Online Voting System

Shubham Pal

Department of Information Technology

Meerut Institute of Engineering and Technology. Meerut, Uttar Pradesh, India.

shubham.pal.it.2019@miet.ac.in

Siddharth

Department of Information Technology

Meerut Institute of Engineering and Technology. Meerut, Uttar Pradesh, India.

siddharth.kailash.it.2019@miet.ac.in

Vishal Kumar

Department of Information Technology

Meerut Institute of Engineering and Technology. Meerut, Uttar Pradesh, India.

vishal.kumar.it.2019@miet.ac.in

Sunil Kumar

Department of Computer Science & Information Technology

Meerut Institute of Engineering and Technology. Meerut, Uttar Pradesh, India.

sunil.ymca2k5@gmail.com

Abstract:

We are investigating a task, which is related to the voting system in India. How much voting is related to politics and how it ends, we see that a lot of human work is done at the time of voting and a lot of effort is put in to make the result acceptable to the citizens of the country. Citizens decide and vote for the unique leader to choose a better leader for the country. We are in developing country where we are focusing on technology, technology works better, reduce error and gives accurate and acceptable results. A lot of work is done in our country with the use of internet and advanced technology. Here we are focusing on how technology can be used for this purpose. We are developing a platform which helps us to save our capex and opex. We are focusing on how technology can be used in the backbone of democracy where people can use this system to elect the leader of the state and make tomorrow better. Manual election system consumes a lot of time and expense. Nowadays EVMs (Electronic Voting Machines) are being used in India, which speeds up the voting system, but requires a lot of effort. Some people have objection on EVM is the machine which may be EVM working properly or not? To make smart voting system. We have developed an online voting system, which is designed for infrastructure fault tolerance and has the capability of autoscaling. This thesis is using new technology to explain how we can develop a system to encourage the generation to vote. All the system will be under National Database and Registration Authority India (NADRA) one election function of India(ECP). This system helps in registering all the voters who are 18 years of age or above in the database of NADRA..

Keywords

PHP, MYSQL, XAMPP, Elastic Application Load Balancer, EC2 Dedicated Hosts, AWS.

Introduction

We focus of importance of social and socio-psychological think.

Using new technologies, design, development, implementation are inform the designer. we are trying to give result of debates as well as practical discourse in considered with design oriented research, these all things are done: first designing and construction of prototype. secondly, analysing in real world and experimenting with 2 prototype to find out One political, legal contains. and in the end the acceptance, usability, trust of voter [1][2].
The system has been made secure and robust by using cloud computing, which also proves to be a good cost-effective system.
[2]Also using more infrastructure will increase our Capex and OPEX, to reduce this, we aim to provide very simple, less expensive, and robust infrastructures for an online voting system.
The system has been made secure and robust by using cloud computing, which also proves to be a good cost-effective system.
The online voting system created by us is highly useful for countries with a large population as it uses less costly and less Capex & OPEX. It also provides countries with the most secure systems [3][4].

Related Work

Internet helps to make a distributed systems which make use for information accessible condition and from whenever anywhere. There are lot of work is done previously for making distributed system and we study all that work and we find that some point that can be use to make system more satisfactory. Electronic voting is considered by governance in India. We study that and we found some issues like votes , fraud, cost, and manual work, less reliable infrastructure [5][6].
Currently we are using EVM(electronic voting machine)
An EVM have two units: first control unit and second balloting unit. and connecting each other by cables. The control unit of the EVM is kept with the presiding officer or the polling officer. The balloting unit is kept within the voting compartment for electors to cast their votes. But this system can not tolerated suddenly increased voters and make heavy burden to management [7][8].

we are developing fault-tolerant infrastructure which can bear heavy load and make runnable situation in toughest situation [9].
as we mention lot of work and study is done previously and all sides are already study , but some study are not focusing on infrastructure .If our system have good designed but not able work in tough situation then its make a problem [10][11].
We add new technology which are cloud based and can be use for certain time period which save our helps us to save our capex and opex. The product work in simple algo which have cloud component in backend which help to shortcutting of cost [12].

Background

We designed this system, focusing of utilization to cast vote by user in an election. All voters are received login credential by election function of India(ECP) after getting login credential voter cast vote to his/her choose candidates to submit his/her vote. An study and testing is done on local area network. But we also study how much online voting system is developed nowadays and many types of error are rise. After considering all the factor we developed a environment where our system work securely online voting system helps voters to case vote . and all users voting integrity is first goal of our system and they can cast his/her vote from anywhere. Our system have some component:
a) User Information
b) User Identity
c) Users voting database
d) Result of final after completion of voting.
e) Result area.
g) Our system provide distinctive user id which is provided by administration and getting this id user must provide some information to administration [13][14].

Product Purpose

The product is an election manage tool with a simple and user friendly GUI and have capability to Fault-tolerance high users number. This system is developed using php. Though legacy is stand-alone. It be in need of a XAMPP server for examination of our designed system [15][16].

Product view

Our system has a server back-end which are developed on aws cloud, and all the take care of done by aws. aws provide server for government use also which have highly secure.
we using ec2, EC2 instance is a virtual server in Amazon's Elastic Compute Cloud (EC2) for running applications on the Amazon Web Services (AWS) infrastructure.
we are using dedicated host which provide whole server for one type of work use.
All the configuration is defined by government by considering measuring load and use of the server.
all the servers and database works under the government [17][18].

Methodology:

With the help of our online voting system, the voter can cast his or her vote for his/her favorite leader. A leader is the Register by the Admin of Election Commissioner. Leader details are already available in the online voting portal [19][20].
All users first who is the citizen of that country go to the portal and then use his/her login credentials. User data is already present in the administrator database so under that he can verify users' credentials [21].

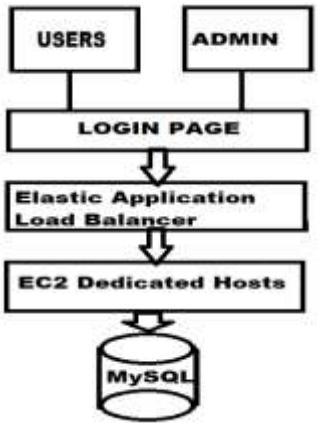
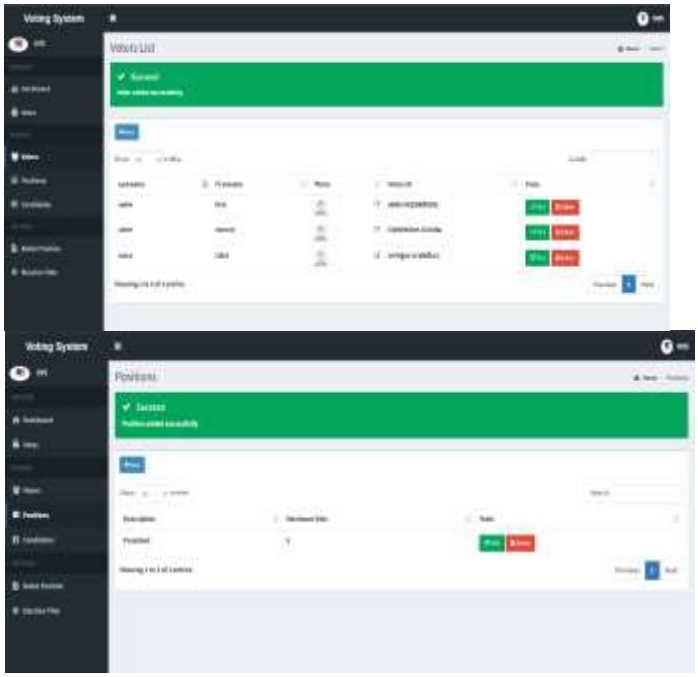


Figure. 1

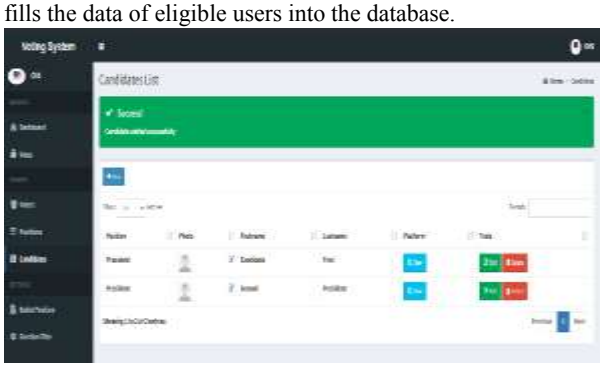
Home

This is the first page of the website created by us which helps to navigate the portal's features. It gives the user an easy and friendly interface, through which the user can use different functionalities.



Registration

This page helps new voters to register in the online voting system.
Firstly, the user has to fill out the form given by the administration, in which he fills all his information. This information is their name, age, address, etc. After that, using the administrator's credentials, the administrator fills the data of eligible users into the database.

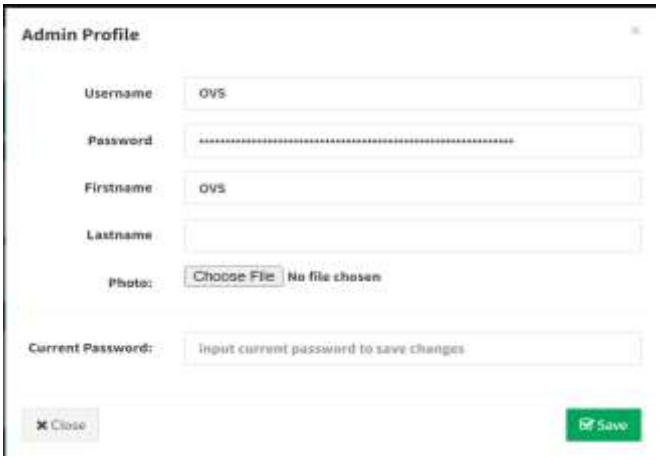


User Login

When the user is fed into the database of the portal by the administrator. After that, the user is given his login credentials. These credentials are username and password. Login credentials are user-specific. These credentials are very important and secret and are given only to the user. User logins using these credentials. If the user forgets his password, he can reset it with the help of a password reset.

Admin Panel

this panel is made for administrator operation. From here the administrator gives the facility to perform different operations. These operations are of different types, such as entering voters' details into the database and entering candidates' details into the database. Generating login credentials for users. generating results and much more



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Voting Panel

This page helps the users to vote for the voter of their choice using their login credentials. This page contains the details of the candidates for the ongoing election. Like his name, and which party he is presenting. His election symbol etc. Here voters vote for their favorite candidate.

Result

When all the voters vote for their candidates before the end of the voting time. After that, the person who gets the most votes is elected as a new leader. All these details are also available on the home panel.

CONCLUSION

With the help of an online voting system technique, voters of that country can use their voting rights for choosing a suitable leader for the country. Our System Providing Less Costly Infrastructure, Fast & Secure. It saves the Capex and OPEX of that country. All voter and candidate data is entered by the election commission of that country into the database. All the results are calculated by predefined methods and no one has the authority to change the method except the administrator. All the results are calculated by a very transparent method.

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