

# Analysis of Face Recognition Security Features and Customer Friendly Interface in Internet Banking System

Ms.Amani Gorre<sup>1</sup>, Mr. Dinesh Bejjanki<sup>2</sup>, Ms.Lavanya Dimki<sup>3</sup>, Ms.Kavya Kasthuri<sup>4</sup>

Department of Computer Science & Engineering

Balaji Institute of Technology & Science, Warangal, Telangana, India.

## ABSTRACT:

The main objective of face recognition security approach is to provide the customers with a simple and friendly interface to perform the transactions by customer easily. The interface options and modules of this application will be available for the customer in their respective languages such that even a uneducated customer can login to his/her account and perform transactions and the other main feature of the project is to focus on the security issues, login credentials, hacking of the account and cracking the passwords. The main feature of this approach is reducing the security attacks on the online banking users. They can install a face recognition feature to the online banking system to avoid unauthorized persons. This reduces the issue of hacking of the accounts of customers and keeps the amount of customers safe.

**Keywords:** Security, Transactions, User-friendly.

## 1. INTRODUCTION:

Online banking or internet banking is an electronic payment system which enables the customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. The online banking system will typically connect to or be part of the core banking system operated by a bank and is in contrast to branch banking which was the traditional way customers accessed banking services.

Online banking is a web application or a software which provides personal and corporate banking services offering features such as viewing account balances, obtaining statements, checking recent transaction and making payments, transferring the money, generation of the debit card pin etc. Access is usually through a secure web site using a username and password, but security is a key consideration in internet banking and many banks also offer two factor authentication.

There is a need of improvised internet banking system because of the present digital world and demand in the online banking sector and also due to the security issues of transactions and privacy. This project is aimed at developing an Online Banking for customer. The system is an online application that can be accessed throughout the organization and outside as well with proper login provided. This project provides the customer with a simple and easy interface with the basic banking terminology with which a normal uneducated customer may also perform the transactions in their respective languages without any interruptions.

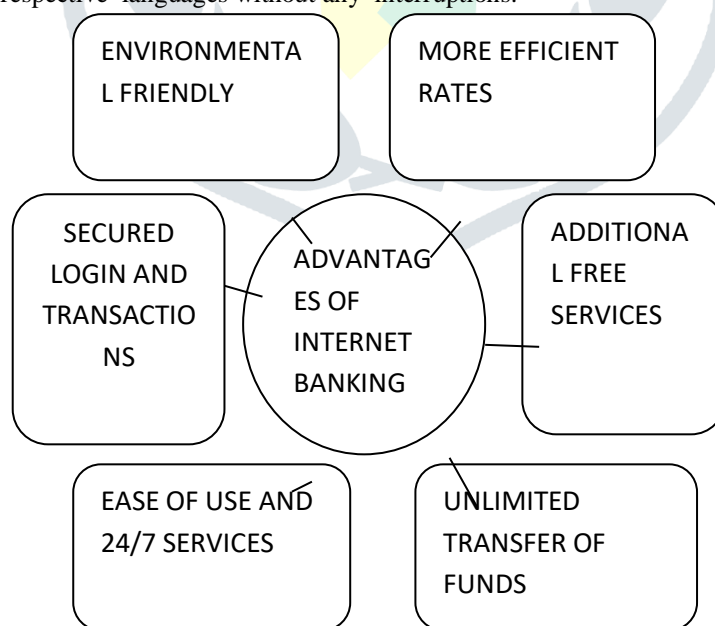


Fig.1.0: Architecture of internet banking.

## 2. LITERATURE SURVEY:

The existing system of the online banking is not so customer friendly. The banking interface or the web pages in the application are filled with the banking terminology and the options in the system are confusing which may not understand by the common people or uneducated customers of the bank. So it becomes problematic for the customers.

In online banking sector the major issue that is commonly facing is the security issues like hacking the accounts of the users or cracking the User Id and passwords. This is due to the failure of the security features of the existing online banking system. The existing online banking system does not provide any extra security features to avoid hacking and to maintain the customer privacy.

- Lack of security of data.
- More man power.
- Time Consuming.
- Consumes large volume of pare work.
- Needs manual calculations.
- No direct role for the higher officials.

The other main drawback of the existing system is that the language in which the online banking applications are available , its available in only English language . If a person who don't know English may not be able to use the online banking services such that the online banking system may not reach to the common people.

These are the factors which may also show the effect on the customers to use the online banking services. These issues are resolved in the proposed system.

### 3. FACE RECOGNITION SECURITY FEATURES

The proposed system of the project will overcome the drawbacks and disadvantages of the existing system .As mentioned in the proposed system the user interface will be more customers friendly which will be developed by using the languages like HTML5, CSS, PHP, and JavaScript. Every customer is provided with their own User Id and Password with which the customer should login to his/her account.

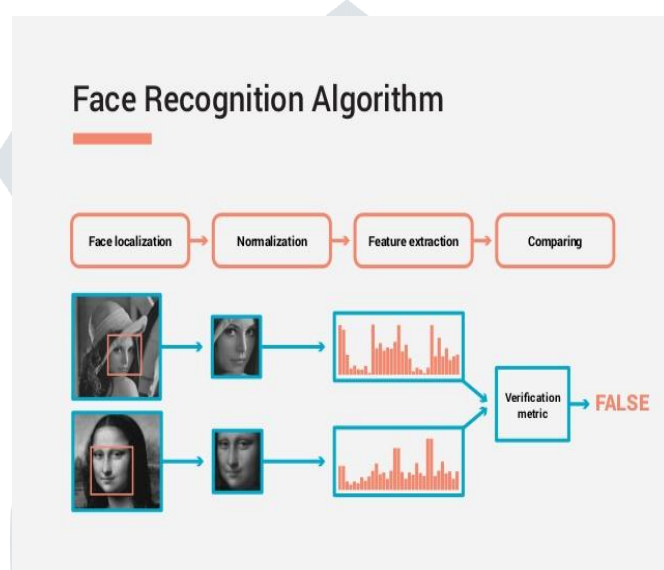


Fig.2.0: Face recognition structure.

This system is highly computerized in which the data of user accounts will be secured with high accuracy that even reduces the machine damage and human made errors and this existing system is highly efficient to offer best services to the customers as well as banks because it has the customer friendly access to that consumes less time when compared to the existing online banking system.

The disadvantage of the existing system that is the language, here it is solved by making available of the banking interface to the customers in their own language which makes even the uneducated customers also to use the online banking services such that we may achieve maximum customers to use the online banking services and that such that the services become even more customer friendly. This is achieved by finding out the location of the customer or finding the mother tongue of the user or by providing a option in settings like language options to choose of customer's wish, such that the application becomes more customer friendly and users likely to be used.

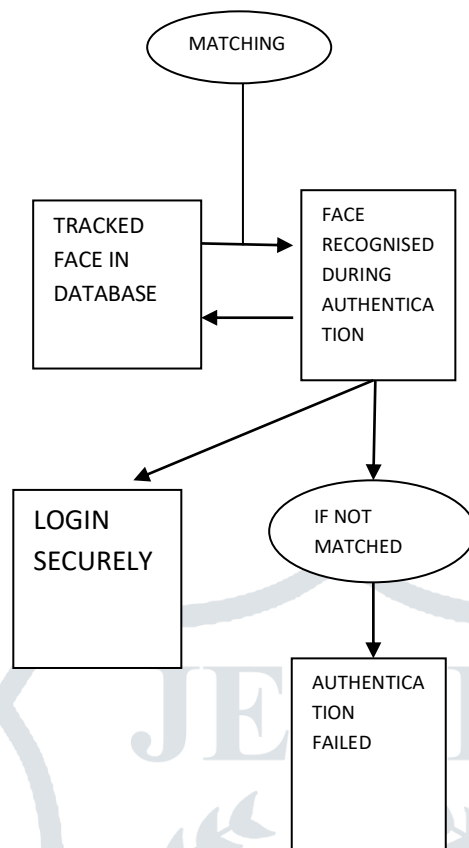


Fig.3.0: Authentication process.

The other main issue to be overcome in the proposed system is that the security issues, to avoid the unauthorized logins into the users accounts a new security program should be installed at the client side that is Face Recognition tool. Initially user should upload his facial picture into the bank database during the account opening for the new customers and for existing account holders a new update or popup should be sent saying that to upload the customer's facial picture. Once the user uploads the data then from the right next login of the account, the person who is trying to login into a particular account then the person's face is compared with data already available in the bank's database using the facial reorganization algorithms and if both are matched then user is authorized and he/she can login into the account securely and if the faces are not matched then login request should be rejected. The other advantage of this feature in online banking sector is we can even identify the hackers who are trying to login into the users account. If a person is trying to login into an account and the face is not matching and if this happens many times with same person who is trying to login into the account, the picture of the person should be saved into the database of the bank. If the same person is trying to login into the multiple accounts we can consider him/her as a hacker and we can easily catch him out.

Such that we can control and avoid then unusual logins of user accounts eventually we can eradicate the hacking hence, the online banking sector will become more secure and provides both smooth and secure banking experience to the customers.

#### 4. CONCLUSION:

The online banking sector has been emerged in such a way that customers are increasing day by day and users of the online banking are in millions all over the world. Online banking or internet banking is called in many other ways like digital banking or E-banking. Every online banking application's primary goal should be providing the safe and secure banking facility to the user account such that the customer trusts the services.

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#### AUTHOR'S BIOGRAPHY:



Amani Gorre student of B.Tech in Computer Science and Engineering, Balaji Institute of Technology & Sciences, Warangal, Telangana, India.



Dinesh Bejjanki student of B.Tech in Computer Science and Engineering, Balaji Institute of Technology & Sciences, Warangal, Telangana, India.



Lavanya Dimiki student of B.Tech in Computer Science and Engineering, Balaji Institute of Technology & Sciences, Warangal, Telangana, India.



Kavya Kasthuri student of B.Tech in Computer Science and Engineering, Balaji Institute of Technology & Sciences, Warangal, Telangana, India.