a poll and adds all constituencies for their respective States.
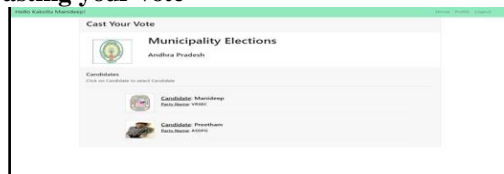
Edit Poll

In this page admin can edit poll and he can add or edit the candidate details. Images are automatically displayed of the state that admin selected to create a poll within.
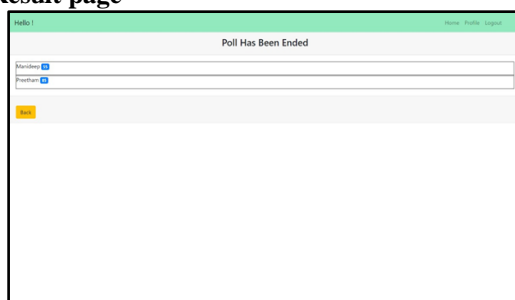
VOTER MODULE :
Casting your vote

Voter selects a candidate of his choice to cast his/her vote from the candidate list below. They are displayed according to the constituency of the candidate.

Result page

Here we can see the results of the candidates who participated in the election.

X.   FUTURE STUDY:

As the present situation is more dependent on the digital world we can change the manual voting system to digital voting. As online voting needs more security we can also develop by keeping retina scanning and face recognition for reducing rigging in the voting system. Moreover we can provide voting portals to different organizations as their organization needs to elect their president and vice president etc.

XI.   CONCLUSION:

The aim of designing this   project for the user to cast their   vote without visiting polling centers, physically. And it also prevents fraudulent activities like double voting i.e., (these days people are using other id to vote again) . The project is very user friendly, that every user can easily understand and get access to vote if, the given input credentials is correct .

The user does not have to be register in advance because, the user has to use Aadhar details for login process. The novelty of this project comparing to the existed projects .We used Django and SQLITE database in this project. And will not the stored or displayed even to the admins, the confidential data like to whom a particular user has cast their vote . But after every user voting the count will be stored automatically and in which there is no need of physical process to count. After the polling end , the winner should be displayed automatically and not only the winner but also the participants are displayed with their resultant number of votes.

Secure Online Voting System can help to increase number of voters as individuals will find it easier and more convenient to vote especially those who are abroad. This Online voting provides wide range of increasing voting percentage. It can help reduce to reduce manual process. It can reduce human errors while calculation of votes. It can help to reduce man power required at voting booths. It can help to reduce time consumed .It can help to save resources. It can ensure secure transmission of vote. And also we provide more security for the user data. With the help of online voting we can also elect a powerful leader.

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