Enhanced Inventory Management System Using Face Recognition Method

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Abstract- *Enhanced Inventory management system using face recognition method is a model of new alternate channel of banking. Now days, the number of transaction frauds in traditional security system.(such as passwords) are rapidly increasing, and the necessity for a strong security method become inevitable. This System provides, banking transaction with strong security and also a cardless one as customers is in need of those methods for their easy banking transaction. This system will never be offline due to connectivity problem, as in the case of card based transaction. Most importantly when you need cash on an urgent basis but your card is lost then this system will come to you as a rescue. Credits cards can save you time and trouble no searching for an ATM or keeping cash on-hand. Face recognition statements can help you track your expenses. Face recognition advances are quick and get original create card person flowed. Account holders who respond to such e-mail messages are directed to a fake web site where they are asked to type in account numbers, passwords and other personal banking or credit card information. Then, in a matter of hours, the criminals can drain your bank accounts, using your passwords to authorize the electronic transfer of funds to accounts they control. This system created by utilizing the most effective and secure backend SQL Server 2008 and the most broadly acknowledged web situated and also application arranged .Net Platform 2010.*

I. INTRODUCTION

Image processing is a method to convert an image into digital form and perform some operations on it, in order to get an enhanced image or to extract some useful information from it. It is a type of signal dispensation in which input is image, like video frame or photograph and output may be image or characteristics associated with that image. Usually Image Processing system includes treating images as two dimensional signals while applying already set signal processing methods to them. It is among rapidly growing technologies today, with its applications in various aspects of a business. Image Processing forms core research area within engineering and computer science disciplines too.

Image processing basically includes the following three steps.

Importing the image with optical scanner or by digital photography. Analyzing and manipulating the image which includes data compression and image enhancement and spotting patterns that are not to human eyes like satellite photographs.

II. PURPOSE OF IMAGE PROCESSING

The purpose of image processing is divided into 5 groups. They are:

- Visualization - Observe the objects that are not visible.
- Image sharpening and restoration - To create a better image.
- Image retrieval - Seek for the image of interest.
- Measurement of pattern – Measures various objects in an image.
- Image Recognition – Distinguish the objects in an image.

III. PROPOSED SYSTEM

In this proposed system, Credits cards can save you time and trouble no searching for an ATM or keeping cash on-hand. Face recognition statements can help you track your expenses. Face recognition advances are quick and get original create card person flowed. Account holders who respond to such e-mail messages are directed to a fake web site where they are asked to type in account numbers, passwords and other personal banking or credit card information. Then, in a matter of hours, the criminals can drain your bank accounts, using your passwords to authorize the electronic transfer of funds to accounts they control.

ADVANTAGES:

Face recognition credit cards have a special numerical code used by many merchants to verify that the card is in your possession when you make purchases by phone or on the Internet.

These 3- or 4-digit numbers are found at the top right corner of the card or on the back, following the credit card number, near the space where you sign the card.

If your card number and expiration date were stolen, but not card itself, thief would not have access to this security code.

IV. ARCHITECTURAL DIAGRAM
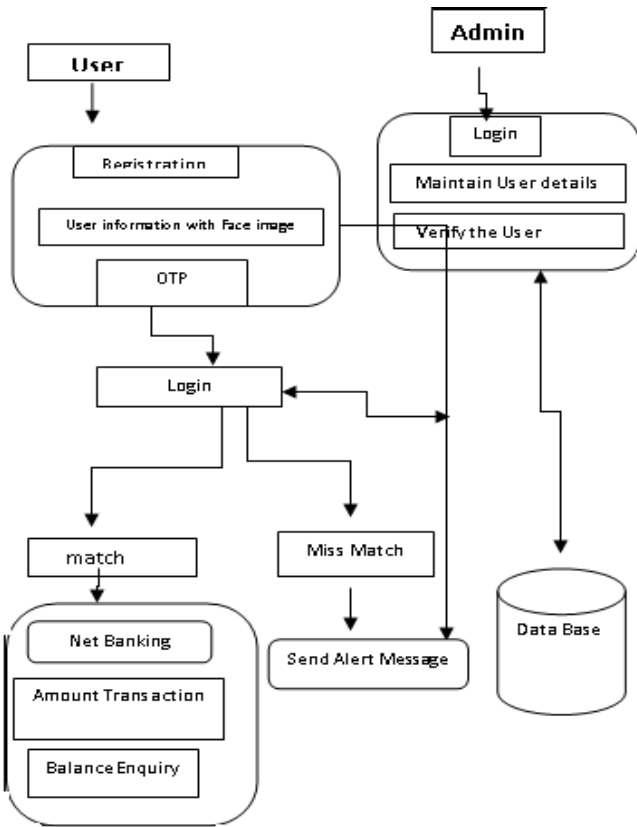
V. MODULES

- o   System model.
- o   Face recognition model.
- o   Encryption Model
- o   Performance evaluation

System Module:

In this module, we have find the register and upload your details datasets.

The uploaded datasets contains of registration form. In model will been register we can identify the personal information which are uploaded online banking website. Then these database are converted into all security processing. Then data we consider to detect the occlusion and analysis the missing data.
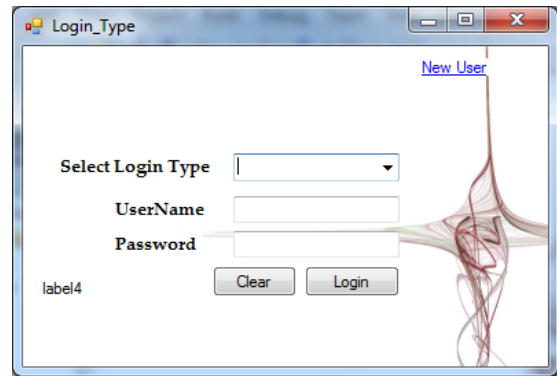

Face recognition module:

Facial recognition (or face recognition) is a type of biometric software application that can identify a specific individual in a digital image by analyzing and comparing patterns. Facial recognition systems are commonly used for security purposes but are increasingly being used in a variety of other applications. This module we analyze the face extra pixels that are not present in the gallery image and these pixels are known as occlusion pixels. Analyze the subspace points and give the nodal points. In this module we analyze the non-occlusion points and perform the occlusion removal process.
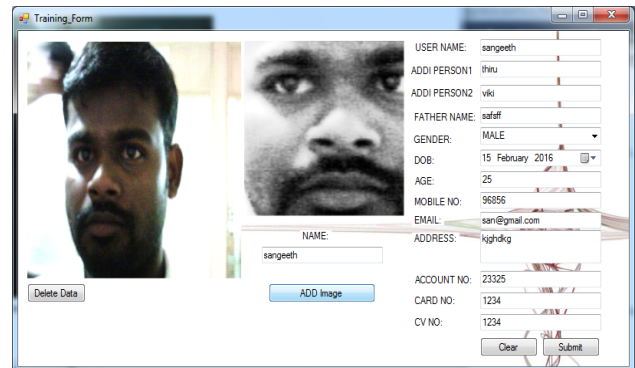

Encryption Model:

The protection of multimedia data is becoming very important. The protection of this multimedia data can be done with encryption. There are so many different techniques should be used to protect confidential image data from unauthorized access. Security is an important issue in communication and storage of images, and encryption is one the ways to ensure security. Image encryption techniques try to convert original image to another image that is hard to understand; to keep the image confidential between users, in other word, it is essential that nobody could get to know the content without a key for decryption.
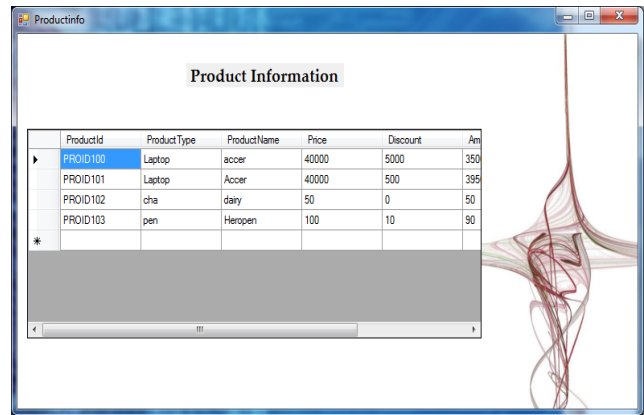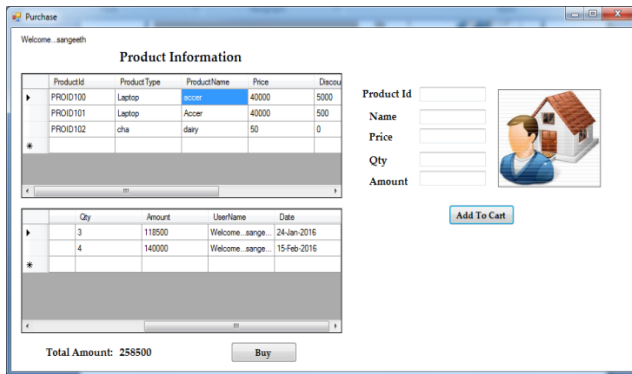
Performance module:

It's having been highly security for banking process we can evaluate the performance of proposed algorithm. This algorithm able to perform with good performance under substantial occlusions, expressions, and small pose variations. Provide best accuracy results in face recognition.

VI. SCREEN SHOTS
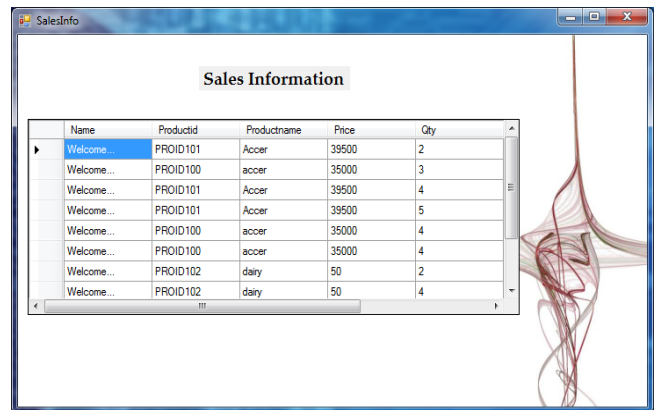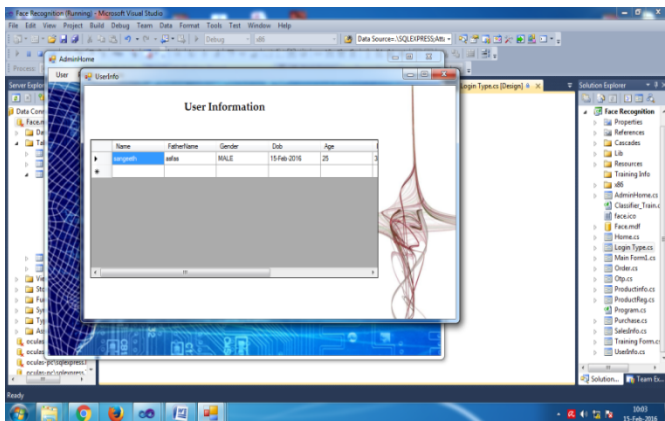
VII. CONCLUSION

3D face recognition has matured to match the performance of 2D face recognition. When used together with 2D, it makes face a very strong biometric: Face as a biometric modality is widely acceptable for the general public, and face recognition technology is able to meet the accuracy demands of a wide range of applications. While the accuracy of algorithms have met requirements in controlled tests, 3D face recognition systems have yet to be tested under real application scenarios. For certain application scenarios such as surveillance system and access control, systems are being tested in the field. The algorithms in these application scenarios will need to be improved to perform robustly under various occlusion and masked projection. The proposed system is able to work with good performance under substantial occlusions, expressions, and small pose variations. When we examine the failures, we see that if occlusions are so large that the nose area is totally invisible, the initial alignment becomes impossible. Similarly, if the face is rotated by more than 30 degrees, it becomes difficult to accomplish the initial alignment.

VIII. FUTURE WORK

In our future work, we plan to develop alternative initial alignment techniques. Furthermore, the automatic

occlusion detection stage can also be improved: As a future direction, we plan to model occlusions better, so that the overall performance of the system can be increased. We extend our work to less limited registration approach and Independent of nose visibility. Then Occlusion invariant recognition system has following aspects,

- Automatic occlusion detection and removal.
- Discriminative features other than depth information.

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