NEW GENERATION MULTILEVEL BASED ATM SECURITY SYSTEM

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Objective

The primary objective of the project is

- Face recognition based new generation ATM system used for mainly in security purpose and detect the unauthorized person.
- If the person is unauthorized means, the message is sent to the authorized one.

Problem definition

- Now a days all peoples are using ATM, lot of people misses their ATM with their PIN it leads to misuse their accounts.
- Face recognition based user authentication system with SMS alert.

Existing System

- Existing ATMs typically provide instructions on an ATM display screen that are read by a user to provide for interactive operation of the ATM.
- Having read the display screen instructions, a user is able to use and operate the ATM via data and information entered on a keypad.

Disadvantage :

- Password protection method is used which is not more secure.

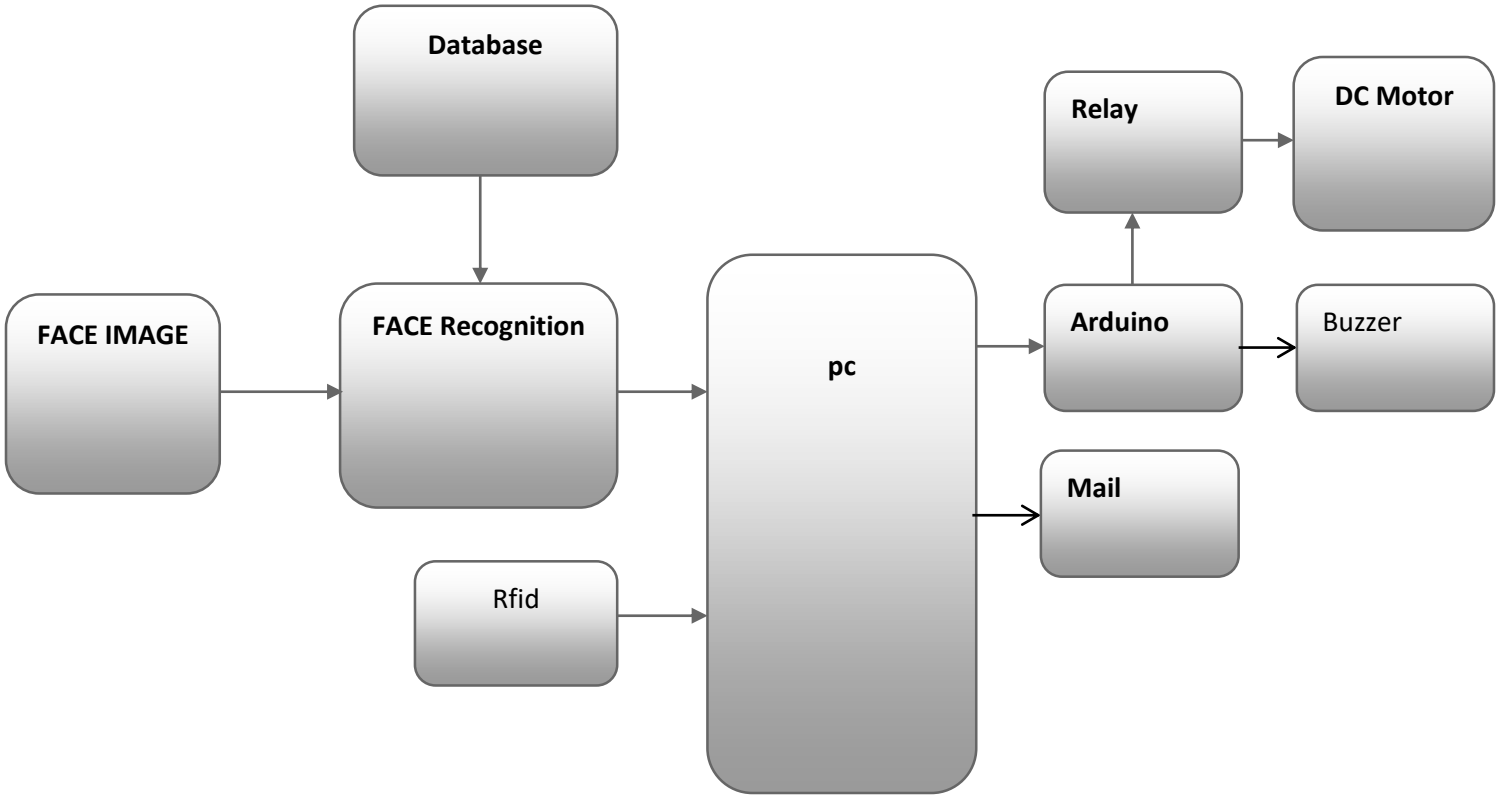
Proposed System

- Face Recognition based user authentication system with SMS alert.

Advantage :

- Higher security
- Easily find out theft identification

Block diagram



Modules

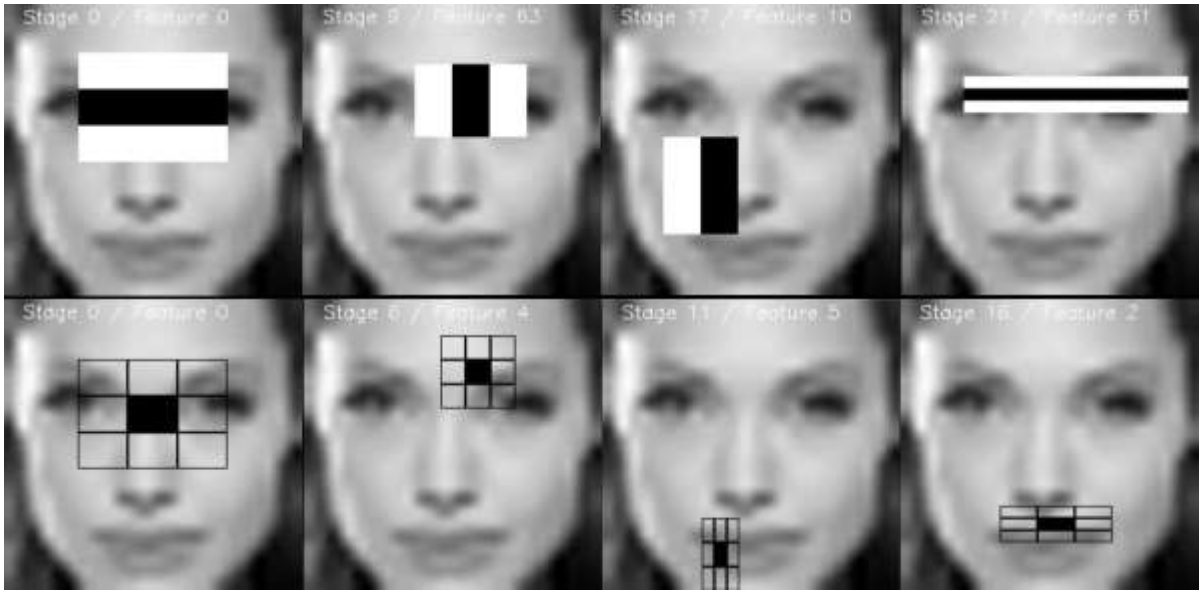
1. RFID Process
2. Face Detection
3. ATM Process

1.RFID Process

The initial process of this model is to scans the user's ATM card using RFID reader.

2.Face Detection

The user’s face is scanned and then scanned image is finally leads to detection in which the scanned face is compared with the databases.



3. ATM Process

Once the scanned face is matched with databases then the particular user can have process like transaction, withdrawal, etc. This may lead more secured process.

HARDWARE REQUIREMENTS

- Arduino Uno
- DC Motor
- Buzzer
- RFID
- Relay

SOFTWARE REQUIREMENTS

- Python
- openCV

CONCLUSION

- The combination of biometrics will always result in high security. The face and fingerprint ID as combined, they result in a hard-secure authentication.
- Now a days, they are used in military bases and government sectors for secure authentication, and their application is still growing.

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Thank you