FINGERPRINT BASED SECURED VOTING

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Abstract: - *In the present world, most countries hold their elections using Electronic Voting Machines. These machines save the fingerprints of the voters electronically. These machines reduce the wastage of ballot papers. As security could be a major concern today, guaranteeing that no one exercises the proper to vote double is that the main side. we will resolve this issue by introducing Finger Print based voting, where a person can be authorized based on his Finger Print. This will put end to fake voting. Thus this Fingerprint online module is an application where the user is recognized by his finger pattern. As we know that the fingerprints of each human being are different, the voter can be easily authenticated. The online system allows the people to vote through their fingerprints. The fingerprint of the voter can uniquely and distinctively identify him/her using the fingerprint module. This system ensures the right to vote for a candidate only once, thus not allowing the voter to vote for the second time. An admin is assigned to include all the candidates standing for the election. Only the admin can able to add a candidate name and photo who are nominated. The Admin will also register the voter by verifying the voter's details. Admin will authenticate the voter by verifying the voter's identity and then admin will register the voter in the system. Once the user has got the voter's id and password from the admin the user can able to log in and vote for the candidates who were nominated. This system will allow one user to vote for only one candidate. By the end, the election result is published by using the election id. Even voters can view the election result.*

Key Words: **Login, Registration, Fingerprint verification, New candidate, Result, EVM**

1. INTRODUCTION

Election is the crucial function of democratic authorities, an electoral gadget is the set of guidelines that determines how elections and referendums had been carried out and the way their effects had been determined. It reduces the body of workers and polling time from paper balloting gadget. According to the modern gadget, votes can be counted manually in order that there's extra possibility for happening error, consisting of duplicates counting and absolutely overlooked counting Sometimes votes had been even manipulated via way of means of political events which result in misguided polling percent and it's going to additionally distort the effects of an election in want of sure applicants. Vote counting is one of the crucial aspect with inside the election manner.

Failure to finish the matter ought to have a completely awful effect closer to the modern authorities in order that the election counting need to be transparent, correct and dependable. There had been distinctive types of balloting presently current with inside the international consisting of paper balloting gadget, balloting via EVM`s and distance balloting gadget. In manual, paper-primarily based totally election, the electorates forged their votes to pick out their applicants, wherein they deposit their exact ballots in sealed containers disbursed throughout the electoral circuits round a given us of a. By the quit of the election, all of the containers are officially opened and votes are counted manually with inside the presence of licensed representatives of all of the applicants till the numbers are compiled.

In India, we use EVM (Electronic Voting Machine) that's advanced via way of means of election fee of India. In distance balloting gadget electorate forged their vote from an area apart from a polling sales space i.e. through mail or net option.

Therefore, safety, confidentiality, reliability and accuracy had been the coronary heart of the balloting gadget which might be supplied via way of means of this fingerprint balloting gadget, wherein election information is recorded, saved and processed as virtual data with inside the contemporary-day era. As no humans could have identical fingerprints, it's going to act as a number one key for safety on this gadget.

2. DESCRIPTION OF PROJECT:

This System aims to present a new voting system employing biometrics in order to avoid rigging and to enhance the accuracy and speed of the process. Biometrics is the term given to the use of biological traits or behavioral characteristics to identify each individual. The traits may be fingerprints, facial geometry, retina patterns and voice recognition. In Fingerprint Voting System we are going to use thumb impression for the purpose of voter identification or authentication. As the thumb impressions of every individual is unique, it helps in maximizing the accuracy. The advent of this thumb impression voting system would enable

hosting of fair elections in India. Less equipment is required. Provides better authentication process.

3. IMPLEMENTATION OF THE PROJECT:

An implementation is a realization of a technical specification or set of rules as program, software program elements, or other computer system though computer programming and deployment. Numerous implementations may exist for specifications or norms. Implementation actually approach to place product or to hold out.

3.1. MODULES IN THE PROJECT

The modules incorporated in this project are:

1. Admin

2. election

3. voter

3.2. DESCRIPTION OF THE MODULES

3.2.1. ADMIN

In the admin module the following activities takes place:

1. Admin can add the candidates.

2. Admin can add the voters.

3. Admin can schedule the elections.

4. Admin can calculate the results.

5. Admin can view the result of election.

3.2.2. ELECTION

This is the module in which real vote casting procedure is done. In this module first we want to pick the election identification after which voter fingerprint verification and validation are done. If their fingerprints are legitimate then they may be allowed to forged their vote.

3.2.3. VOTER

In the voter module the following activities takes place:

1. Voters can cast their votes.

2. Voters can view all the candidates participating in the election.

3.3. TECHNOLOGIES USED

1. The .NET Framework

Microsoft .NET is a group of Microsoft programming improvements used to rapid shape and coordinating XML Web administrations, Microsoft Windows primarily based totally applications, and Web applications. The .NET Framework is a language-nonpartisan level for composing packages which could without a good deal of a stretch and thoroughly interoperate. There`s no language boundary with .NET: there are numerous dialects on hand to the clothier along with Managed C++, C#, Visual Basic and JavaScript. The .NET shape offers the established order to components to partner consistently, irrespective of whether or not regionally or fairly on numerous stages. It normalizes regular facts sorts and correspondences conventions with the aim that components made in numerous dialects can certainly interoperate. ".NET" is moreover the mixture call given to specific programming components primarily based totally upon the .NET level. These can be the 2 items (Visual Studio.NET and Windows.NET Server, for example) and administrations (like Passport, .NET My Services, etc.).

2. SQL SERVER

SQL Server is an ideal data set stage for use in shared and devoted Web facilitating conditions. Of the different SQL Server releases, just SQL Server Express ought to never be utilized in Shared Hosting situations, this version was intended for application improvement conditions as it were. The SQL Server Deployment Guidance for Web Hosting Environments gives best practices to arranging SQL Server to enhance security, occupant confinement, and the presentation of your facilitated SQL Server organization. Test scripts for provisioning clients and data sets for use in shared facilitating are incorporated.

3.4. ARCHITECTURE
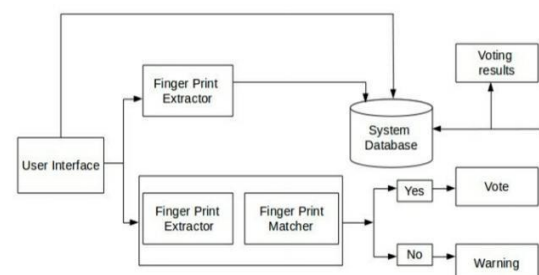
4. FUTURE SCOPE OF THIS PROJECT:

The proposed fingerprint based voting system project aims at reducing illegal activities during the election time. This system will also provide accurate results. We can implement this system in real time elections to reduce rigging and to conduct free and fair elections.

In this project we are using the fingerprints of the voters so that more security is provided as no two individuals will have the same fingerprint patterns. This system also doesn't allow a person to vote twice.

In future this project can be implemented in real time. The additional features that can be implemented in this project are we can use fingerprint scanner to capture the fingerprints of the voter. We can also connect aadhaar database to the system in real time implementation.

The main aim of this project is to conduct free and fair elections by using the biometrics of the voters.

5. CONCLUSION:

In total, this machine has the capacity to overcomes maximum of the issues confronted in the course of the vote casting duration with the aid of using the undertaking ballot machine. The effectiveness of this machine relies upon the internet interface, its usability. This will honestly assure a more secure vote casting approach which may be very a great deal required for a healthful boom of a growing nation. In this undertaking, the proposed Fingerprint primarily based totally vote casting machine that's higher and quicker than preceding systems. The new machine prevents get right of entry to unlawful voters, gives ease of use, transparency and maintains integrity of the vote casting. The machine additionally prevents a couple of votes from the identical man or woman and controls voters. It additionally permits a voter to vote from everywhere furnished that the voter is inside electoral limits. Fingerprint primarily based totally secured vote casting machine has furnished hazard to keep away from invalid votes, It reduces the polling time, Easy to hold to polling middle from the polling box, Reduces the group of workers at vote casting middle, It gives clean and correct counting with none troubles.

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