SRS of fingerprint based ATM

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FINGERPRINT BASED ATM SYSTEM

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Purpose of project:

Fingerprint Based ATM is a desktop application where fingerprint of the user is used as a authentication. The finger print minutiae features are different for each human being so the user can be identified uniquely. Instead of using ATM card Fingerprint based ATM is safer and secure. There is no worry of losing ATM card and no need to carry ATM card in your wallet. You just have to use your fingerprint in order to do any banking transaction. The user has to login using his fingerprint and he has to enter the pin code in order to do further transaction. The user can

withdraw money from his account. User can transfer money to various accounts by mentioning account number. In order to withdraw money user has to enter the amount he want to withdraw .The user must have appropriate balance in his ATM account to do transaction. User can view the balance available in his respective account.

Scope :

The objective of our project is to provide biometric security through fingerprint authentication in ATM application.

- The underlying priniple is the phenomenon of biometrics " **AUTHENTICATION "** in this project we propose a method of fingerprint matching based on matching algorithms

FUNCTIONAL REQUIREMENTS:

The user has to login using his fingerprint and he has to enter the pin code in order to do further transaction. The user can withdraw money from his account. User can transfer money to various accounts by mentioning account number.

- **Login: -** User will login to the system using his fingerprint.
- **Add Pin Code: -** User has to add pin code in order to do transactions.
- **Withdrawal of cash: -** User can withdraw cash by entering the amount he want to withdraw.
- **View Balance:** - User can view balance which is available in his respective account.

NON FUNCTIONAL REQUIREMENTS:

The system can be used in various Banks ATM . So there should be more branches of ATM in every corner of the city in both urban or rural areas so people can get access to it easily and utilize it .

HARDWARE REQUIREMENTS:

- Display : LCD 18”, 1024x768 / Above
- Internet connection : 512 kbps or above
- Sensors : Ultrasonic sensor
- Microprocessor : Arduino UNO

ENVIRONMENTAL REQUIRMENTS:

A developed environment in which the user trust the digital method of transaction and save their time and also save themselves from the danger of unsecured payments gateways

SECURITY REQUIRMENTS

High security assurance . Biometric identification provides the answers to “something a person has and is” and helps verify identity. User Experience Convenient and fast. Non-transferrable – Everyone has access to a unique set of biometrics. Spoof-proof – Biometrics are hard to fake or steal

- Fingerprint based ATM System is more secure than ATM card.
- User can make transaction using his fingerprint anywhere and at anytime he need not have to carry ATM card.

OUTSTANDING SOFTWARE ATTRIBUTES :

Biometric verification systems consist of both the components - hardware as well as software. The hardware is a device that will automate his working , and it is priced autonomously from the software (which is designed to manage costumer account data). However, the cost of implementing hardware or software depends on the size of a business and choice of components.

Biometric devices with massive memory capacity capable of storing more than 2Lac templates and with a higher IP rating (for protection against dust & water) will usually cost around $1800.