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## Security System Using Steganopin

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**ABSTRACT:** The main objective of the system is to develop a secure ATM in the future. In the modern world everything were computerized due to the technological development. The computerized world is full of frauds and crimes so ,to reduce it we introduce a new technique. In this technique the main concept is to hide the PIN number, and also to overcome the shoulder surfing attack. The shoulder surfing attack can be done by observing the PIN entry. The shoulder surfing can be done at the distance using the binoculars and nearby using the cameras fixing on the walls etc., to avoid shoulder- surfing and for providing security we can use steganography techniques. Steganography is the technique used to concealing the message with the another message. The secret message can be hidden using the another ordinary message. In this technique the PIN entered by the user can be hidden using the steganography technique so the shoulder- surfing can be avoided.

**KEYWORDS:** Authentication, human machine interaction, personalized identification number(PIN)entry, security, shoulder-surfing

### I.INTRODUCTION

In now-a-days ATM plays a vital role all over the world, by using an ATM customer can access the bank deposit or credit accounts in order to make a variety of financial transactions such cash withdrawals, check balances, credit mobile phones withdrawals these are the most common way to use an ATM. You simply get cash out of your account deposits are also growing in popularity ATM. You can deposit cash and checks, if your bank allow it balance inquiries simply show you how much you have this might be helpful if you need to know how much you can spend with your debit card ,transfer and payments might also be available depends on your bank. ATM skimming is a worldwide problem, skimming is the method used by the criminal to capture the data from the magnetic strip on the back of the ATM card. PIN capturing refers to a method of strategically attaching cameras and various other imaging devices to ATM. Once captured, the electronic data is encoded into fraudulent card and captured pins are used to withdraw money from customer accounts.

### II.RELATED WORK

Paper[1]-The dawn of monetary transactions have brought about a new economic and technological reform around the world. Along with the continuous development of technology, security concerns are also increasing. ATM or automated teller machine, which helps in transaction of money anytime, and anywhere, faces the threat of fraud and theft, and thus, there is a need for high security to providing safety to the consumer markets. Iris technology, which uses the iris patterns of an individual as an identity proof, along with radio frequency identification, is the best method to address and eradicate the threat involved in ATM transactions.



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Paper[2]-The growth in the electronic transactions have resulted in a greater demand for fast and accurate user identification and authentication. User has been largely depending on and trusting the Automatic Teller Machine (ATM) to conveniently meeting their banking needs. However, numerous advantages of ATM system, the ATM fraud has recently become more widespread. This system used to avoid the ATM robberies and wrong person misuses the ATM. So we proposed things such as sounds and actions of Breaking or damaging the machines threatening the ATM users denial of transactions and any other ATM user by invalid users or mask

Paper[3]-In this paper the Designing and of Security Based ATM system project with the observation in our real- life examples happened around us. This project overcomes the drawback of older technology used in our society. It deals with the security of ATM. When robbery occurs, Vibration sensor and MEMS sensor is used here which senses vibration produced from ATM machine and the movement of ATM. GSM is used for send the message to the police station and authority. In this paper they use PIC controller which is based on embedded system process real time data collected using the MEMS sensor and vibration sensor. When the movement of machine and the vibration is sensed the beep sound will occur from the buzzer. The use of camera is always in processing and sending video continuous to the pc and it will be saved. Here LCD board shows the status of our project. It will prevent the robbery occurs. Here, MP LAB tools are used to implement the idea and results are obtained.

## III.EXISTING SYSTEM

Clients commonly reuse the same customized identification number(PIN) for numerous frame works and in numerous sessions. At the point when client endeavor to enter the PIN in different frame work from numerous points view, at that point coordinate PIN passages are very disposed to bear suffering assaults as aggressors can proficiently watch pin section with disguise cameras. Where indirect pin passage techniques anticipated as counter activities are once in a while send in light of the fact that they request a heavier psychological workload for clients.

## IV.PROPOSED SYSTEM

Where commonsense of backhanded stick passage technique normally called as stegano-pin.with a specific end goal to accomplish security and convenience. Stegnano-pin is one of secured keypad .where pin can be securedly entered on display of assailant .In this undertaking utilizing PIC microcontroller16f877a,rfidreader,rfidtag,lcddisplay,keypad interface,GSM,EEPROM .characters from a to z alphabets like apple, bat, cat, dog, etc are randomly displayed in the monitor. The user first finds their allotted character words display in the monitor,then the character count is added to the last digit of the standard pin number.for ex:if a standard pin is 1213,and the allotted character is “A” for character A is ant if the count is 3,add the count to the standard pin, then the current password is 1216. The message is send to the user through the GSM when the amount transaction is completed and also malpractice of any other use.



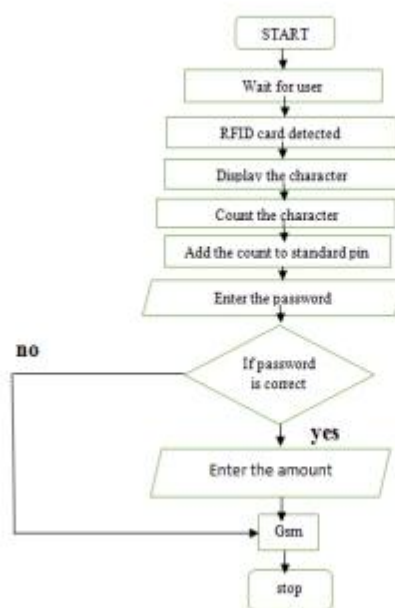
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## V.FLOW CHART



## VI. BLOCK DIAGRAM



## VII.POWER SUPPLY

Power supply unit is the main source for embedded modules to working with real time system. The main unit for hardware module. A power supply unit converts mains ac to low-voltage regulated dc power for the internal components of a computer. The power supply converts ac from your homes outlet into dc which your computer needs to run.it adjust the supplied voltage to the levels needed. It filters the voltages prevents any damaging power from reaching or take effect at the output.

## VIII.PIC MICROCONTROLLER:

PIC micro controller(16877a) is used most commonly used because of its flexibility, availability, low cost and serial programming capability. It supports both hardware pin interrupts and timer interrupt. Power consumption is very less and programming also easy compare to other micro controllers. It is available in various types. In early 1980 the micro-controller had a simple processor executing 12-bit wide instructions with basic I/O functions. These devices are known as low –end architecture. They have limited program memory and are meant for applications require simple interfaces functions and small programs data memories.



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## IX.RFID READER

A RFID (Radio frequency identification reader) is a device used to gathering information from an RFID tag. It is used to track individual objects. RFID reader scans the RFID card (ATM card) and pass the information to the controller. The tags used in variety of applications such as tracking of goods, toll collection, airport baggage tracking logistics etc..

## XI.RFID TAG

A radio frequency identification tag is an electronic tag that exchange data with a RFID reader through radio waves. Mostly RFID tag are made up of two main parts .The first is an antenna, which receives radio frequency waves. The second is an IC which is used for processing and storing data, as well as modulating and demodulating the radio waves received/sent by the antenna.

## XII.LCD DISPLAY

LCD is a liquid crystal display(LCD) is a thin flat panel display device used for electronically displaying information such as text, images and moving picture.LCD is used in computer monitors, televisions, instrument panels, gaming device etc,. Polarization of lights is used here to display objects.LCD display the current status of the details ,this displayed for password typing and accesses details of the account information

## XIII.GSM

GSM is the global system for mobile application, it is uses for send message through the entire world with low cost .in this module we have used to send the message to account authorized person when unauthorized person try our account accesses.

## XIV.EEPROM

EEPROM is non-volatile memory. In this project it stores the user password every time. It used for storing information for long life if power is loss.It is used for generate alphabet letter for random purpose. EEPROM values are maintained when power is shutoff. EEPROM is not affected if program memory is rewritten.

## XV.CONCLUSION

In this paper the pin security using steganopin technique is discussed for protecting the pin from the attacker.This method is very useful to the user because the attackers cannot trace the pin and it provide security to the user .

## XVI.FUTURE WORK

In future, we can develop a project for blind people also use this method because, we use a headset for hearing password. Senior citizens who are not legally blind but who have issues with their eyesight can derive benefit from talking ATM. A talking ATM, provides audible instructions so that person who cannot read an ATM screens can independently use the Machine. Deaf and blind have difficulty in communicating with others who don't understand their sign language, can independently use this talking ATM machine, where a wireless data glove is a normal cloth driving glove fitted with flexes sensor along the length of each finger and the thumb. The output from sensors is a streaming of data that vary with degree of bend. The sensor output is analog values, converted to digital and processed by micro controller, then it given to the voice chip to produce voice usingspeaker.



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