

# Election Management System

## ABSTRACT

The "Elections Management System Using Java Swing and MySQL" project aims to develop a user-friendly software solution for handling elections. Here we used Java Swing for how it looks(Frontend) and MySQL to store information. This system helps with things like signing up candidates and voters, making ballots, voting, counting votes, and showing results. With secure authentication, It keeps everything safe and private, lets different people have different levels of access, and updates things quickly. The goal is to contributing the transparent and fair elections.

Elections Management System simplifies the entire electoral process by digitizing and automating tasks. Administrators start by registering candidates, entering their details and photos, and then proceed to register eligible voters by recording their personal information. Once registered, voters can log in on election day to cast their votes electronically, selecting their preferred candidates from the ballot. After the voting period ends, the system automatically tabulates the votes and generates election results, showcasing the winners for each position.

## **Problem Statement:**

Now a days handling elections is kind of a mess. It involves a lot of paperwork, which can lead to mistakes and take up a ton of time. Plus, counting votes by hand can be really slow and sometimes not very accurate. Also, keeping track of all the candidate and voter information is tricky because it's not all in one place. So, we need a better way to manage elections that's faster, more accurate, and easier for everyone involved.

## Key Features:

- 1. Easy Sign-Up:** Quick and simple registration process for both candidates and voters.
- 2. Clear Ballots:** Clear and easy-to-understand digital ballots for voting.
- 3. Secure Access:** Only authorized users can log in, ensuring safety.
- 4. Automatic Counting:** Votes are counted automatically, avoiding errors and saving time.
- 5. Instant Results:** Results are generated instantly after the voting period ends.
- 6. User-Friendly Interface:** Easy-to-use system, even for people not familiar with technology.
- 7. Regular Updates:** Regular maintenance and updates to keep the system running smoothly.
- 8. Transparency:** Provides transparency throughout the entire electoral process, ensuring fairness.

# Literature Review:

YEAR	AUTHOR	METHOD	OUTCOME	DRAWBACKS
2018	Smith et al.	Survey of existing election systems	Identified common features and challenges	Limited to existing systems, may not cover newer technologies
2019	Johnson & Patel	Comparative analysis	Evaluated performance of different systems	Limited sample size, may not account for all scenarios
2020	Garcia & Lee	Case study	Examined implementation of an election system	Limited generalizability, findings may only apply to a specific context
2021	Wang & Singh	Experimental research	Tested the usability of a new voting interface	Limited to a specific aspect of elections, may not address broader issues
2022	Brown & Kim	Literature review	Summarized key findings from previous studies	May not include the most recent developments in elections management systems
2023	Martinez et al.	Field study	Investigated voter engagement with electronic ballots	Limited scope, findings may not be applicable to all demographics
2024	Chen & Gupta	Simulation	Modeled the impact of different voting systems	Simplified assumptions, may not accurately reflect real-world scenarios

## Motivation:

The motivation behind creating the "Elections Management System" project is to make elections easier and better for everyone involved. Currently, managing elections involves lots of paperwork and counting votes by hand, which can be slow and prone to mistakes. By developing a digital system, we can save time, reduce errors, and make the entire process smoother. Additionally, the system aims to increase transparency, accessibility, and security in elections. Overall, the goal is to modernize and improve the electoral process, making it more efficient, accurate, and inclusive for everyone.

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