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BIOMETRICALLY SECURED ATM VIGILANCE SYSTEM

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Abstract: Automated Teller Machine (ATM) services are increasingly popular due to their flexibility and easiness for banking systems. To provide high security, fingerprint and face recognition based customer authentication was introduced. This project aims to develop a single smart card ATM (Automated Teller Machine) for multiple bank accounts, reducing the cost of inter banking transactions. The user module is the interactive module through which the user can log into the system and perform transactions of their choice. The proposed system provides the user with a level of higher convenience, efficient and user friendly.

Keywords*: IOT, Biometric authentication, face recognition, OTP,ATM.*

I. Introduction

This project uses face recognition and RFID cards to secure money transactions from multiple bank accounts. It also sends an OTP to the registered mobile number for non-authenticated users, providing a highly secure system. This project introduces the concept of physical browsing and development of a system that Will permit customers to apply their cellular telephones to safely withdraw coins from ATM machines. This will make it easier to carry multiple cards and remember pins. ATMs are generally reliable .However, there have been cases of machines giving out money without debiting the account or giving out a higher denomination of note by mistake.

II. Literature Survey

2.1 Smart Card & Security Basics

This paper explains why smart cards are preferred for banking systems than other type cards. Smart cards provide convenience and security of any transaction, providing tamper proof storage of user and account identity, and providing tamper proof storage of user and account identity. Smart playing cards are a form of chip card embedded with a laptop chip that shops and transacts records among users. They were introduced in Europe nearly three decades ago to pay phone bills. Smart cards provide tamper proof storage of user and account identity, making them more reliable than other machine-readable cards..

2.2 Secure Internet Banking Application

This paper tells approximately how authentication may be saved secure at some point of malicious software program attacks.Here short-time passwords and one on certificate are used to protect the authentication.Here short lived passwords are generated using offline card reader and smart card to manage the authentication. Hence the transaction can be done without any malicious attacks.

III. Methodology

3.1 LCD Display

Character based LCD modules use Hitachi HD44780 controller chips, which are not as advanced as the latest generation laptop computers. They are still used in commercial and industrial equipment, particularly where display requirements are simple. Character based LCDs are still used in commercial and industrial equipment..

3.2 RFID Reader

RFID Reader Module also are referred to as interrogators. They convert radio waves lower back from the RFID tag right into a form that may be exceeded directly to Controllers, that can employ it.RFID tags and readers ought to be tuned to the identical frequency so that it will communicate. RFID systems use many different frequencies, but the most common and widely used and supported by our reader is 125 kHz. RFID readers or receivers are composed of a radio frequency module, a manipulate unit and an antenna to interrogate digital tags thru radio frequency (RF) communication..

3.3 Micro controller

The LPC2141/42/44/46/48 microcontrollers are based on a 16-bit/32-bit ARM7TDMI-S CPU with real-time emulation and embedded hint support, combined with embedded high speed flash memory ranging from 32 kB to 512 kB. A 128-bit huge reminiscence interface and unique accelerator structure allow 32-bit code execution at the highest clock rate.

IV. Block Diagram

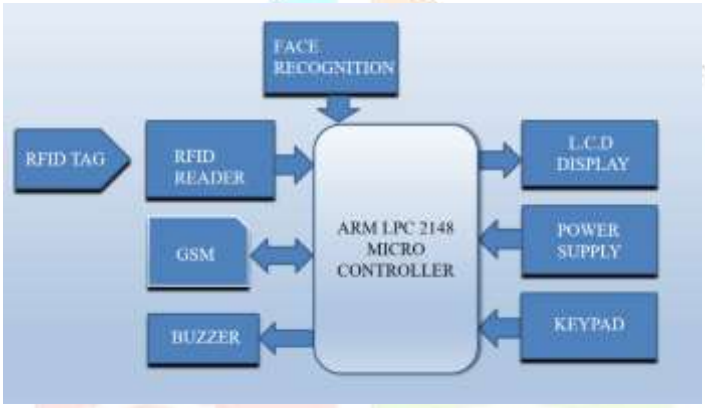

Fig 1: Internal Design

V. Results

5.1 ATM Used by Authorized person

Fig 1: Selecting Authorized and unathorized

Fig 2: Enter PIN

Fig 3: Face Authentication

Fig 3: Detecting face

Fig 4: If valid person select the banks

Fig 5: select bank

Fig 5: Bank displayed

Fig 6: Enter amount

Fig 7 : Transaction completed

5.2 ATM used by Unauthorized person

Fig 7: Unathorized person

Fig 8: scan card

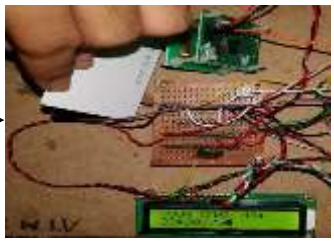

Fig 9: model

Fig 10: Enter OTP

Fig 11: Select bank

Fig 12:Bank select

Fig 13: bank displayed

Fig 14:amount enterd

Fig 15 : Collect money

VI. Conclusion

The system used for handling multiple accounts is more efficient than the existing system, reducing transaction cost and allowing users to perform transactions for all their bank accounts using a single smart ATM card with enhanced security systems such as OTP (one time password) and face recognition. This reduces the complexity of managing multiple ATM cards and passwords, and reduces the cost of transaction charges on customers for making transactions. Additionally, ATM fraud can be avoided by implementing this system.

References

[1]. Chip-and-PIN: Success and challenges in reducing Fraud from Federal Reserve Bank of Atlanta"-Douglas King, Jan 2012.

[2] Examining Smart-Card Security under the Threat of Power Analysis Attacks- Thomas S.Messaerges member IEEE, Ezzat A.Dabbish member IEEE, and Robert H.Sloan senior member IEEE vol.51, No. 5, MAY 2002.

[3]Katakam Swathi, Prof.M.Sudhakar "Multi Account Embedded ATM Card with Enhanced Security" IOSR Journal of Electronics and Communication Engineering IOSR Journal of Electronics and Communication Engineering, Volume 10, Issue 3, Ver. I (May- Jun.2015)