# Prevention of ATM Transaction from Anti shoulder Attack

[1]Sharang Dev Srivastava, [2]Fanish Tiwari,
[1]Graduate Engineer, [2]Graduate Engineer
Information Technology,
[1]SRM INSTITUTE OF SCIENCE AND TECHNOLOGY, Kattankulathur, Chennai, INDIA

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*Abstract : We know today's world is growing with new and improved technology there is a major issue going on regarding transactional fraud, stealing of information. In all of this major issue is a Credit card fraud issue. Credit Card fraudiscommitted using or involving a payment card, such as a credit card or debit card, as a fraudulent source of funds in a transaction. While users perform PIN-based authentication at ATM terminals are common attacks in nowadays. The solution I propose an ATM guard transaction mainly users have to enter two pins to make a transaction, First original pin, then the pin generated by the ATM guard. This approach protects the users from the shoulder-surfers, video recording ,and hidden camera*

*IndexTerms - ATM Guard, PIN.*

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## I. INTRODUCTION

An automated teller machine (ATM) is a computerized banking outlet that allows customers to compete basic transaction in a public area, Credit card or debit card can access the many ATMs. First ATM was put into use in north London, United Kingdom, on 27 June 1967. Without the need of human teller, customers can make cash withdrawals, check account balance and print passbooks just with the help of an ATM. Day by day the numbers of ATM cardholders are rapidly increasing, absurdly the transactional fraud is also increasing. Mainly the approaches used by the fraudsters are shoulder surfing, fake pin pad overlay, hidden cameras. Many major shoulder-surfing resistant methods have been taken but they are not successful in stopping these attacks. Main components of ATM are CPU, magnetic chip card, PIN pad and Securecryptoprocessor. The main purpose of ATM guard is to secure all the personal information, transactions illegally obtaining money from shoulder surfing attacks by generating the (one time password) OTP inside the application with or without the help of internet.

## 2. LITERATURE REVIEW

### 2.1 Research Background

As we know automated teller machine (ATM) frauds has been increasing day by day. Personal identification number (PIN) was made to overcome the security problem. This mechanism basically works on speed, memory and security. The most popular emerging technique seems to be fingerprint recognition system, alternative method against the PIN-based authentication. Fingerprint system has its own flaws. These are unique but they are not secret. We can leave our fingerprints anywhere with anything we touch. It can get damaged or changes with age. To overcome this we use ATM guard authentication.

The use of ATM guard authentication ensures that it can help the security of ATM. ATM guard authentication process involves technique, It is used for an online transaction that is provided by the many financial institutions, where Personal identification number (PIN) will be generated after every thirty seconds in the application

### 2.2 Existing Work

The existing ATM system uses transactions via the card and PIN-based system. Thereafter, it grants access to the customers to several services such as cash withdrawal and deposits, accounts or to account transfers from one bank to another, utility bills payments. The ATM system grants the PIN to every customer, where they can authorize their transactions. If there is a match, the systemgrants the access to all the services provided by the ATM. On the other hand, if there is any incongruity, the transaction process fails and the user is given two more opportunities to correct the PIN. If again an incorrect PIN is entered the third time, cards get blocked and all services will be blocked by the ATM.

## 3. PROPOSED SYSTEM

The proposed system is an improvement over the existing system, and, it is built upon the existing card and PIN-based system. ATM machine uses two factors authentications: ATM cards and Personal identification number (PIN). Passwords are easiest targets for the fraudsters. Therefore, many companies are trying to protect the data of their customers and employees. Biometrics is an alternative used by some organization for securing the data, given the expense, it is too costly to handle. The existing system is based on the card and PIN system. Many flaws are there in the existing system. But the proposed system is based on the mobile application where the OTP will be generated after every thirty seconds. In this application, the user will have to create a profile, where it will ask for all the personal details. OTP will be generated as soon as the user enters its username and password. The transaction will be performed only when OTP is entered correctly. If OTP is incorrect then again after every thirty seconds another OTP will be generated, the transaction can be processed.

**4.FLOW CHART OF PROPOSED SYSTEM**
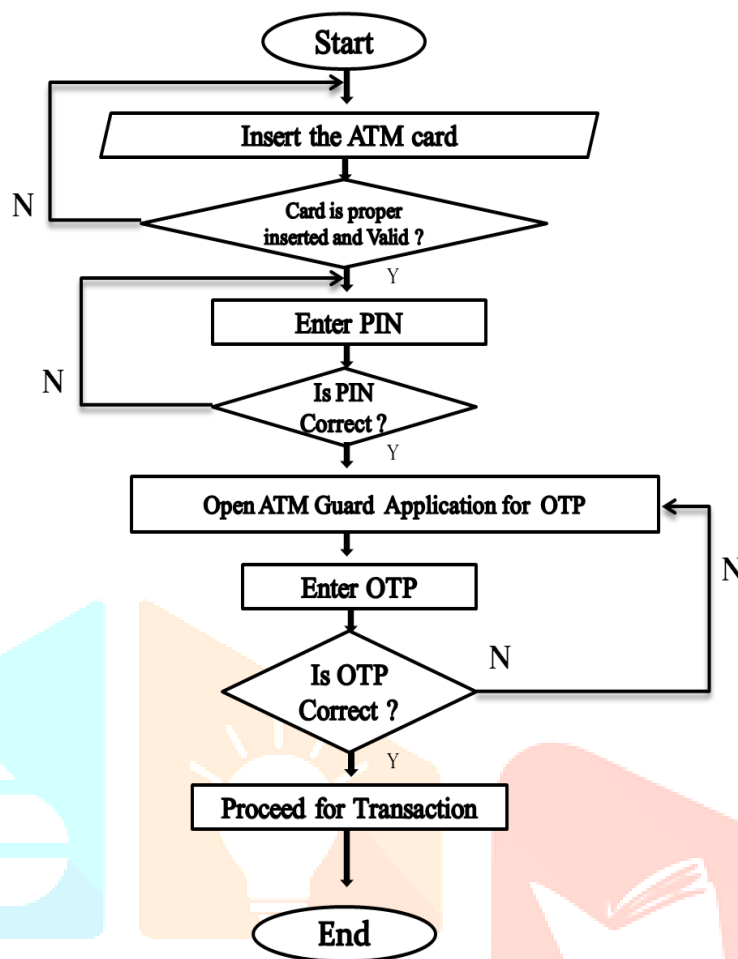


## 5. CONCLUSION

This proposed system will help us to ensure that all the ATM transaction will be secured. As we know Nowadays security system used in ATMs are totally PIN-based, Banks provide the user with the default four digits PIN which needs to be changed at the first. This makes the ATM security quit vulnerable, four digits PIN are also very much guessable. So in this it is suggested that ATM Guard will provide the OTP after every thirty seconds, where user have to enter the one time password (OTP) after the default password of the Bank OTP will be keep on generating after every thirty seconds, even if the users misses the OTP it can still obtain the another OTP. This system will provide the customer satisfaction and also a level of security to their transaction. Finally, it will limit all the risk from the anti-shoulder attack.

## REFERENCES

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