



# Implementation Of College Online Voting System

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**Abstract:** College Online Voting System is a web-predicated system, that facilitates the running of choices and checks online. The system has a centralized database to keep records of all the pickers, contenders, and final results. Stoners are inclusively interacting with the system. All user commerce is performed ever through the user's cybersurfed. Before advancing user should fill registration

Form and give their details, and those details are compared with details in the council database, if data are matched also stoner request form is accepted and handed by username and word, different entry is going to be cancelled by the director. stoners using their username and word log in into this system and vote on that date in the specified timeslot. In this, the system contains two positions of the user, one is the director position and another bone is the picker. The introductory end of the system is to avoid the pupil conflicts that occur during offline advancing. This system of ours is largely secured, and it has a simple and interactive user interface. The system generated a more accessible picker and candidate registration interface, an effective voting interface, vote storage and count plus immediate result florilegium, etc. Several- advancing systems have been developed for varying issues. This system still was specifically developed for use in tertiary institutions and has security capabilities built into its design. It can be concluded that the online voting system incorporates all the features of a regular voting system but offers a necessary system of conducting choices that is less stressful, easier, and faster through the use of the network. The online voting system calculates the results hastily, reduces time spent making long queues at the polling stations during voting, reduces mortal sweat, and also enables pickers to cast their votes from any part of the globe. Online voting technology intends to speed up the counting of ballots, reduce the cost of paying staff to count votes manually, and give advanced vacuity for disabled pickers. The system can manage the information data truly efficiently. The proposed system is more reliable, hastily, accurate, and easy to handle compared to being manual voting system. It helps to computerize everything and reduce crimes as compared to the usual manual voting system.

**Index Terms** – Online Voting System, College Election System, Web-Based Voting Platform, Centralized Database, User Registration, Voter Authentication, Secure Voting System.

## I. INTRODUCTION

The College Online Voting System is a digital platform designed to facilitate secure, efficient, and transparent elections within a college environment. By replacing traditional paper-based voting methods, this system streamlines the election process, making it more accessible to students and staff. The project includes essential features such as user authentication to ensure secure access, candidate registration and management for clear representation, and a robust voting mechanism that allows each registered user to cast a single vote. Automated vote counting enhances accuracy and provides real-time results, while a responsive user interface ensures a seamless experience across various devices. Built using a combination of web technologies like HTML, CSS, JavaScript, and a backend powered by PHP or Python with a

database such as MySQL, this system demonstrates practical expertise in web development and secure database management. It offers a modern, error-free alternative to traditional voting systems, fostering greater participation and trust in college elections.

## II. OBJECTIVE

The main end of the study is to assess the current election system and suggest and develop the College Online Voting System in such a way that Voter may cast votes in a more accessible way, by using available coffers which could grease the choosers during choices. The most pivotal factor for a system like College Online Voting System to be successful is to parade a Voting Protocol that can help openings for fraud or for immolating the name's sequestration. The Voting Protocol that will be designed and enforced for the College Online voting System will combine the advantages of being protocols and ways, while at the same time it'll aim at barring utmost of the linked scarcities and problems.

The affiliated attributes that the College Online Voting System will completely support, and against which it'll be considerably tested and validated, are listed below. These attributes can be also considered, according to the literature, as a set of criteria for a " good" online voting system that can fluently enjoy the trust and confidence of the choosers and process organizers coming up with an automated council online voting system that's largely accessible, secure, traffic-free and a fair election voting system. icing that the choosers aren't demanded to go to a physical polling station.

Also icing the idea of demolishing the idea of standing by long ranges to bounce. Promoting the idea of minimizing crimes of vote counting also enlightens the moto of a fair voting system. Saving time and energy. Blacking the old council voting system. Reducing expenditure on polling staff and on the coffers for the offline advancing system. Can give advanced availability for impaired choosers. publish the report (election results) To break the problem of publishing election results with overvotes or under votes. produce the time limit of Voting Day, which means no vote can be submitted after the time of advancing finish.

## III. PROPOSED SYSTEM

We propose a web operation designed specifically for managing council choices. This online voting system will efficiently handle chooser and seeker details, furnishing an impeccable experience for both. The vital features include secure chooser login and seeker information operation. The system ensures that data is organized and managed efficiently, offering a significant enhancement over traditional homemade voting styles. It's further dependable, hastily, accurate, and stoner-friendly. By computerizing the voting process, the system reduces crimes, saves time, and enhances the overall experience for scholars and election directors likewise. still, figures of ways are present to convert the data in enciphered format to help from manipulation while transferring to the network. One disbenefit can be mooted also that after the correct data have been stored in the database trust and security are demanded at substantial positions.

A centralized storehouse is inconvenient if the data is esteemed because unauthorized access and attacks by hackers will challenge the system in terms of responsibility. It can be easy for selectors to feel disconnected from the process of traditional voting. But with online voting, they can see the results in real time, making them feel more engaged in the process. The individual selectors and their votes are submitted in the database which is queried to find out which of the applicants for the given post has got the maximum number of votes. Choices always bear a high position of security in order to cover picker insulation and the integrity of final results. Meeting the security conditions of choices means that online voting technology must overcome walls that don't apply to other online- predicated processes.

For illustration, if you were trying to complete any number of online banking processes, you would want the bank to corroborate your identity so that only you can pierce your account. You would also want the bank to associate your identity with your online banking exertion so that you can be assured that only you are making changes to your account. This is generally done by vindicating your identity through a username and word and also tracking your exertion formerly you are logged in. When advancing online, the online voting system also needs to corroborate your identity to ensure that you're eligible to brio in a given election. still, unlike in online banking, the system also needs to guarantee your obscurity by separating your identity

from your online exertion so that no one can link your ballot, which contains your voting choices, to your identity. Having to both corroborate your identity while also breaking ties between your identity and the ballot you cast is a unique challenge to online voting. Challenges like this can be overcome with sophisticated cybersecurity measures like encryption and digital signatures. In this case, a picker's restated digital ballot would be signed with their digital hand so that the voting garçon can corroborate that the ballot was transferred by an eligible picker. Once the picker's eligibility is determined, the digital hand can be separated from the ballot before it's scuffled and decrypted, revealing its contents while conserving picker insulation.

#### IV. METHODOLOGY

The software is developed for the convenient use of student voters. It can be used easily for college elections. Students just have to register, login and vote his/her favorite candidate.

Online college voting system contains:

- Registration** - In this module the selectors have to do the enrolment for performing the voting process online. Once the enrolment is completed, the admin approves the selectors for the voting process. So, the stoner can log in and bounce for the favourite seeker. The stoner enrolment is performed for security purposes. Without enrolment, the stoner can't perform the voting process.
- Administration** -It has the authority to store the stoner information, furnish enrolment, and perform the adding, electing, and streamlining of the stoner and election seeker information. The admin grants the authorization for the selectors to bounce. Admin gives the date for the voting process, so the members have to perform the voting process within the particular date specified. eventually, the director can view the winning seeker list.
- Voting** -Choosers have the provision to view the list of contenders who are nominated for the election. So, they can bounce for their favourite seeker online. The voting process can be done only formerly. While advancing verification law has generated and transferred to the chooser correspondence id. The chooser has to enter a verification law to complete the voting process.
- Counting** - In this module counting is performed. The vote acquired by each seeker will be displayed. Total number of votes for each seeker is calculated and displayed. It helps to avoid duplication. The seeker with a maximum vote is awarded as the winning seeker. All these processes are done in a fast and effective manner.
- Reports** - This is the last module in this design. By this module, the admin gets the final report of the voting. The seeker with advanced votes is displayed as the winning seeker. The details regarding the voting process will be stored in the database for future reference.

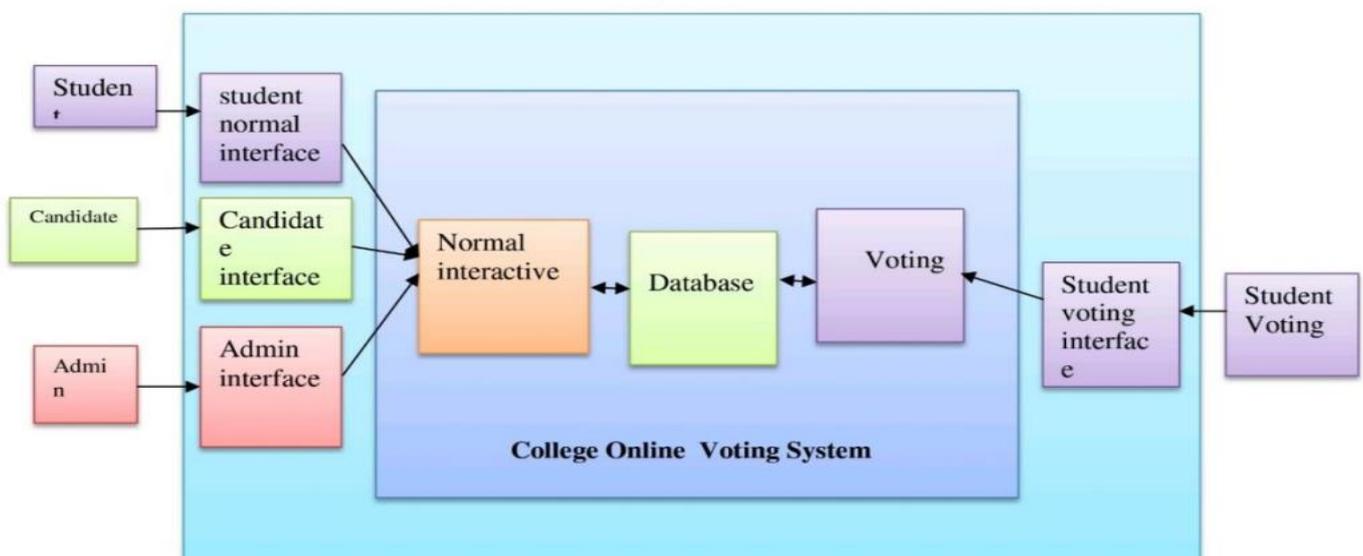


Figure 1: Methodology of college voting system

## V. IMPLEMENTATION

### 1. Information Required by the System:

**Voter Details:** Username, email, and secure password.

**Candidate Details:** Voter ID, course, faculty, year of study, and candidate photo.

**Voting Data:** Voter details, candidate of choice, and time of voting.

### 2. Users and Access:

**Voters:** Secure login using username and password for voting.

**Admin:** Access to voter registrations, candidate details, and results.

### 3. User Objectives:

Convenient voting via the Internet.

Secure voting system to maintain privacy and data integrity.

### 4. Data Collection Methods:

**Interviews:** Conducted with students and management to gather requirements.

**Documentary Sources:** Reviewed articles and reports on online voting systems for secondary data.

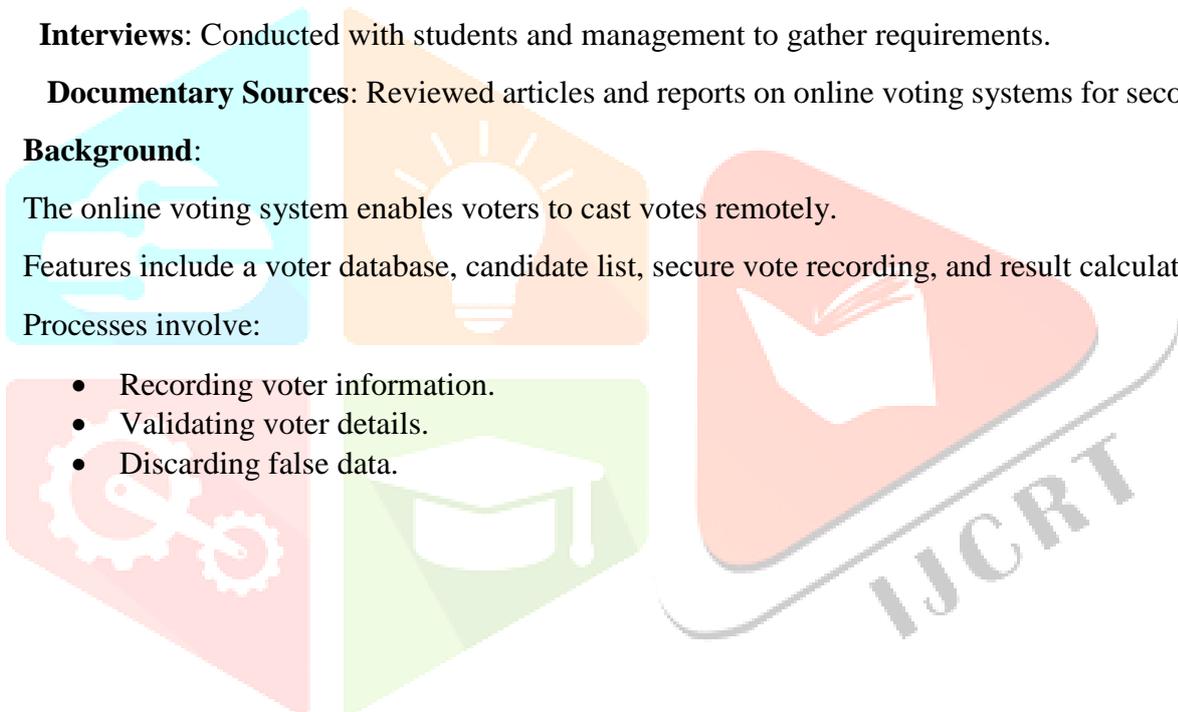
### 5. Background:

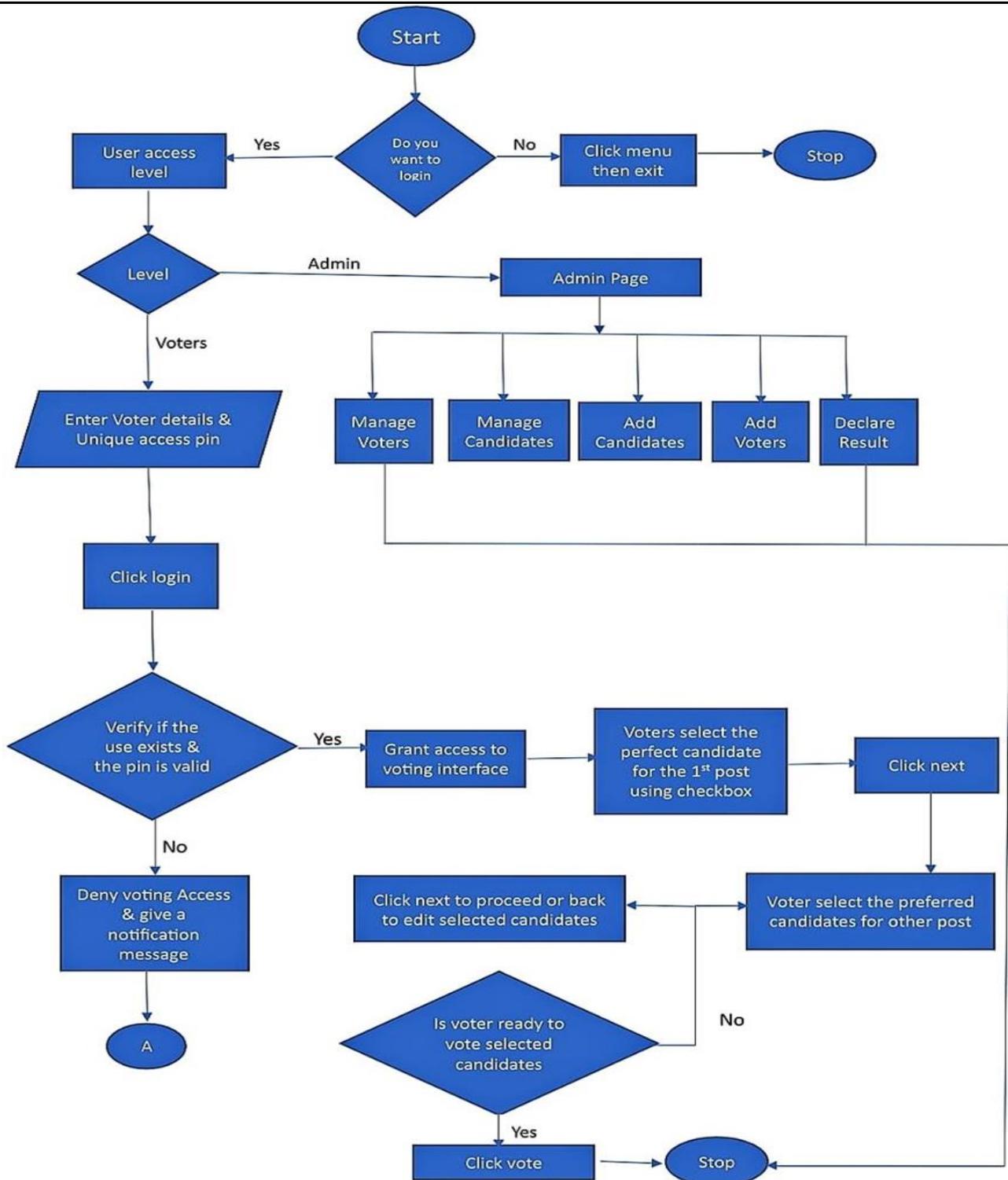
The online voting system enables voters to cast votes remotely.

Features include a voter database, candidate list, secure vote recording, and result calculation.

Processes involve:

- Recording voter information.
- Validating voter details.
- Discarding false data.





**Figure 2: Flowchart of College Voting system implementation**

**VI. RESULTS**

This project aims to design and implement a college online voting system. The college online voting system successfully automates the voting process in an educational institution, ensuring efficiency, transparency, and accessibility. The student log in with unique usernames and passwords, ensuring only eligible users can vote. The college online voting system project successfully modernizes the voting process within an educational institution by providing a secure, efficient, and user-friendly platform. The system allows students to cast their votes conveniently from any location using the internet, eliminating the need for physical polling stations and reducing logistical challenges. By implementing robust authentication mechanisms, such as unique usernames and passwords, and encrypting voter data, the system ensures a secure voting process while maintaining voter privacy. It prevents duplicate voting and automates vote counting, providing instant and accurate results. Administrators can efficiently manage voter and candidate information, monitor the election process, and

access detailed results through an intuitive dashboard. The project significantly reduces the time, cost, and errors associated with traditional voting methods, while also enhancing accessibility and encouraging greater participation. With real-time results and a transparent voting process, the system fosters trust and reliability among users, demonstrating how technology can streamline traditional operations effectively.



Figure 3: Student Login Page

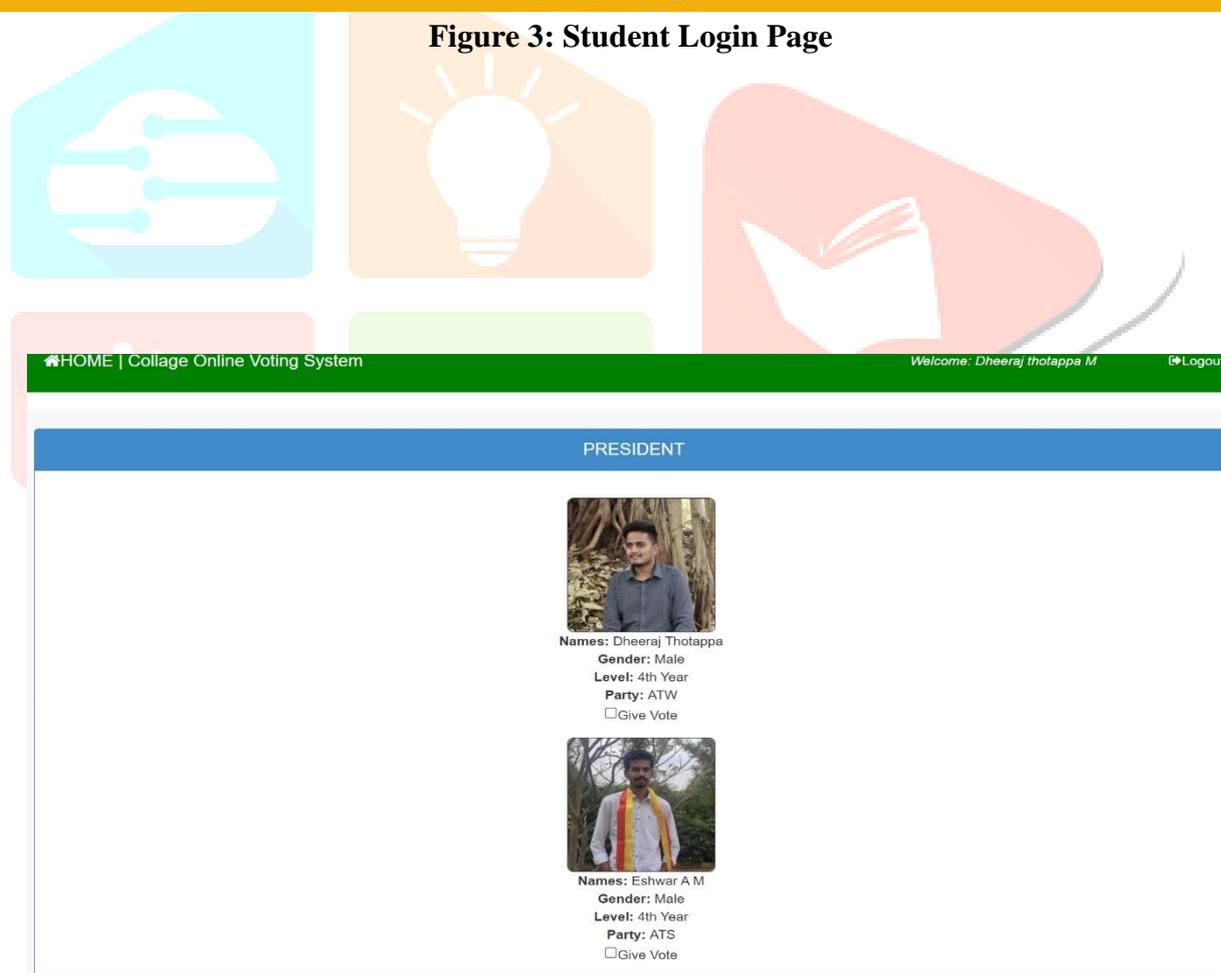


Figure 4: Voting Page

| Candidate for President | Image | Total |
|-------------------------|-------|-------|
| Dheeraj Thotappa M      |       | 25    |
| ESHWAR A M              |       | 9     |

**Figure 5: Election result page**

## VII. CONCLUSION

The conclusion of a college online voting system would depend on various factors, including the specific goals and requirements of the system, the technology used, and the context in which it is implemented. However, here are some possible general conclusions: Increased convenience and accessibility: An online voting system would allow students to vote from anywhere and at any time, without having to physically go to a polling station. This would make it easier for more students to participate in the voting process. Reduced costs and administrative burden: An online voting system would potentially reduce the costs associated with organizing and conducting an election, as well as the administrative burden of handling paper ballots and verifying votes. Potential security risks: Online voting systems can be vulnerable to various types of security threats, such as hacking, tampering, and fraud. Ensuring the security and integrity of the voting process would require robust cybersecurity measures, such as encryption, authentication, and auditing. Overall, an online voting system for a college can offer many potential benefits, but it is important to consider the specific goals and requirements of the system carefully and to take steps to address any potential security or access.

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