Online Voting System Using Android Application

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Abstract: In the traditional system there was a need to go on the voting booth and cast a vote. People from distinct places who did not have their voting cards cannot cast their votes. Also authentication of the user was not good and appropriate. There was a lot of paper work which was very time consuming. The results needed to be calculated manually which was very time consuming process. Therefore the proposed system is developed to remove the efforts needed in the traditional voting process. The proposed system has an application developed on android phone via which the user can cast his vote from anywhere on the face of the globe. The user registers by giving his personal details and the image of his face which gets stored in the database at the server side. After the voting date is fixed the user gets notification on the android phone via GCM (Google Cloud Messaging). After that the user opens the application. The face authentication is done and then the OTP (One Time Password) is send to the user's mail address if the user is valid user. Using OTP user opens the voting form he casts his vote and then click on submits button and then logout. On the server side we can check the results. The GCM is which sends notification to user's android phone. The sqlite is the local database of the user's phone. If his internet connection is off then the notification and other details get stored on his local server. When he starts his internet connection then this message are retrieved from the GCM that is the local database of the android phone.

Keywords: Short Message Service (SMS), Android Device, Dedicated Server, JDK 7.0.

I. INTRODUCTION

The voting is done by traditional approach. That approach is very time consuming as well as have got manual errors. This approach eliminates the drawbacks of voting booths. This proposed system increases the performance of online voting system using android application. The system was proposed to eliminate the trouble of people to go and vote at the voting booth. Whenever schedule date notification is get on user android device, user can cast their vote from anywhere and at anytime. For casting the vote particular user should be authorized so the proposed system will done authentication of voter. With the help of mobile camera proposed system capture his/her face if current face is matched then authentication is done.

This proposed system is based on face matching algorithm (eigen algorithm).During registration the proposed system capture the user face which is used for during the authentication process. The proposed system will display the voting results on web application. In proposed system advancement in android device is very easy and secure voting. The proposed system provides the specification and requirements for E-Voting using an Android platform.

II. LITERATURE SURVEY

To make the voting process very easy and efficient wireless and web technologies are used. The online-voting system has the possibility of secure, easy and safe way to capture and count the votes in the election. The proposed system provides the specification and requirements for Online-Voting using an Android platform. The Online-voting means the voting process in election by using mobile phone. The android platform is used to develop an Online-voting application. Through a general diagram the introduction of the system is presented. The proposed Online-voting system will be presented with the obtained results.

The proposed system also described how the android mobile phones are efficient. The android platform is used to develop a reliable and efficient application. Using the face-book API's provided by the android SDK (software development kit) the login can be done very efficiently.

III. EXISTING SYSTEM

In existing system of voting, voter go on voting booth on the day of voting. There is no any centralized system, where we can cast our vote from remote location. There is no proper authentication present of an individual. There is manual work involved, so it may generate errors in the system. The Traditional approach is very time consuming and have got manual errors.

IV. RELATED WORK

Face Detection:

In this algorithm, we are using eigen algorithm which will calculate the edges of input image and compare it with stored image in database. If match is found then it will authenticate the user.

OTP sending on mail & SMS:

System will generate one time password while registration which will be sent to input mail & SMS. Once user enter proper OTP generated the system will register the user.

Cast Vote and Display Results:

In this module, we will cast our vote using android application and results will be calculated on web application. We will use crystal reports to display the results.
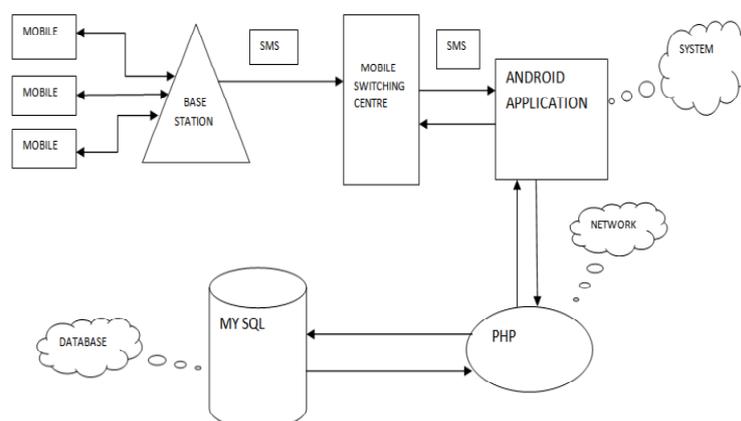
V. ARCHITECTURE

Fig 1: Proposed System

I.   Via SMS: The voter can vote by sending an SMS through the mobile connection to the system through the "Mobile Switch Center". For proposed system the android application is created on android phone, then the system will start working properly. The android system will implement some processes on the SMS which is sent by the voters into the

server through a network. The database is installed on the server side to send a result back to the voter by the android system application as shown in figure.

II.   The Android phone takes the image and gives it to the web service. The web service stores the image in the database. The web service executes the Laplace algorithm which checks for Face validation. In this algorithm, we are using eigen face   algorithm which will calculate the edges of input image and compare it with stored image in database. If match is found then it will authenticate the user. If the user is valid then it will send OTP message to its mail id and message. Using that the user will open the voting form. Then he will cast his vote. Then press submit button and logout. The results are displayed at the server side on the web application.

III.   We are making an android application with face match algorithm for authentication. Authenticated user can cast his vote on voting day by using an android application. Reports will be displayed on web application.

VI. CONCLUSION

The completion of this project we are providing the Online Voting system using android application. It basically on android device. The security is in terms of providing the one time password (OTP) and image. Basic aim of this project is time consuming.

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