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Fingerprint Based Banking System

Mrs.Nazia.Z.Mulla¹, Shraddha Pandarkar², Payal Pawar², Hemraj Balwadkar², Bhakti Shelar²

Lecturer, Department of Computer Engineering, JSPM's Rajarshi Shahu College of Engineering, Polytechnic,

Tathawade, India¹

Student, Department of Computer Engineering, JSPM's Rajarshi Shahu College of Engineering, Polytechnic,

Tathawade, India²

ABSTRACT: Digital information has become a social infrastructure and with the expansion of the internet, network infrastructure has become an indispensable part of social life and industrial activity for mankind. In recent years, the demand for online banking has increased and the number of people who rely in online transactions has tremendously increased. Thus necessity for a reliable security for online transactions is ever than before. By combining biometrics and cryptography, biometric encryption has drawn great attention in the field of information security. Two levels of security are provided in this proposed design. Firstly we consider the security level at the client side by providing biometric authentication scheme.

I. INTRODUCTION

Security is one of the most important issues related with any field. Only authorized person have the access. Many methods are available for implementation of security. Use of "Biometrics" is one of the important methods of security.

Fingerprint Authentication is errorless system where records of fingerprints of authorized person already stored in the database. It is captured through sensor. When person try to access system, he is asked for fingerprints. Again it is captured through sensor and matched with records those are already stored in the database

II. PROPOSED SYSTEM

A. Bank Module The first isthelogin process. Initially the administratordoes the account creation for a new user. Once the request is approved theuser can open the account and an account numberis provided by the bank at the time of registration. The login process of user leadstouser page. The website provides the transaction details of the user, their account balance details about the bank and services provided by the bank.

B. Fingerprint In this module fingerprint of the registereduser is enrolledandverified. Fingerprint enrolment is done by entering the unique account number of the user provided by the bank atthe time of account registration. Fingerprint isverified at the transaction time and ifthefingerprintverified is authorized, he/she can withdraw themoney and can check the account balance.

III. LITERATURE SURVEY

Previous work on defending againstuser password - stealing attacks for the three major categories.

Phishing attacks are relatively new butvery effective. Therearetwo typical types of phishing. First, to prevent phishing emails astatistical machinelearning technology is used to filter the likely phishing emails; however, such a content filter does not always work correctly.

Blacklistsof spamming / phishing mail servers are notuseful when an attacker hijacks a virus - infected PC.

A path - based verification was introduced. Key distribution architecture and a particularidentity - based digital

signature scheme were proposedtomakeemailtrustworthy.Second,todefend against phishing websites, the authors in and developed

some web browser toolbarsto inform a userof thereputation and origin of thewebsites which theyare currentlyvisiting. The authors implemented password hashing with a salt as an extension of the browser, a web proxy, or astand – alone Java Applet. Regardless of the potential challenges considered

in an implementation, such passwordhashingtechnology has a roaming problem becausenot everyweb browser installs such an extension or sets theweb proxy.

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Scope of the project:

The scope of the project is confined to store the image and store in the database. When a person has to be identified the images stored in the database are compared with the existing details and than virtual password is send to user mobile to check twice.

Architectural model (project block diagram):



Technical requirement:

HARDWARE	REQUIREMENTS
Processor	Core 2 duo and abo
Ram	Minimum 512 MB
Device	Fingerprint
Secondary storage	Minimum 80 GB
SOFTWARE	REQUIREMENTS
Operating System Server	Windows XP or later
Database Server	Oracle or MYSQL
Tools and environment	jdk1.6
Code Behind	Java and JMF Framework

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Technical Language: Java

BackEnd :MYSQL 5.5

Advantages of project:

1) Very fast and accurate.

2) No need of any extra manual effort.

3) High Security using virtual and fingerprint.

4) Just need a little knowledge to operate the system.

Limitations of project:

Fingerprintdevice should be attached in Computer.
Time Consuming because of 2 level security.

V. CONCLUSION

In this project, we introduce a security system for preventing unauthorized access of a person's bank account by an attacker when the bank card is lost or when the password is stolen. The newly introduced authentication levels such as a virtual password and finger print verification ensure stight security. This enables the authorized user to access his account securely and provides enhanced security to the Bank system.

REFERENCES

[1]. Bharti Patil,Bhagwan S. Chandrekar , Mahesh P. Chavan , Bhavesh S. Chaudhri; RBI 3X-Fingerprint Based BANK System, IJARCCE Vol. 5, Issue 3, March 2016.

[2]. Sneha Ramrakhyani, Manisha Meshram, Lata Chandani, RasanjaliGothe, Parul Jha; Fingerprint Based BANK System: Survey, IJIRSET Vol. 6, Issue 11, November 2017.

[3]. Aruna R, Sudha V, Shruthi G, Usha Rani R, Sushma V; BANK Security using Fingerprint Authentication and OTP, IJERECE Vol 5, Issue 5, May 2018.

[4]. Steffy Mathew, Mohammed Arshak C, Muhammed Ajmal KP, Mohammed Fazil KK, Honey Susan Eldo; Fingerprint Based Security System for BANK, IRJET Volume: 06 Issue: 06 | June 2019.

[5]. URANG Awajionyi S. and Ojekudo Nathaniel A; Securing Bank System) Transaction Using Biometric Fingerprint, AJER Volume-9, Issue-9, pp-36-43.











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