Biometric Based Human Information and Voting

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Abstract
Biometric based Human Information and Voting is a peculiar process to verify and store the whole details of any person only through his fingerprint. Then it also allows the person to cast his vote as an application model. Here the coding part is done in a software named LabVIEW which a graphical programming language where the execution is done in sequential way. MyDAQ is a Data Acquisition Device used to implement the whole process.
Keywords: *LabVIEW, MYDAQ*

I.   Introduction

The main motto of our project is to verify the complete details of person through his fingerprints and furthermore as an application it is/can be implemented in the voting process. Firstly the fingerprint of the person is read through software named SFG and one by one the templates are saved according to the name. Then any of saved templates are given as input to the fingerprint sensor module. As soon as authentication is verified the details of the person along with the photograph are displayed. As mentioned above then the voting process is enabled i.e. proceed to vote. After the person has given the votes total number of votes given by the candidate is also displayed.

II.   Fingerprint Technology

Fingerprint recognition is really just a type of associative memory with similarity measure. Among all the biometric techniques, Fingerprint based identification is the oldest method which has been successfully used in numerous applications because of their uniqueness and reliability.

VOTING SYSTEM:

Indian voting machines use a two-piece system with a balloting unit presenting the voter with a button (momentary switch) for each choice connected by a cable to an electronic ballot box. An EVM consists of two units, control unit and balloting unit. The two units are joined by a five-meter cable. The control unit is with the presiding officer or a polling officer and the balloting Unit is placed inside the voting compartment.

III.   Proposed Method

The present existing method to store the information of an individual is just through the adhaar card details or passport or else any survey conducted by the government. In this project we are storing and providing the complete details only through the fingerprint so that no one can access our information until our fingerprint inputs are given. This process can further be implemented in the voting procedure to avoid the issue of fake votes being given.
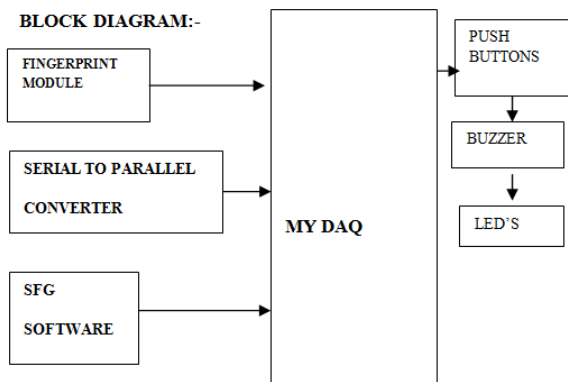
IV. Results

The programming part of our project was done in a software named LabVIEW. It is a dataflow programming language where in the icons are dragged and dropped and the execution is done in a sequential manner.
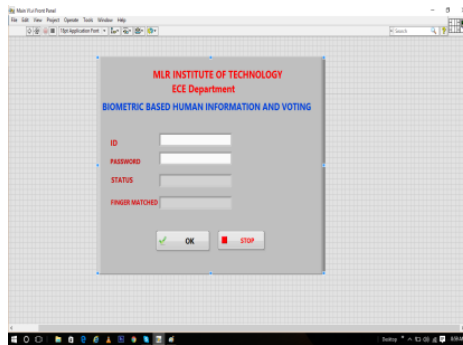

- ✓ First will be having the Main login VI.
- ✓ Login VI consists of username, password, status button, ok button and also the stop button.
- ✓ If username and password is entered by the person and if we run the program then it will give us the status.
- ✓ If both the username and password are correct the status is valid username and passwords. Then we haveto press the OK button and it will open the fingerprint VI.
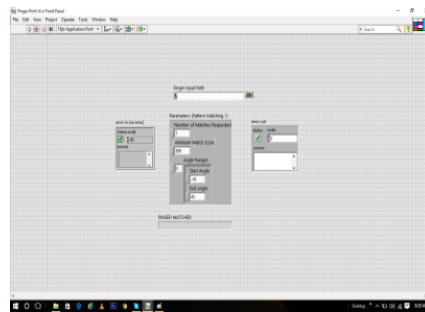

- ✓ As already the fingerprints are saved.
- ✓ We have to give the fingerprint path which one we want to select or we can directly give the concerned fingerprints as saved.
- ✓ After this it asks us select the region of interest.
- ✓ If the fingerprint is matched then it will open the fingerprint matched VI.
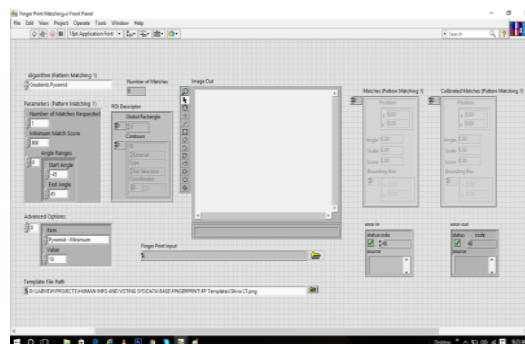

- ✓ If the fingerprint is matched then it will give image of a person and then it will go to the details of a person VI.
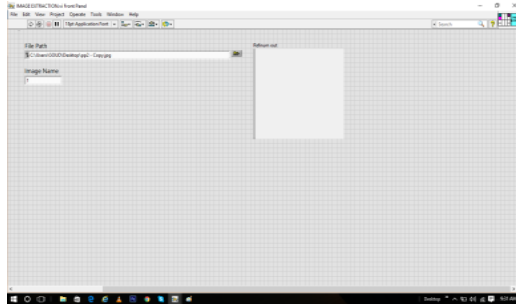
- ✓ To display the image we areusing the IMAQ and Refnum icons.
- ✓ First we have to give the file path of image which want to select.
- ✓ And also the image name.
- ✓ Then refnum will give the image output.
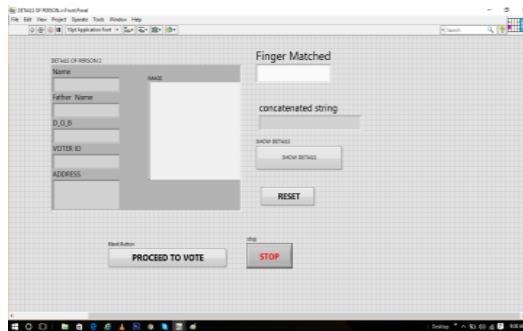
- ✓ The details of a person VI will display the details like name, father name, date of birth, voter id, address, finger matched, concatenated string and image of person is also displayed.
- ✓ If we press on the show details button then it will display all the details of person.
- ✓ If all the details of the person are correct then there is a button called proceed to vote.
- ✓ If proceed to vote button is pressed then it will open the voting for candidate VI is opened.
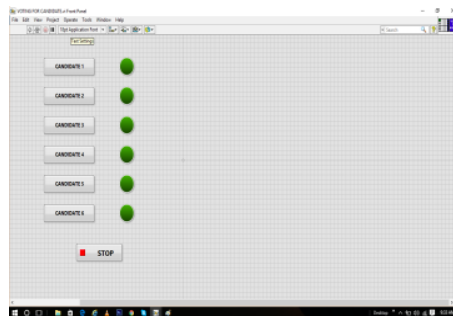
- ✓ If the candidate is voted then the boolean .
- ✓ For one person it will glow only one time.
- ✓ It will not allow to vote the one person for several times.

V.   Conclusion

Hence we conclude saying that it is an innovative idea to store the information only through the fingerprints. This is very secure and has no conflicts futher. It also helps many departments to store the information in this way so that they easily access the details of any person they want to.

Future Scope

1.This project can be implemented as a mobile application where-in total security is provided.
2. Memory of finger print module can be expanded .We can use a 1mb flash memory finger print module for increasing the capacity.
3. It can also be used in airport security system.

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