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ONLINE VOTING SYSTEM

B. SRIRAM REDDY, D. PRATHAP, B. KARTHIK
Mrs. J. NEHA (Guide)
Sreenidhi Institute of Science and Technology
Hyderabad

ABSTRACT:

Online Voting system can be used by any voter who had registered before and can vote from any corner of the world by just accessing to internet. The system is an online application that can be accessed throughout the Election Commission and voters as well with proper login provided, which will give them better service. This system can be used for voting purpose and the admin can check the results and declare the winner for that particular constituency. Overall description consists of background of the entire specific requirement. It also gives explanation about actor and function which is used. It gives explanation about architecture diagram and it also gives what we are assumed and dependencies. It also support specific requirement and also it support functional requirement, supplementary requirement other than actor which is used. It also gives index and appendices. It also gives explanation about any doubt and queries. Once a voter votes his/her candidate he can give the feedback of the system and his experience of voting through online.

This project can be used by any one and can be helpful by the people who can't stand for hours in that long queues and they no need to step out of their house to vote just one click and availed their right.

INTRODUCTION

The Online Voting System is a web application developed for the voters. It can be accessed throughout the World once we deploy it in internet. Any voter who is eligible can access the search Engine to cast their vote. It provides a good interface between voters and the system to cast their vote from any part of the world. The voters first have to register themselves with all their details.

This system can be used by any voter who had registered before and can vote from any corner of the world by just accessing to internet. The system is an online application that can be accessed throughout the Election Commission and voters as well with proper login provided, which will give them better service . This system can be used for voting purpose and the admin can check the results and declare the winner for that particular constituency. Overall description consists of background of the entire specific requirement. It also gives explanation about actor and function which is used. It gives explanation about architecture diagram and it also gives what we are assumed and dependencies. It also support specific requirement and also it support functional requirement, supplementary requirement other than actor which is used. It also gives index and appendices. It also gives explanation about any doubt and queries. Once a voter votes his/her candidate he can give the feedback of the system and his experience of voting through online. This project can be used by any one and can be helpful by the people who can't stand for hours in that long queues and they no need to step out of their house to vote just one click and availed their right.

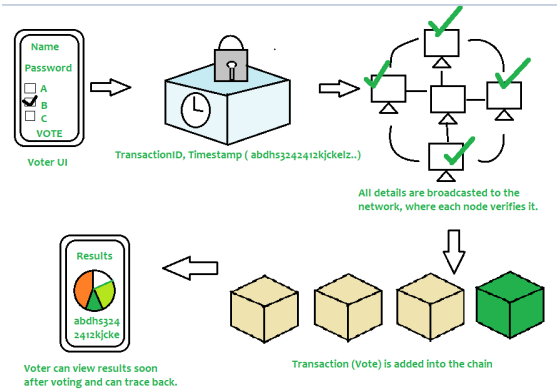

Fig 1: online voting system outline

The platform consists of three pages which are home page, registration page, forum page, contact page, and Message page.

Home page: Prompt the user for credentials and provide only the most basic information. If the user has successfully registered and provided the correct information, they will be granted access to the application. Otherwise permission will be denied. If not registered, new users have the opportunity to create their own.

Registration page: Users are required to provide certain personal information on the Site in order to register for the Application and access and use the Program.

Dashboard page: The user will be able to see various information like political party groups and the count of votes a particular party got.

WEB TECHNOLOGIES

Most of us know that computers don't interact like humans do. Instead, computers need code or instructions. A computer can process any data thanks to her binary code and commands. Hundreds of billions of zeros and ones are processed every second to get the information you need. So what does this have to do with being able to upload your latest photos to the web? The World Wide Web is the way computers connect through mark-up language and multimedia applications.

Over the last few decades, the Internet has evolved from a handful of tagged websites to perform very specific tasks without disrupting the entire network.

```
<?php require("header.php");

?>
<script type="text/javascript">

document.getElementById("auhome").cl
assName="active";
</script>
```

Fig2: sample markup language code

TECHNOLOGIES USED

HTML

Common markup languages used to create hypertext markup or HTML web pages are called languages. HTML is written using HTML elements, which are tags enclosed in angle brackets (like). HTML tags are often paired, such as and , but some tags are not paired, such as the tag denoting an empty element. The opening tag is the first tag in the pair, and the closing tag is the second tag (also called opening and closing tags). A web browser's job is to read HTML files and assemble them into visually or aurally appealing online pages. HTML tags are not rendered by the browser, but are used to understand the content of the page. HTML describes the architecture.

CSS

Cascading Style Sheets (CSS) is a style sheet language commonly used to specify the appearance and formatting of documents written in markup languages. The language is most commonly used for styling HTML and XHTML web pages and user interfaces, but it can also be used to create simple XML, SVG, and XUL documents. CSS is the underlying web

specification, so most websites use CSS style sheets to specify their presentation.

CSS also allows you to render the same markup page in different ways. This includes on-screen, printed, read-aloud by screen readers and voice-based browsers, and tactile devices that use Braille. It can also be used for authorization.

JAVASCRIPT

An object-oriented, cross-platform programming language called JavaScript is used to create interactive websites **(complex** animations, clickable buttons, popup menus, etc.). **In addition,** there are more sophisticated server-side JavaScript implementations such as Node.js that can be used to enhance your website's properties. The functionality without downloading additional files (such as real time collaboration between multiple computers). JavaScript can link to the objects of its environment inside a host environment (such as a web browser) and grant programmatic control over those objects.

PHP

PHP stands for Hypertext Pre-processor and is a PHP-based program. PHP is a server-side programming language designed specially for web development. It's open source, so it's free to download and use. Easy to learn and use. ".php" is the file extension. The original design of PHP was inspired by Rasmus Lerdorf, who also contributed to later iterations. It's an interpreted language, so no compiler is needed. PHP code runs on the server. Compatible with a wide range of databases including Oracle, Microsoft SQL server, MySQL, PostgreSQL, Sybase and Informix.

It supports robust content management systems like WordPress and can be used to regulate user access.

MYSQL

Many small businesses use MySQL, a fast and simple RDBMS. MySQL AB, a Swedish company, creates, promotes, and supports MySQL. The fact that MySQL is available under an open source license is just one of many good reasons for its growing popularity. Therefore, there is no charge for using it. By itself, MySQL is a powerful program. It manages most of the functionality of the most expensive and powerful database products.

It also uses a popular variant of the well-known SQL data language compatible with a wide range of programming languages and operating systems including PHP, PERL, C, C++, JAVA and

more. Even with huge amounts of data, MySQL works quickly and effectively.

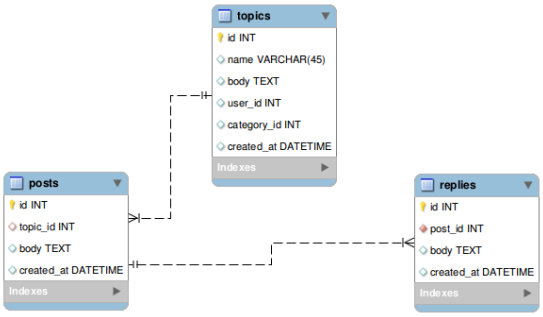

Fig4: MySQL database schema

ADVANTAGES OF PHP AND MYSQL

PHP itself does not store any data, making it ideal for creating dynamic web applications. You need a database to store your data, and MySQL is the database of choice for PHP programmers. Based on predetermined criteria, MySQL automates the most common tasks associated with retrieving and storing unique user information. MYSQL, an open source relational database management system, and PHP, a server-side programming language. Combining the two can result in some very unique solutions.

The Major Benefits of using PHP and MySQL in Web Development

1. Open source, easy and fast maintenance

2. Better scalability, reliability, and superior performance

3. IIS, Apache, and other operating systems compatible

4. Independent of platforms and works on Linux, Windows, or Unix

5. Programming is user-friendly and supports multiple languages

6. Broader support for other widely used databases, such as Informix, Oracle, Sybase, etc.

ADMIN MODULE

Platform administrators have some privileges that allow them to terminate accounts of users that they believe have done something unethical or contrary to the rules of the platform. Administrators can also grant users special access to perform various operations that cannot be performed without administrator approval.

Admin can view overview and images on the home page along with category management consisting of various operatio ns such as: B. Add new categories, list categories, and view their details. In addition, administrators can update and edit category data.

Admin manage post management features such as creating new posts, listing all posts, viewing post details, editing and updating post details, managing the comments section, and deleting comments and posts. User management also an administrator's responsibility. This includes adding new users, listing all users, viewing user details, and editing and deleting their details. Other important functions that administrators ensure for proper operation are login and logout operations, as well as updating system information and account details/credentials.

The administrator is responsible for maintaining the database, managing the users requests,. When any user submits the registration form, it is to be verified, after all the details are approved by the administrator, the user will be added into the site. The administrator maintains the database of Event Manager and that of himself.

Sub modules of Administrator are:

Manage User Requests

Maintain Database

Authenticate User

Declare Results

VOTER MODULE

Students must be logged in to access software functionality. You need to go to the home page first. The user has to log in first so they can choose to log in or not. Otherwise, you will need to log in to access the website directly.

The User can register themselves and after the approval from the administrator they can login into their account and can view the Nominations details & have access to Vote them.

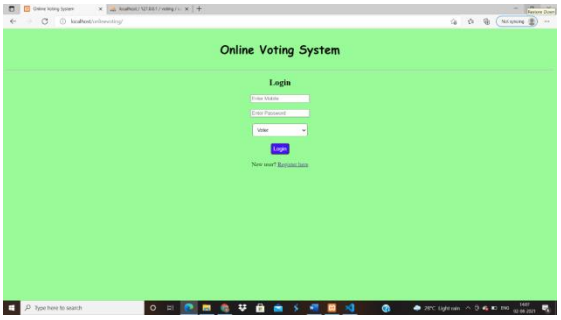

Fig5: Home Page

On the dashboard user can see the party profiles and votes obtained by the particular party based on the information provided after completing all calculations.

Registration

Login

View Dashboard/Details

Vote

Logout

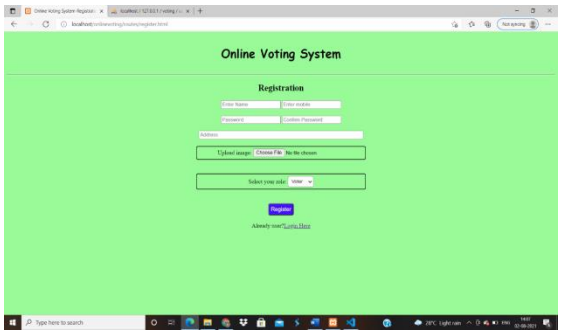

Fig6: Registration Page

ADVANTAGES OF ONLINE VOTING SYSTEM

Advantages of online voting systems include greater efficiency, greater accuracy , and greater voter engagement compared to paper ballots.

Increased Efficiency

One of the main advantages of online voting systems is their incredible efficiency. A traditional paper-based ballot involves many steps, from printing ballots to voting by hand. You can avoid all this with online voting.

Online systems allow you to send electronic ballots to all voters in just a few clicks. And once the voting period is over, the system automatically counts the results so you don't have to do it yourself, saving your organization a lot of time and money.

Improved Accuracy

Another advantage of online voting systems is that they tend to be more accurate than traditional paper-based systems. With paper ballots, on the other hand, there is always the possibility of human error, such as miscounting or mistaking ballots.

But with online voting system, your votes automatically are counted and counted, eliminating human error and giving you peace of mind that your results will be accurate.

Larger Turnout And Voter Engagement

Another advantage of online voting is that voters find it more convenient to vote online than going to a physical polling place, which can increase turnout.

Additionally, online voting can also improve voter engagement. It's easy for voters to feel disconnected from the traditional voting process. But with online voting, you can see the results in real time, making you feel more involved in the process.

Reduced costs

There is a cost to print, mail, and count paper ballots. Route all or as many of these activities through Skypunch technology in exchange for a much

lower cost, with the added benefit of cryptographically hash-chained votes for otherwise unavailable audit capabilities.

Immediate election results

Knowing the election results within seconds of the vote being completed removes human error from the counting process and eliminates the need for recounting. Results can optionally be made public, so voters know the results as quickly as you do and appreciate the transparency of getting results from service providers rather than election administration.

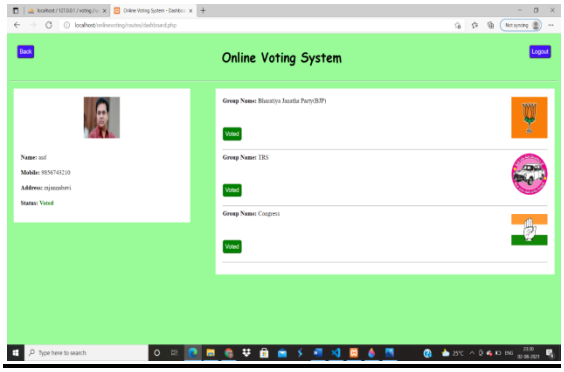

Fig7: Dashboard after voting

RESULTS

The software system allows candidates to log into their profile and upload all details including previous milestones into the system. Admin can see the details of each candidate and review the documents. Only after verification will a Candidate ID and password be generated and the erroneous account deleted. This software system allows voters to view a list of candidates in their area. Administrators have general rights to the system and can moderate and remove all details not related to election rules.

LIMITATIONS

The two main concerns with online voting systems are voting security and transparency.

The security of online voting system

One of the biggest drawbacks of online voting systems is that they are not as secure as traditional paper-based systems, as there is always an opportunity for hackers to manipulate the results.

To improve the security of your dial, you should look for a system that encrypts your data. Systems should be tested by independent security experts.

For example, our online voting system is protected with 256-bit encryption. This is the same level of security that major banks offer. Also, user and voter data is not shared. This means your vote will remain private and confidential.

Lack of Transparency

Another drawback **of** online voting is the lack of transparency. With traditional paper-based voting, voters can see their ballots being tallied. However, online voting makes it difficult to verify results because the process is entirely electronic.

It's important to look for an online voting system that offers transparency features. For example, some systems offer live election results pages where voters can see the results as they type. Our voting system also offers vote verification.

This means that votes cast using our system are auditable. We also provide independent reviews by independent external auditors to ensure the election process is fair.

Existing system

The existing systems are not computer based, they are not connected onto the World

Wide Web i.e., web-based systems. Due to this the people had to face lot of problems and on theirs a fear of theft and rigging of the ballot boxes. From day of election to result announcement day the commission has to worry about how it goes. Some of the faults given below about offline voting .them are even being handled manually.

Proposed system

The proposed system using ORACLE overcomes the drawbacks of the existing system. ORACLE environment which is a freeware is one of the effective platforms when it is used for these types of online processes. The robustness of the ORACLE is too high as the internal software modules are not inter-related. This makes the server to work efficiently in case of software corruption. The database handling is so large in ORACLE that maintenance can be done at any one of the client systems rather doing it in server itself, no matter where the server is placed. Here the updating and maintenance of the profiles becomes very easy. These are some of the major merits, which lead to develop this ONLINE COLLEGE ALUMNI project.

SOFTWARE REQUIREMENTS

Software requirements set an agreement between the team and the customer regarding what the application should do. A software requirement is a description of the features and functions of the target system. Requirements communicate user expectations for a

software product. Requirements may be obvious or hidden, known or unknown, expected or unexpected from the customer's perspective.

Operating System: Microsoft Windows XP.

Front-End: HTML,CSS

Back-End: ORACLE 10g, PHP,XAMMP

Web-Server: Apache-Tomcat 6.0.32

Platform: Visual Studio Code

HARDWARE REQUIREMENTS

These requirements include the minimum processor speed, memory, and disk space required to install Windows.

Processor:	Intel P-IV based system
RAM:	Min. 512 MB
Hard Disk:	500 GB and above

CONCLUSION

This system is an online application that can be accessed throughout the Election Commission and voters as well with proper login provided, which will give them better service . This system is used for voting purpose and the admin can check the results and declare the winner for that particular constituency. The application can be further expanded by following the Future Enhancements mentioned below.

Because it is based on object-oriented design, any further changes can be easily adaptable.

Based on the future security issues, security can be improved using emerging technologies.

Module for validating Job Postings by Administrator.

ACKNOWLEDGMENTS

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