MATDAN – A ONLINE VOTING MANAGEMENT SYSTEM

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MASTER OF COMPUTER APPICATIONS

By

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August, 2021

DECLARATION

I hereby declare that the work presented in this report entitled "MATDAN - A ONLINE

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embodied in this report for the award of any other degree or diploma of any other University or

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I have given due credit to the original authors/sources for all the words, ideas, diagrams,

graphics, computer programs, experiments, results, that are not my original contribution. I have

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I affirm that no portion of my work is plagiarized, and the experiments and results reported in the

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CERTIFICATE

Certified that **Shashank Mishra** (Universitity Roll No: 1900290140032) has carried out the project work presented in this thesis entitled "**Matdan – A Online Voting Management System**" for the award of **Master of Computer Applications**) from Dr. APJ Abdul Kalam Technical University, Lucknow under my/our supervision. The project embodies results of original work, and studies are carried out by the student himself/herself and the contents of the project do not form the basis for the award of any other degree to the candidate or to anybody else from this or any other University/Institution.

Signature	Signature
(Name of Supervisor)	(Name of Supervisor)
(Designation)	(Designation)
(Address)	(Address)
Date:	Date:

ABSTRACT

Our paper deals with online voting system that facilitates user (voter), candidate and

administrator (who will be in charge and will verify all the user and information) to participate in

online voting. 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.

Keywords: HTML, CSS, Java Script, PHP, MYSQL, phpMyAdmin, XAMPP

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AKNOLEDGEMENT

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Name:

Place:

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(Signature of the Candidate)
Name:
University Roll No.:

INTRODUCTION TO ONLINE VOTING SYSTEM

Introduction:

- MATDAAN-Online Voting System" is an online voting website. In this system people who are citizens and whose age is above 18 years of age and any sex can give his\her vote online without going to any physical pooling station.
- In MATDAAN a voter can use his\her voting right online without any difficulty. He\She has to be registered first him\her to vote.
- After registration, voter is assigned a secret Voter ID with which he\she can use to log into the system and enjoy services provides by the system such as voting. If invalid/wrong details are submitted, then the citizen is not registered to vote.

BACKGROUND OF STUDY

Background of Study:

- The Online Voting System 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 (including self-contained direct-recording electronic voting system 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 applications. 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 given post has the highest numbers of votes.
- This system is geared towards increasing the voting percentage in India since it has been noted that with the old voting method (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 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 must have the requirements. For instance, he/she must be a registered citizen i.e. must be 18 and above years old. As already started, the project "Online Voting" provides means for fast and convenient voting and access to this system is limited only to registered voters.

• Internet voting system are appealing for several reasons which includes, People are getting more used to work with computer to do all sorts of things, namely sensitive operations such as shopping and home banking and they allow people to vote far from where they usually live, helping to reduce absenteeism rate.

SIGNIFICANCE OF STUDY

Significance Of Study:

The main purpose of Online Voting System includes:

- Provision of improved voting services to the voters through fast, timely and convenient voting.
- Reduction of the costs incurred by the Electoral Authority during voting time in playing the very many clerks employed for the sake of the success of the manual system.
- ➤ Check to ensure that the members who are registered are the only ones to vote. Cases of "Dead People" Voting are also minimized.
- ➤ Online voting system will require being very precise or cost cutting to produce an effective election management system.
- ➤ Increased number of voters as individual will find it easier and more convenient to vote, especially those abroad.

OBJECTIVE OF PROJECT

Objective of Project:

The specific objectives of the project include:

- > Reviewing the existing/current voting process;
- > Coming up with an automated voting system;
- > Implementing an automated/online voting system;
- > Validating the system to ensure that only eligible voters are allowed to vote.

PROJECT JUSTIFICATION

Project Justification:

MATDAAN - Online Voting System shall reduce the time spend making long queues at the polling stations during voting. It shall also enable the voters to vote from any part of the globe as explained since this an online application available on the internet. Cases of voter miscounts shall also be solved since at the backend of this system resides a well-developed database using SQL Server that can provide the correct data once it's correctly queried. Since the voting process shall be open as early as possible, the voters shall have a time to decoide when and whom to vote for.

SCOPE OF STUDY

Scope of Study:

It is focused on studying the voting system of voting and to make sure that the people 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 abroad.

OLD METHOD OF VOTING

Old Method of Voting:

- 1. <u>Paper-based voting</u>: The voter gets a blank ballot and use a pen or a marker to indicate he want to vote for which candidate. Hand-counted ballots is a time and labor consuming process, but it is easy to manufacture paper ballots and the ballots can be retained for verifying, this type is still the most common way to vote.
- 2. <u>Lever voting machine</u>: Lever machine is peculiar equipment, and each lever is assigned for a corresponding candidate. The voter pulls the lever to poll for his favorite candidate. This kind of voting machine can count up the ballots automatically. Because its interface is not user-friendly enough, giving some training to voter is necessary.
- 3. <u>Direct Recording Electronic voting machine:</u> This type, which is abbreviated to DRE, integrates with keyboards; touch screen, or buttons for the voter press to poll. Some of them lay in voting records are doubted about its accuracy.
- 4. <u>Punch Card:</u> The voter uses metallic hole-punch to punch a hole on the blank ballot. It can count votes automatically, but if the voter's perforation is incomplete, the results is probably determined wrongfully.
- 5. <u>Optical Voting Machine:</u> After each voter fills a circle correspond to their favorite candidate on the blank ballot, this machine selects the darkest mark on each ballot for the vote then computes total result.

SECURITY ISSUES FOR ONLINE VOTING

Security Issues For Online Voting:

Foreign experience revealed that they are often confronted by security issues while the online voting system is running. The origin of the security issues was due to not only outsider (such as voter and attackers) but also insider (such as system developers and administrators), even just because the inheritance of some objects in the source code are unsuitable. These errors caused the voting system to crash.

The proposed solutions were correspondingly outlined to hold back these attacks. For example, to avoid hacker making incursion into the voting system via network, we can design our system to transmit data without network. Another example is to limit voter ton input particular data, so that we can prevent the command injection from running.

RECRUITMENTS

Recruitments:

- 1. Registration of the voter is done by ELECTION AUTHORITY.
- 2. ELECTION AUTHORITY can change the information any time if required.
- 3. Registration of the Voter depends upon the information filled by the user manually to the ELECTION AUTHORITY.
- 4. Voter is given a unique Login ID and PASSWORD.
- 5. In the DATABASE information of every voter is stored.
- 6. Database shows the information of ever user.

PROBLEMS WITH THE EXISTING VOTER RESISTRATION SYSTEM

Problems:

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

- > Expensive and Time consuming.
- > Too much paper work.
- > Errors during data entry.
- > Loss of registration forms.
- > Short time provided to view the voter register.

SOFTWARE & HARDWARE REQUIRMENT

SOFTWARE REQUIRMENTS:

➤ A machine with Windows 7/8/10(32/64 bit)

> Development Language: HTML, CSS, JAVASCRIPT, PHP

> Database: MySQL

> Framework: Bootstrap 4.0

HARDWARE REQUIRMENTS:

> CPU: Intel Pentium (Dual Core)

RAM: 2GB or More

➤ Hard-Disk: 500GB or More

MODULE-DESCRIPTION

ADMIN:

- Add Elections
- Edit Elections
- Add Candidates
- Candidates Details

VOTER/USER:

- Login And Registration
- List Elections
- Vote
- Show Stats

ADVANTAGES & DISADVANTAGE

ADVANTAGES:

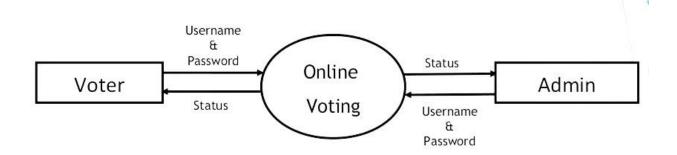
- Fast and easy way to conducting Election.
- Voters can view background of each Candidate
- Admin can verify the details of Candidate.
- Result will be out after 2 Hrs of Election.

DISADVANTAGES:

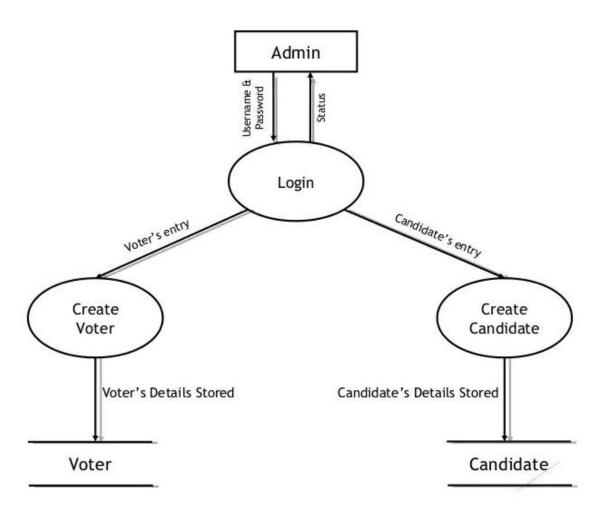
- Need a mobile or Laptop/Computer.
- Active Internet Connection.
- Knowledge of working on Laptop/Computer.

DATA FLOW DIAGRAM

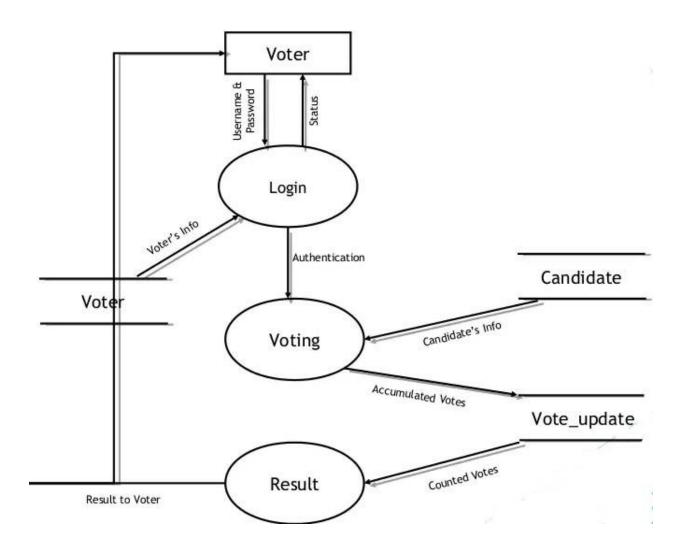
Context Diagram:



First Level DFD: For Admin:

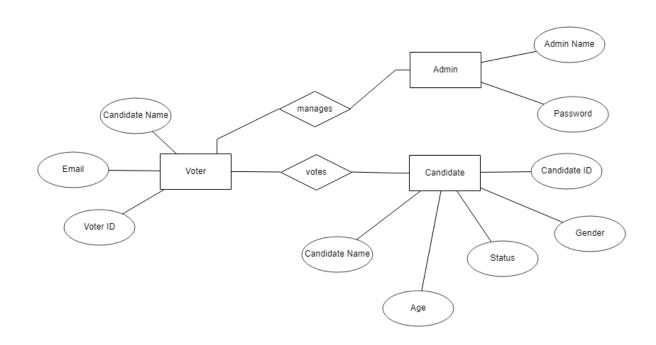


First Level DFD: For Voter:



ENTITY RELATIONSHIP DIAGRAM

ER Diagram:



DATABASE TABLES

Database Tables:

This project uses many tables:

- Admin
- Voter
- Candidate

ADMIN TABLE:

Field Name	Data Type	Description
Username	Varchar	Login Id for Admin
Password	Varchar	Password For Login

VOTER TABLE:

Field Name	Data Type	Description
Name	Varchar	Name of the voter
Email ID	Varchar	Register email of the voter
Voter ID	Integer	Login Id for voter

CANDIDATE TABLE:

Field Name	Data Type	Description
Symbol	Varchar	Party Symbol
Name	Varchar	Name of the voter
Sex	Varchar	Sex of voter
Age	Integer	Age of voter
City	Varchar	City of voter
Count	Integer	Count the no of votes

TESTING

Testing:

- <u>Unit Testing</u>: All the modules are being separately tested
- System Testing
 - \checkmark α testing
 - \checkmark β testing

SNAPSHOT

HOME PAGE:



FEATURES:







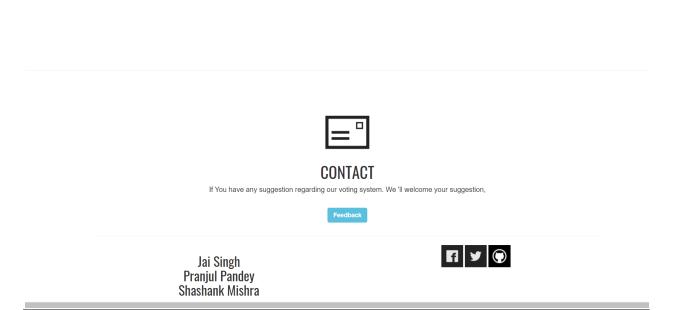


Nomination

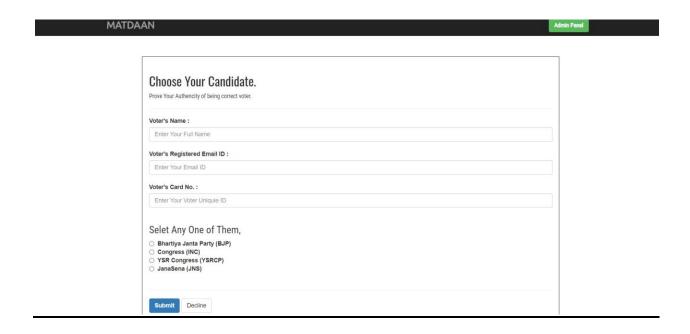
Statitics

Admin's Control Panel allows you to manage the list of filled nomination. Shows You the Graphical Data Representation of your votes. And, it is in Admin's Control Panel.

CONTACT/FEEDBACK:



CAST YOUR VOTE:



CANDIDATE/NOMINESS NAME:

MATDAAN



Narendra Modi Modi, a leader of the Bharatiya Janata Party, was the Chief Minister of Gujarat from 2001 to 2014 and is the Member of Parliament from Varanasi.

- Born: September 17, 1950 (age 64), Vadnagar
 Spouse: Jashodaben Modi
 Education: Gujarat University (1983), University of Delhi (1978)
 Parents: Heeraben Modi, Damodardas Mulchand Modi
 Awards: CNN-IBN Indian of the Year



Rahul Gandhi Rahul Gandhi; is the Vice-President of the Indian National Congress party and the Chairperson of the Indian Youth Congress and the National Students Union of India.

- Born: June 19, 1970 (age 44), New Delhi Full name: Rahul Gandhi Parenes Sonia Gandhi, Rajiv Gandhi Siblings: Priyanka Gandhi Education: Trinity College, Cambridge (1994–1995) Awards: CKN-HBN Indian of the Year in Politics



YS Jagan Mohan Reddy Ys Jagan Mohan Reddy is an Telugu politician, who is the Second and current CM of Andhra Pradesh.

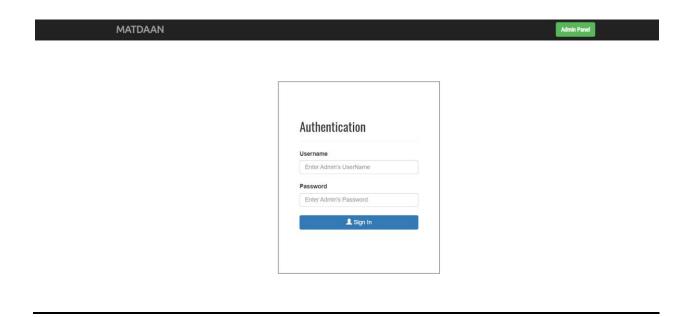
• Born: August 16, 1968 (age



Pavan Kalyan Pavan Kalyan is an Indian politician.

- Born: Sept 22, 1965 (age 50),
 Full name: Pavan Kalyan

ADMIN PANEL:



FUTURE ENHANCEMENTS

Future Enhancements:

The Online Voting System platform can be made more secure by using the following methods:

- > Email Conformation.
- > Fingerprinting.
- Cornea Detection.

CONCLUSION

Conclusion:

The online voting management system will manage voters 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 voters vote to every party and it count total no. of votes of every party. There is a DATABASE which is maintained by the Election authority in which all the names of voter with completely information is stored.

In this user who is above 18 years register his/her information on the database and when he/she want to vote he/she to login by his id and password and can vote to any party Only single time. 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 very less time consuming. It is very easy to debug.

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