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Enhance The Security System In ATM

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ABSTRACT

Now is no need to remember the passwords and the reference DNA data will be digitized and converted to barcode by using barcode generator, which is stored back of ATM card. This search can predict the proper user of the ATM card & collecting the measured DNA data and biometric security, Global positioning system (GPS) and mobile messaging we have design an algorithm which increase security of electronic transaction of user. A three layer security model is used to enhance the electronic NOW a day a banking system is very important and useful for human day to day life. Peoples widely used to perform economic activities. Now electronic devices through which most of the transactions like, withdrawal, balance check done on ATM this used saves our time too and decreased the crowd in bank. It's a way to secure our money but there are fraud /robbery unnecessary event is done on ATM boot so we used biometric technology to resolve problems. Biometric technology like finger print, retina veins, DNA. In biometric where only we work as a password. But earlier used the signature system is replaced by ATM pins or after than biometric technology like finger print. So use DNA biometric is more secure to our account. This paper presents a highly secure system to increase the ATM security system.

Keywords -Biometric, Verification, ATM System, DNA Recognition, DNA barcode generator.

I. INTRODUCTION

This paper present a system to secure the ATM from thieft. It is very important to protect and secure the ATM from frauds & attacker. camera attach with the ATM to survilliance on ATM . In DNA is a biometric technology bio means life and metric means measure it measure & identify the characteristics of our body. DNA in which we are camera of our account.DNA(deoxyribonucleic acid)its provides the most personal identification . DNA is more secure than fingerprint or other biometric technique .it is personal accurate authentication. it can never change even a person in living stage or after a death stage. in using DNA technique there are so many questions arises in peoples how our personal identification information be obtained from DNA in human genome,& second one question is how personal id generated from DNA based information etc. in this paper we briefly explain about all .DNA exists in the double stranded form ,in which two anti-parallel strands spiral around each other in double helix.dna is complex molecule that contains all of the necessary information to build & maintain an organism.. These methods of authentication can involve simply comparing face or fingerprint characteristics to as complex as DNA and Iris characteristics.There are other various stages of development today.There are many complexities surrounding the issue of Biometrics of DNA, such as: Biometrics and health issues, private information, ig here string search algorithm to resolve the security

problems this algorithm is very important to solving the security related problems.[1][2]This algorithm has many applications like in network security, medical science, text editor bioinformatics in computing machines & in database queries, and last one is image processing.[3]In Intrusion Detection Systems (IDS) searching algorithms help to detect virus patterns,& to convert into personal networks & in computer system. it is used to find out the attacks or robbery and try to sort out or recovery from that least harm to the victim machines and analyze the security flaws so that repetition must not be occurred in future [4].IDS uses three types of data that includes network traffic data, system level test data and system status file . the detection of virus is huge challenges in network & computer security.[5]statistical anomaly-based detection method (also known as behaviour based detection) and it is straightforwoard protocols and the most standard and efficient techniques. [6]Anomaly-based intrusion detection system is in which, it is classified into many sub-domains such as statistical methodologies [7-8], genetic algorithms[9],data mining[10-11] , immune system [12-13] and artificial intelligence [14].

II. BACKGROUND WORK

A. Brute Force Algorithm

The simplest method of the pattern searching algorithms is the brute force algorithm. This algorithm is considered as a naïve algorithm. The working principle of this algorithm is so intuitive. This algorithm scans all the indices of the text bioinformatics is sufficient to find out the DNA sequence and nucleotide artificial intelligence [14]. in bioinformatics is efficient and find a particular DNA sequence and search nucleotide & Amino acid pattern in genome and protein sequence from a huge database. Electronic Transaction System with 3 Layer Securities:

These three layers are:

- First: Insert ATM card which is having DNA barcode.
- Second: Biometric security using Fingerprint or Iris recognition.
- Third: Mobile security using GPS or mobile System.

T= {t1, t2, t3 .....tn-1 } and compares with one character of the pattern P= {p1,p2,p3.....pn-1 } at a time, on mismatch the pattern shifts by one index from the left to the right. This process continues until the entire match of the pattern is found in the given text string. In addition to the pattern and the text, neither pre-processing time nor auxiliary space is required in this algorithm while most of the algorithms string searching consist of two phases: pre-processing phase and searching phase. Character comparison in the searching phase can be performed in any order. It requires at most 2n number of comparisons in its searching phase. The searching phase running time is O (nm). The average case and worst case time complexities of the brute force algorithm are O (n + m), and O (n m) respectively. The prime advantage of this algorithm is that it can be implemented easily. The Brute-Force algorithm is so primitive and slow compared to other existing standard algorithms in the literature.

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B. Boyer-Moore Algorithm

It R. S Boyer and J. S Moore [2] designed a string searching algorithm in 1977. It is faster and efficient than other algorithms, known as Boyer-Moore algorithm. Boyer-Moore algorithm has been considered as a standard algorithm for a long period of time. This algorithm is one of the most popular pattern matching algorithms and conforms to the protocols of exact string matching methodologies. In Boyer-Moore algorithm the comparison of the pattern with the text string occurs from the right most character in the pattern to the left [22]. The analogy of this phenomena can be drawn to the concept of sliding doors in its technique. Boyer Moore algorithm consists of two phases such are preprocessing phase and searching or scanning phase. In the phase the pattern string is processed and a table of values is derived corresponding to the pattern characters using the following formula. Value =Length (of the pattern)-Index (of the character)-1.Two pre-computed functions have been used to shift the door to the right. These two shift functions are as follows: match shift (also known as Good Suffix Shift) and mismatch shift(also known as Bad Character Shift).

III. BIOMETRIC ADVANTAGES

- No forgotten or stolen password.
- Positive and accurate results.
- Highest level of security.
- Offer mobility.
- Serve as a key that cannot be transferred.
- Safe & user friendly.

IV. DNA IDENTIFICATION TECHNOLOGY

DNA biometric could be most exact form of identifying any number given individual. every human being has its own its own individual map for every cell made & this map or blueprint as its more often called can be call in human body cell.dna is the structure who where physical and intellectually unless an individual is an identical twins it is not possible that any other person has same genes. DNA can be collected from blood, hair, salivmouth swabs, straws, finger nails and any number of other sources that has been attached to the body at some time

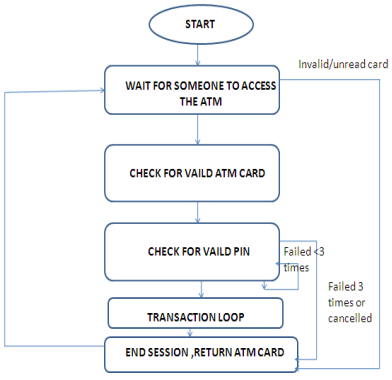

Fig1 .State flow diagram of transaction

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V. BIOMETRIC COMPARISON

- Uniqueness-well the biometric separates individually from another.
- Performance – How well a biometric resists aging.
- .Collectability – Ease of acquisition for measurement.
- Performance – Accuracy, speed, and robustness of technology used.
- Acceptability – Degree of approval of a technology.
- Circumvention – Ease of use of a substitute.

VI. ADVANTAGES OF DNA

- DNA is the only device that provides the facility of linking related to the unknown person.
- This techniques is relatively mature but dynamically evolving technology that is becoming widely used .
- DNA identification devices are making positive identifications
- It has ability to store large no. of DNA in databases to increases the possibilities of matches.

Fig 2 Biometric Atm

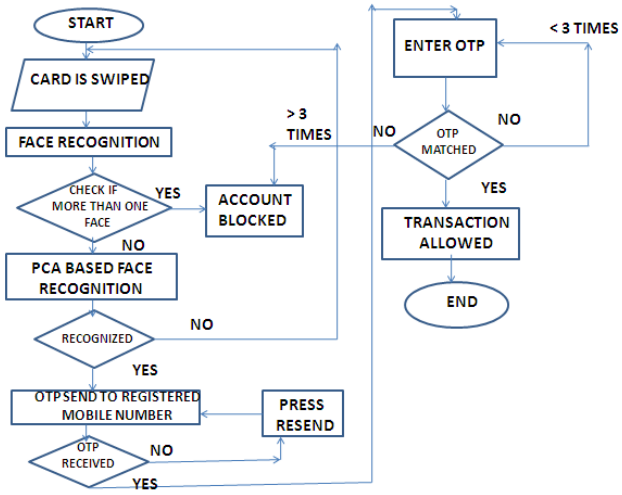

Fig 3.Model of ATM

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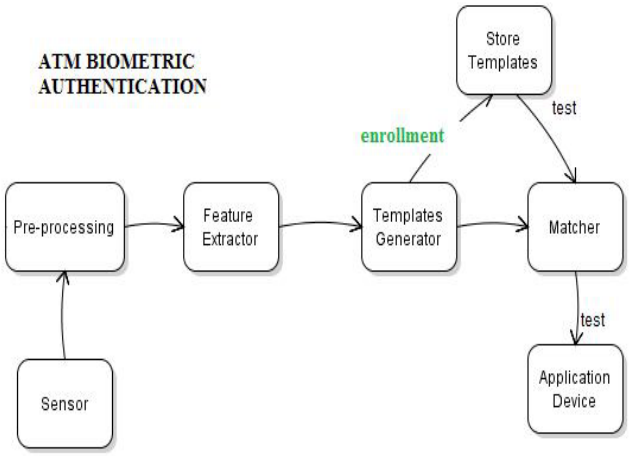

Fig 4. Biometric Authentication

VII.CONCLUSION

This paper gives a brief idea about the various ways in which an ATM transaction can be done. It shows how security in the transaction is being improved. It also shows how the use of biometrics for authentication is improving the security and ease of the transaction. The paper also gives u Finally it presents the concept DNA biometric to protect us from fake detection .It offers greater security and convenience than traditional methods In this paper DNA identifying test is time taking process, but it is a unique identification test that no one can forge it or copy it. The authentication method provided to ATM system will be extended more secure & protect from frauds..

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