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BANK TRANSACTION USING IRIS AND BIOMETRIC

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Abstract - Exact correlation of contactless 2D unique finger impression pictures with contact-based fingerprints is basic for the achievement of developing contactless 2D unique finger impression innovations, which offer more sterile and distortion free procurement of unique finger impression features. Convolutional neural systems (CNN) have demonstrated comment capable capacities in biometrics acknowledgment. Be that as it may, there has been nearly nil endeavor to coordinate unique mark pictures utilizing CNN- based methodologies. This paper builds up a CNN- based system to precisely coordinate contactless and contact-based unique mark pictures. Our structure right off the bat prepares a multi-Siamese CNN utilizing unique finger impression details, individual edge guide and particular district of edge outline.

***Key Words*:** Biometric, samples.

1. INTRODUCTION

The related work on fingerprint sensor interoperability and CNN- based image recognition and representation. There have been many promising studies son the fingerprint sensor interoperability. It has investigated fingerprint sensor interoperability using a multi-sensor fingerprint database acquired from different contact-based fingerprint sensors. In the authors proposed an 'average' deformation model based on thin-plate model to address contact- based fingerprint sensor interoperability problem. Contact-based fingerprint sensor interoperability problem was also investigated. To investigating fingerprints sensor interoperability, the challenges in contactless to contact-based fingerprint cross comparison have been detailed.

2. PROBLEM STATEMENT

Developing a secure and efficient system for bank transactions utilizing iris and biometric authentication presents multifaceted challenges. These include ensuring high accuracy and reliability in iris recognition, safeguarding biometric data privacy, integrating seamlessly with existing banking systems, addressing user acceptance concerns, and complying with regulatory frameworks. Balancing these considerations is crucial to develop a robust solution that enhances security.

3. OBJECTIVES OF THE PROJECT:

CNN-based framework to address the problem of accurately matching contactless 2D fingerprints with respective contact-based fingerprints. Our framework incorporates a robust multi-Siamese CNN to learn fingerprint minutiae feature correspondences. The feature vectors generated from the multi Siamese CNNs are concatenated to form more robust fingerprint deep feature representation, which is expected to incorporate more information to describe the similarities between contactless and contact-based fingerprints.To investigating contact-based fingerprints sensor interoperability, the challenges in contactless to contact-based fingerprint cross comparison have been detailed.

4. SIGNIFICANCE OF PROJECT

Enhanced Security: Implementing iris and biometric authentication significantly reduces the risk of unauthorized access and fraudulent transactions, bolstering the overall security of bank transactions.

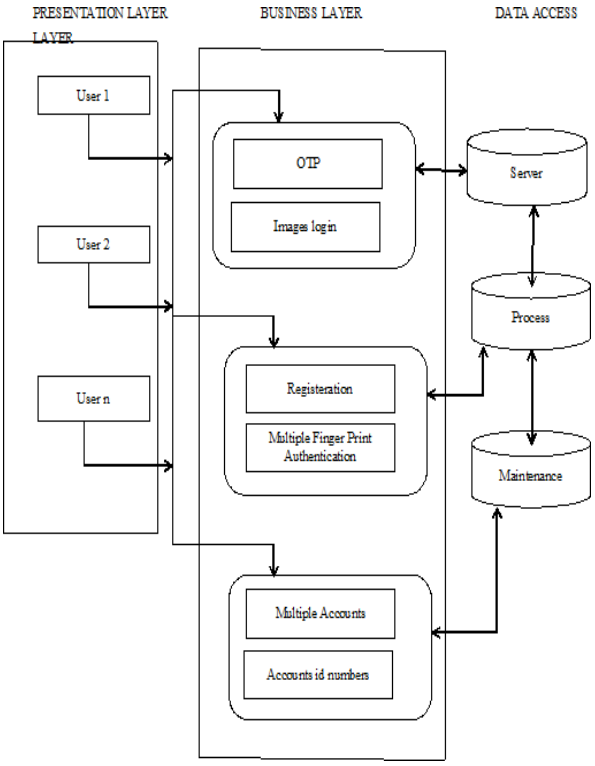
Improved User Experience: By replacing cumbersome password- based authentication with convenient biometric methods, the project enhances user experience, reducing friction in the banking.

Fraud Prevention: Iris and biometric authentication systems offer a highly reliable means of verifying user identities, thereby effectively mitigating fraud attempts and protecting both customers and banks.

Compilance: Adhering to regulatory requirements, such as GDPR and banking industry standards, ensures legal compliance and builds trust among customers regarding the responsible handling of their sensitive data.

Technological Advancement: The project showcases the bank's commitment to leveraging cutting-edge technology to stay ahead in the industry, positioning it as a leader in innovation and security.

5.ARCHITECTURE DIAGRAM



Implementing iris and biometric authentication significantly reduces the risk of unauthorized access and fraudulent transactions, bolstering the overall security of bank transactions Implementing iris and biometric authentication significantly reduces the risk of unauthorized access and fraudulent transactions, bolstering the overall security of bank transactions..

6.WORKING

Making a transaction within a bank system utilizing iris and biometric authentication involves a series of secure steps to authenticate the user and ensure the integrity of the transaction process. Initially, the user initiates the transaction, typically by visiting an ATM, accessing a mobile banking app, or interacting with a bank teller. Upon initiating the transaction, the system prompts the user to verify their identity using biometric authentication methods, such as iris scanning or fingerprint recognition. Once the user's identity is successfully authenticated, the system proceeds to process the transaction, which may involve actions such as withdrawing cash, transferring funds, or making payments. Throughout the transaction process, stringent security measures are employed to protect sensitive information and prevent unauthorized access. After the transaction is completed, the system provides confirmation to the user, ensuring transparency and reliability in the banking experience. By leveraging iris and biometric authentication, the bank system enhances security and user confidence, offering a seamless and secure transaction process for customers.Banking transactions have evolved significantly over time, shifting from simple deposits and withdrawals to complex digital transfers. Understanding this evolution provides insight into how bank transactions work.

7.RESULT

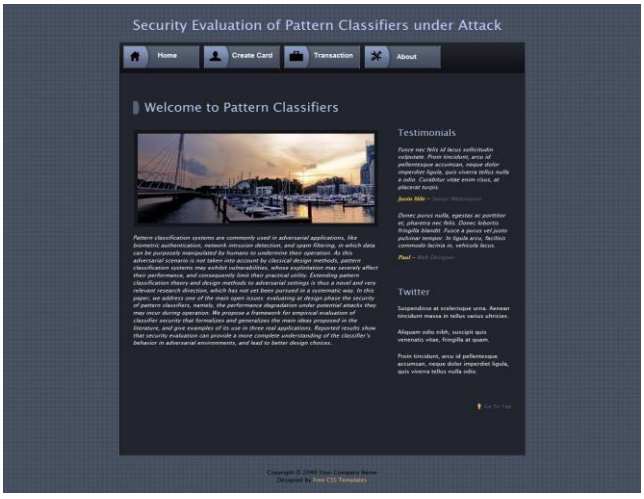


Fig 7.1-HOME PAGE

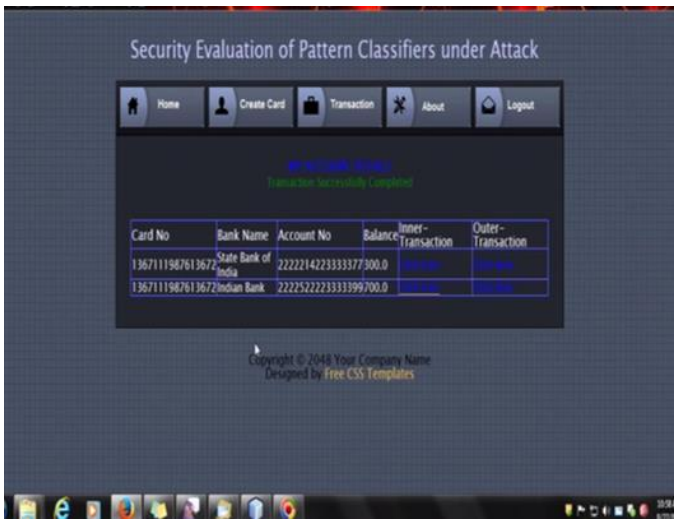


Fig 7.2 USE REGISTRATION

Fig 7.4 Amount Transaction

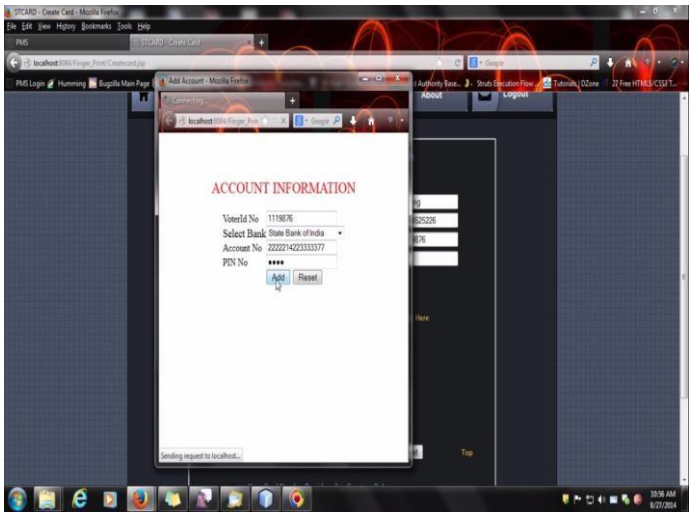


Fig 7.3 ACCOUNT INFORMATION

Fig 7.5 BIOMETRIC SAMPLES

8.CONCLUSION

We have displayed an uncommonly outlined multi Siamese unique mark cross examination system to precisely coordinate contactless to contact-based fingerprints. In the best of our insight, this is the main such endeavor to address testing cross-unique finger impression examination issue utilizing profound learning. Our structure point by point in this paper joins most solid particulars includes alongside the individual edge stream maps to guarantee heartiness in the learning particulars highlight correspondences. . A multi-Siamese CNN with separate mindful misfortune work is utilized to produce the unique mark include portrayal vectors. What's more, the hand-make highlights (unique mark center point) is used to produce more vigorous unique mark profound component portrayal.

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