ONLINE VOTING SYSTEM

A JAVA WEB PROJECT

Submitted by

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JAVA PROGRAMMING

Submitted to

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Contents

INTRODUCTION

The Aadhaar-Based Online Voting System aims to improve the security and efficiency of Indian elections by utilizing Aadhaar authentication for voter verification. This system ensures the validation of high-security passwords before votes are recorded in the Election Commission's database, providing an added layer of protection against fraud. A key feature is the ability for voters to confirm that their votes have been accurately cast for the intended candidate or party, enhancing transparency. Additionally, the system enables voting from any location, even outside the voter's designated constituency, offering increased accessibility and convenience. The vote tallying process is fully automated, significantly reducing the time required to announce election results. The system consists of five primary modules: Authentication and Security, Admin, Candidates, Users, and Reports. The Authentication and Security module handles user registration and approval, ensuring secure voter access. The Admin module is responsible for managing users, political parties, election scheduling, and announcing results. The Candidates module allows candidates to register and view other candidates, while the Users module facilitates voter registration, voting, and tracking election outcomes. This comprehensive approach aims to revolutionize the electoral process, ensuring greater security, efficiency, and accessibility.

PROBLEM STATEMENT

The Existing system for Civil Registry maintains the relevant data across the files and ledgers. The concerned authorities must update the data regarding to the government records and Register certificates and send the same to citizens. The authorities must collect the data from various departments and register certificates. The system lacks coordination among the various departments.

The citizens have to apply for the required Government records at the respective offices by filling the appropriate forms. Manual checking for the attested identify proofs is required which consumes much effort and time as different records are handled by different authorities. No particular notification will be provided before the rejection of the form for any cause or reason. Presently all the registrations are done manually.

If a person wants to make registrations like birth, death, marriage etc., he should directly contact the corresponding office. The main disadvantage is that there will be lot of difficulties for the citizens. So, all these procedures will be a time consuming one. The applications from the users of all are maintained at the single authority where all the verifications will be done. This increase the manual work as the authorities must collect the data from various departments and agencies. Due to this there arise chances of clubbing and misplacement of data which results in mistakes in the certificate issued.

PROJECT OVERVIEW

Aadhar based online voting system is developed for Indian elections. The proposed model has a greater security in the sense that voter high security password is confirmed before the vote is accepted in the main database of Election Commission of India. The additional feature of the model is that the voter can confirm if his/her vote has gone to correct candidate/party. In this model a person can also vote from outside of his/her allotted constituency or from his/her preferred location. In the proposed system the tallying of the votes will be done automatically, thus saving a huge time and enabling Election Commissioner of India to announce the result within a very short period. The Modules involved are Authentication and Security Module, Admin, Candidates and Users.

Authentication and Security Module

User/ Political parties should register should register here for getting login permissions. Admin will verify the details and accept or reject the user/Political parties. Once admin accept the user/political party registration then only they can login.

Admin Module

Admin can login to the system by default user name and password then he can change the login credentials. Admin can accept or reject the users and political parties. Admin can view the list of parties and users. Admin has to announce the election dates and results. Admin has to maintain previous records and generate reports based on previous records.

Candidates Module

Candidates have to enroll them self with party name, name, age, gender etc. Candidates can view other registered candidates. Candidates can login after admin acceptance only.

User Module

Users have to enroll them self with name, mobile, email, address, Aadhar number etc. Once admin accepts the registration users can login into system and they can view list of parties. They can vote. Users can change the passwords and update the profile. They can view election results.

USECASES

VOTER USE CASES
A voter registers in the system to create an account with their credentials and personal information. After registration, they can login to access the voting platform using their username and password. For security purposes, voters can change their password periodically or when needed. Voters view candidates to browse through the list of all eligible candidates participating in the election, including their information and platforms. The primary function allows voters to cast their vote for their preferred candidate, typically with confirmation steps to prevent errors. Once voting concludes, voters can view results to see the election outcome. When finished using the system, voters logout to secure their session and account.

CANDIDATE USE CASES
A candidate nominates themselves by submitting their information, qualifications, and platform to be considered in the election. They login to access their candidate portal using their credentials. For security, candidates can change password when needed. Candidates can view status to check their nomination approval, campaign standing, or other relevant information throughout the election process. After the election concludes, candidates view result to see the final outcome. When finished using the system, candidates logout to terminate their session securely.

ADMIN USE CASES
An administrator logs into the system using secure credentials to access the administrative control panel. They can view voters to monitor the complete list of registered voters and their information. Admins view candidates to access all nomination details and candidate information. When necessary, they can remove voters who have duplicate accounts, are ineligible, or have violated system policies. Similarly, they can disqualify candidates who don't meet requirements or have violated election rules. Admins view status to monitor the overall election process, participation rates, and system performance. At the conclusion of voting, admins declare result to officially announce and publish the election outcome. When administrative tasks are complete, they logout to secure the administrative portal.
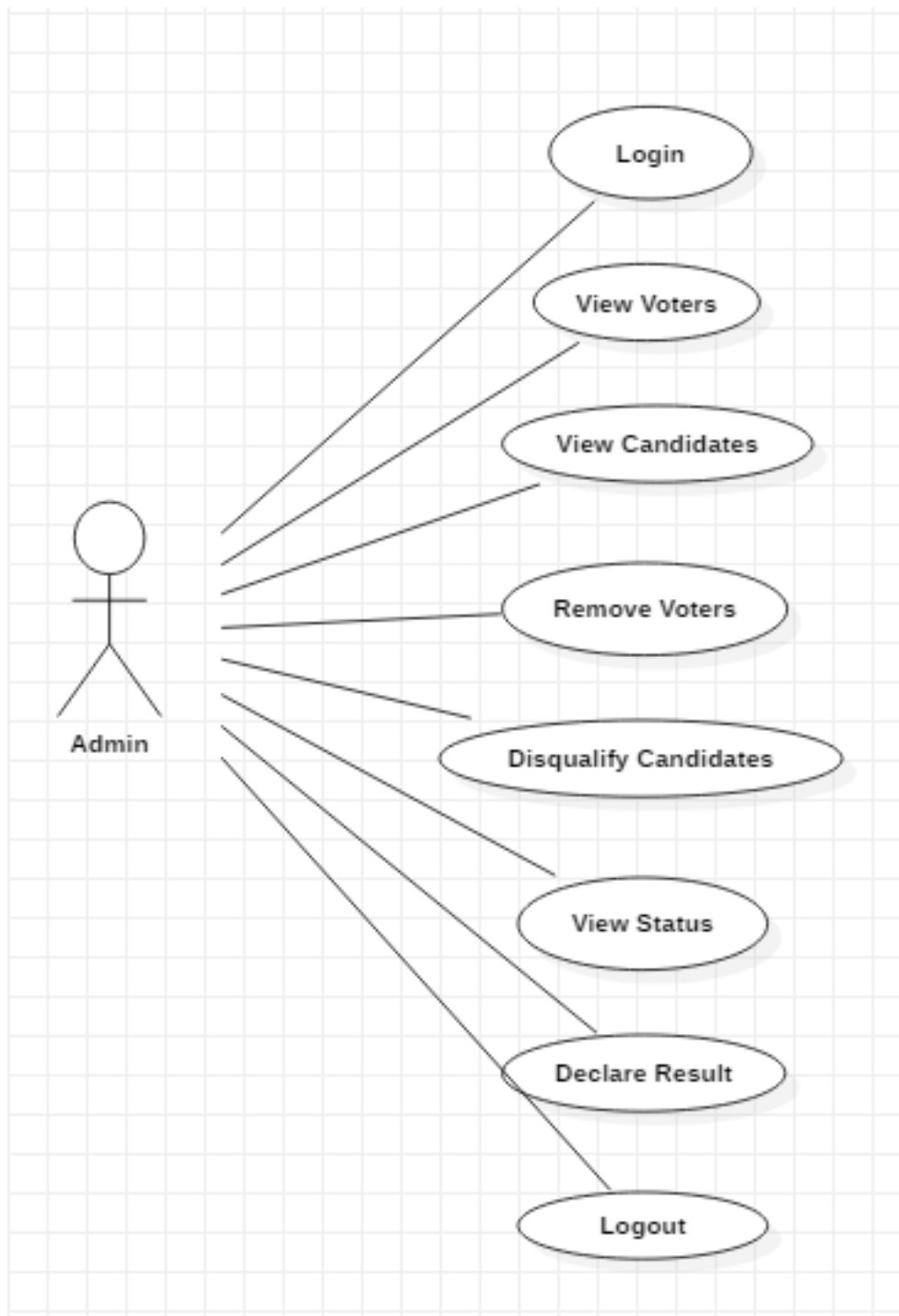
USECASE DIAGRAM OF USER:
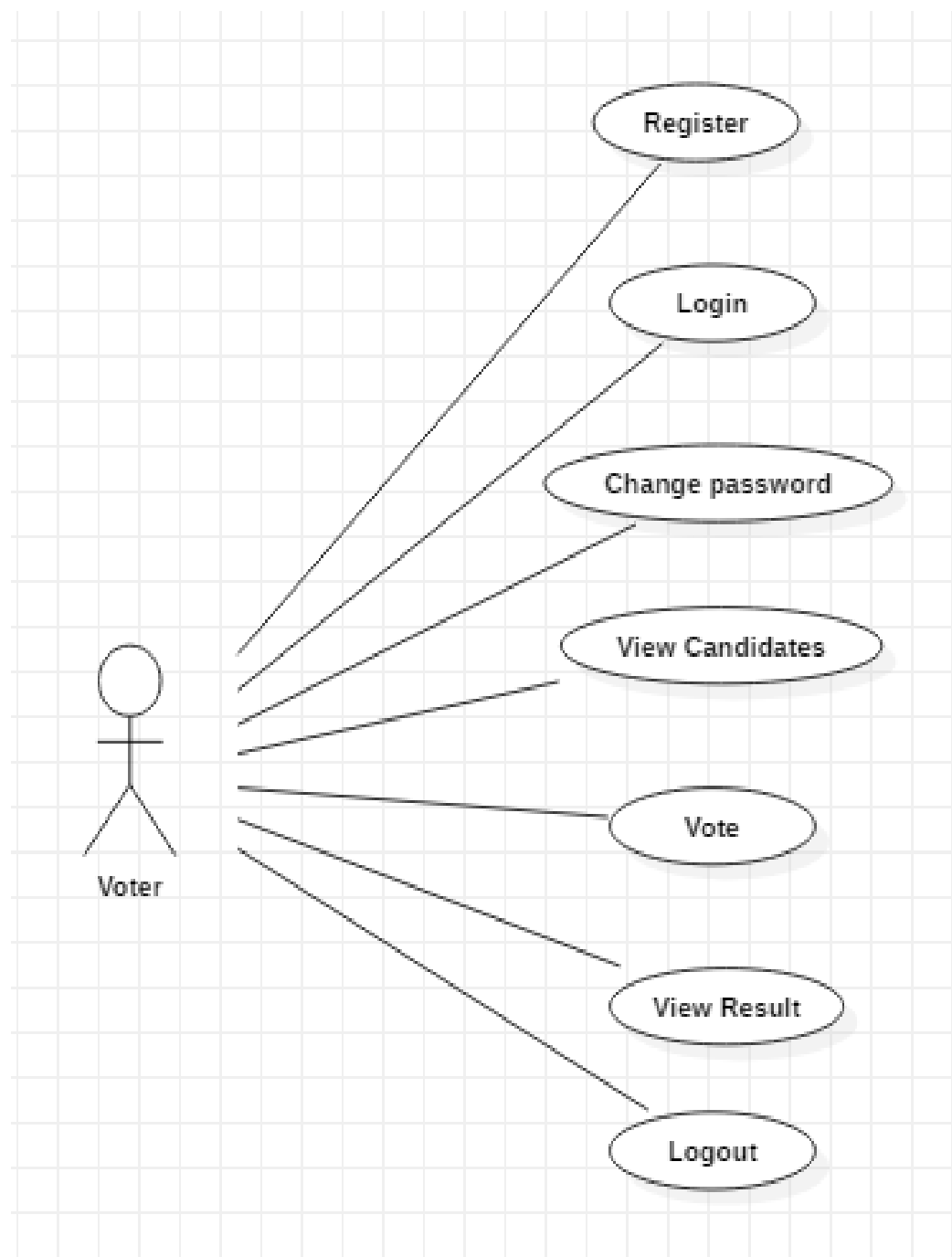
USECASE FOR CANDIDATE:
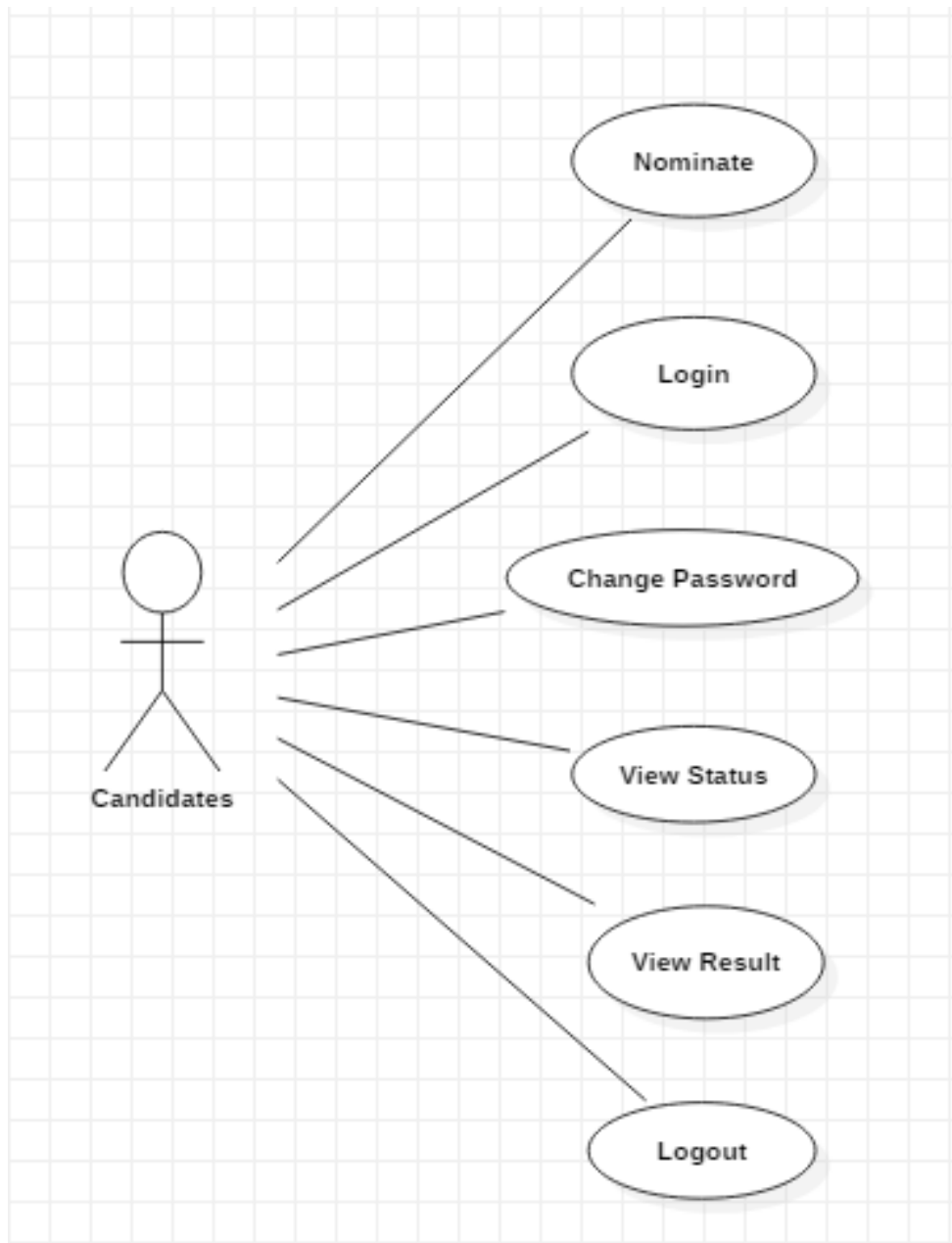
USECASE FOR ADMIN:

CODE SNIPPETS

Index.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
    <head><title>ONLINE VOTING SYSTEM</title></head>
<frameset rows="15%,10%,*" border="0"  framespacing=0 >
    <frame name="head" src="top.jsp"  scrolling="no">
    <frame      name="head"      src="online_voting_tmenu.html"
scrolling="no">
    <frameset cols="84.5%,*" >
          <frame name="main" src="home.jsp" >
          <frame   name="left"   src="online_voting_rmenu.html"
scrolling="no">

    </frameset>
 </frameset>
 </html>
```

Rest of the code can be viewed using the given link:

KrishnenduMR/Online-Voting-System

OUTPUTS

HOME PAGE:

USER HOME PAGE:

CANDIDATE HOME PAGE:

ADMIN HOME PAGE:

भारत निर्वाचन आयोग
Election Commission of India

eVote
Online voting system

| Home | Register To Vote | Candidate Nomination | Election Result | Login | About Us | Contact Us |

Online Voting

Instructions For Voters
Instructions For Candidates
Important Dates

View Enrolled Voters — Voters List
View Candidates Nominated — Candidates List
Remove Voters from List — Delete Voters
Disqualify Candidates — Delete Candidates
Election Status — Election Status

CANDIDATES LIST:

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Available Candidates For Voting

Instructions For Voters
Instructions For Candidates
Important Dates

Name	Age	Gender	Party
Ramesh	56	male	INC
Shiva	65	male	BJP
Padmavathi	45	female	TRS
Srinivas	52	male	
David	41	male	CPM
Fathima	65	female	BSP
nota	nota	nota	nota

VOTING: PAGE

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Election

Instructions For Voters
Instructions For Candidates
Important Dates

Enter Your User ID: [_____]
Vote For A Candidate From Below: [_____ ▾]

submit   cancel

VOTE ACKNOWLEDGEMENT PAGE:

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Your vote has been casted succesfully...

Go To Home

Instructions For Voters

Instructions For Candidates

Important Dates

VOTING STATUS PAGE:

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Total Votes Casted=16

Candidate Name	Votes Gained
Fathima	1
nota	1
Shiva	1
Ramesh	3
David	3
Padmavathi	7

Instructions For Voters

Instructions For Candidates

Important Dates

FINAL RESULTS:

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Total Votes Casted=16

Candidate Name	Votes Gained
David	3
Fathima	1
nota	1
Padmavathi	7
Ramesh	3
Shiva	1

Maximum Number Of Votes are gained by Padmavathi

Winner of Election is "*Padmavathi*"

Instructions For Voters

Instructions For Candidates

Important Dates

CHANGE PASSWORD:

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Online Voting

USER ID	
OLD PASSWORD	
New Password	
Confirm Password	

Save   cancel

Instructions For Voters
Instructions For Candidates
Important Dates

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Election Commission of India

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Online Voting

Candidate ID	
OLD PASSWORD	
New Password	
Confirm Password	

Save   cancel

Instructions For Voters
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DISQUALIFY CANDIDATES:

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Election Commission of India

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| Home | Register To Vote | Candidate Nomination | Election Result | Login | About Us | Contact Us |

Delete Candidates

Enter the Candidate Id Of the Candidate to be removed

submit   cancel

Instructions For Voters
Instructions For Candidates
Important Dates

REMOVE VOTER:

भारत निर्वाचन आयोग
Election Commission of India

eVote Online voting system

| Home | Register To Vote | Candidate Nomination | Election Result | Login | About Us | Contact Us |

Delete Voters

Enter the User Id Of the Voter to be removed

submit   cancel

Instructions For Voters
Instructions For Candidates
Important Dates

CONCLUSION

Online Voting Systems have many advantages over the traditional voting system. Some of these advantages are less cost, faster generation results, easy accessibility, accuracy, and low risk of human and mechanical errors. It is very difficult to develop online voting system which can allow security and privacy on the high level. Future development focused to design a system which can be easy to use and will provide security and privacy of votes on acceptable level by proper authentication and processing section. It is easy to use and it is less time consuming. It is very easy to debug.