

## **Voting System by Finger Print & Auto Results on web application**

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**Abstract:** Electronic voting meant for casting vote and counting votes electronically. This voting technology includes punch cards, optical scan voting systems and direct recording electronic (DRE) voting systems. It can also involve transmission of ballots and votes via telephones, private computer networks, or the Internet. Electronic voting systems have much more advantages compared to other voting techniques. An electronic voting system can be involved in any one of a number of steps in the setup, distributing, voting, collecting, and counting of ballots, and thus may or may not introduce advantages into any of these steps. The main aim of this project is develop an Electronic Voting Machine with maximum security facilities.

**Key words-** voting system, Finger print, Microcontroller.

### **1. INTRODUCTION**

E-voting has been a very controversial topic ever since the presidential elections in the U.S. in 2000. Many security flaws were found. The standards for the implementation of e-voting systems were shown to be too weak and many (scientific) experts expressed their negative opinions on e-voting. Nevertheless, efforts are still made to introduce e-voting in countries that use traditional paper ballots. E-voting is an election method in which the votes are cast or collected electronically. A computer system whose main element is an software component that maps the voting procedure electronically is called an e-voting system.

A direct recording electronic (DRE) machine is a special case of such a system as it implements all steps in the voting process, from registration and ballot casting to counting. There are two different forms of voting: distance and presence voting. In presence voting, a voter can cast his or her vote in a polling station under the supervision of the election's administration. Examples for presence voting are conventional elections in polling stations or voting with e-voting machines. In distance voting, the voter acts without the supervision of the electoral commission and casts his or her vote from a place other than

a polling booth, such as casting absentee ballots via mail or internet voting.

## **2. RELATED WORK**

### **Existing system**

The system allows the Evil Practices held in the Electronic voting systems may offer advantages

Manual Voting system. An electronic voting system can be involved in any compared to other voting techniques. one of a number of steps in the setup, distributing, voting, collecting, and counting of ballots, and thus may or may not introduce advantages into any of these steps.

### **Proposed system**

Electronic voting (also known as e-voting) is a term encompassing several different types of voting, embracing both electronic means of casting a vote and electronic means of It can also involve transmission of ballots counting votes. And votes via telephones, private computer networks, or the Internet

## **3. IMPLEMENTATION**

### **Finger-Print Biometric**

Human fingerprints are unique to each person and can be regarded as a sort of signature, certifying the person's identity. Fingerprints are the oldest and most widely used form of biometric identification. A fingerprint is formed from an impression of pattern of ridges on a finger. A ridge is defined as a single curved

segment, and a valley is the region between two adjacent ridges. The minutiae which are the local discontinuities in the ridge flow pattern, provide the features that are used for identification

### **Finger-Print Recognition**

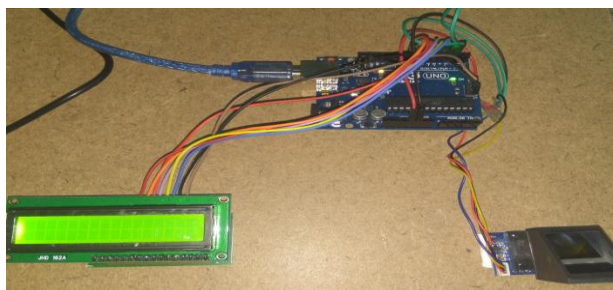
It is an active research area n nowadays. An important component in fingerprint recognition systems is the fingerprint matching algorithm. According to the problem domain, fingerprint matching algorithms are classified in two categories: fingerprint verification algorithms and fingerprint identification algorithms. The aim of fingerprint verification algorithms is to determine whether two fingerprints come from the same finger or not. On the other hand, the fingerprint identification algorithms search a query fingerprint in a database looking for the fingerprints coming from the same finger. Despite the widespread use of fingerprints, there is little statistical theory on the uniqueness of fingerprint minutiae. A critical step in studying the statistics of fingerprint minutiae is to reliably extract minutiae from the fingerprint images. However, fingerprint images are rarely of perfect quality. They may be degraded and corrupted due to variations in skin and impression conditions. Thus, image enhancement techniques are employed

prior to minutiae extraction to obtain a more Reliable estimation of minutiae locations

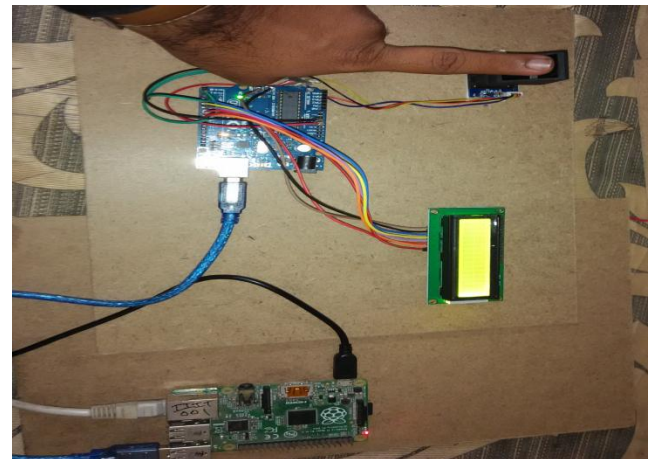
### Arm9 Microcontroller

The S3C2440A is developed with ARM920T core, 0.13um CMOS standard cells and a memory compiler. It's low power, simple, elegant and fully static design is particularly suitable for cost- and power sensitive applications. It adopts a new bus architecture known as "Advanced Microcontroller Bus Architecture". This processor offers outstanding features with its CPU core. It is a 16/32-bit ARM920 RISC processor designed by Advanced RISC Machines Ltd. The ARM920T implements MMU, AMBA BUS, and Harvard cache architecture with separate 16KB instructions and 16KB data caches, each within 8-word line-length. By providing complete set of common system peripherals, the S3C2440A minimizes overall system costs, and eliminates the need to configure additional components.

### 4. EXPERIMENTAL RESULTS



**Fig:-1** Kit of the Project



**Fig:-2** User Voting in our System



**Fig:-3** Secure Login for Web application



**Fig:-4** Voting Page for user

```
[1]+ Stopped nano fp2
pi@IIIT001 ~/fp $ sudo python fp2.py
2
1
4
0
ROSE:2
SUNFLOWER:1
LILLY:4
LOTUS:0
winning party is LILLY
```

**Fig:-5** Results of Voting

## 5. CONCLUSION

This paper is used to enhance security by eliminating bogus voting and vote repetition using finger print based authentication. As an additional security measure photo and details of the voter are displayed on ARM9 LCD from remote server and results are viewed at central server by an authorized person. In future, security of FP-EVM can still be enhanced if finger-print data can be stored and accessed from central server, voting ballot unit is separately placed from control unit and photo and details of the voter be displayed on PC rather than on ARM9 LCD as in the present project.

## 6. REFERENCES

- [1][http://www.rspublications.com/ijeted/ijeted\\_index.htm](http://www.rspublications.com/ijeted/ijeted_index.htm) Issue 2, vol6, september2012 ISSN 2249 -6149
- [2][http://en.wikipedia.org/wiki/Indian\\_voting\\_machines](http://en.wikipedia.org/wiki/Indian_voting_machines)
- [3]IJCSI International Journal of Computer Science Issues, Vol. 10, Issue 4, No 1, July

2013ISSN (Print): 1694 -0814 | ISSN (Online): 1694-0784www.IJCSI.org

[6] Smith, A.D.: Acceptability of internet voting and CRM principles among the internet savvy. *Int. J. Bus. Inf. Syst.* 3(5), 498–528 (2008).

[7] Conrad, F.G., Bederson, B.B., Lewis, B., Peytcheva, E., Traugott, M.W., Hanmer, M.J., Herrnson, P.S., Niemi, R.G.: Electronic voting eliminates hanging chads but introduces new usability challenges. *Int. J. Hum. Comput. Stud.* 67(1), 111–124 (2009).

[8] E-vote 2011 (2009) Use case specification: 2.1 E-voting: Project: Evote 2011.