

Face recognition-based Attendance Monitoring System

Dr.A.Suresh, Mr.T.Krishnaprasath, M.Nandhakumar, A.Rajakeerthi

Abstract— The main purpose face recognition-based attendance monitoring system for upgrade the current attendance system into more efficient and effective. The human face uniquely identify an individual. Therefore, it is used to trace identity as the possibilities for a face to deviate or being duplicated is low. In this project, face databases will be created. Then, during the attendance taking session, faces will be compared against the database to seek for identity. Attendance information regarding an individual can be accessed from a web server .

Keywords— face recognition , Attendance information, face to deviate, database etc.

I. INTRODUCTION

To reduce the Man power and get the accurate results for the Attendance management using Face Recognition. This project is very usefull to Public Industry, Education Institution and Other Sectors. It is Real time application Project.

II. EXISTING SYSTEM

- Manual Attendance,
- Biometric(Finger Print),
- Palm Scanner,
- ID scanning and swipe,
- Iris scanning are available in Current systems.

Disadvantages Of Existing System

- Wrong input are entered, the application resist to work.
- Manual Record maintain is too difficult.
- Twins identification is difficult to other systems.
- Recognition Accuracy is less.
- Retrieval of the information is not as easy.
- Time Editing and Server Editing is not available in

Dr.S.Suresh, Professor, Department of Computer Science and Engineering, Nehru Insitute of Engineering and Technology, Coimbatore, Tamilnadu, India.

Mr.T.Krishnaprasath, Assistant Professor, Department of Computer Science and Engineering, Nehru Insitute of Engineering and Technology, Coimbatore, Tamilnadu, India.

R.NaveenKumar, UG Scholar, Department of Computer Science and Engineering, Nehru Insitute of Engineering and Technology, Coimbatore, Tamilnadu, India.

S.Sabarinathan, UG Scholar, Department of Computer Science and Engineering, Nehru Insitute of Engineering and Technology, Coimbatore, Tamilnadu, India.

current systems.

III. PROPOSED SYSTEM

- Overcome the drawback of the existing systems.
- Accuracy is high , Compared to other Systems.
- Saving time to Record Attendance and Generate Accurate results.
- Provides a best user interface.
- Efficient reports.
- Cost is less to compared other systems.

A. Advantages Of Proposed System

- It is trouble free to use.
- Relatively fast approach.
- Highly reliable.
- Best user interface.
- Any Time and Any Where, the Admin can get the Records.

IV. SYSTEM ARCHITECTURE

A. Modules

- Take face images , Get images and labels
- Train face images , Using machine Learning Concepts
- Track face images using Open CV , Create the Data Sets
- Edit the DataSets when it is Necessary.
- Real Time Usage.

B. Take face images , Get images and labels :

Recognition the peoples face and create the separate profile for everyone. It is the unique ID

C. Train face images , Using Mechine Learning Concepts:

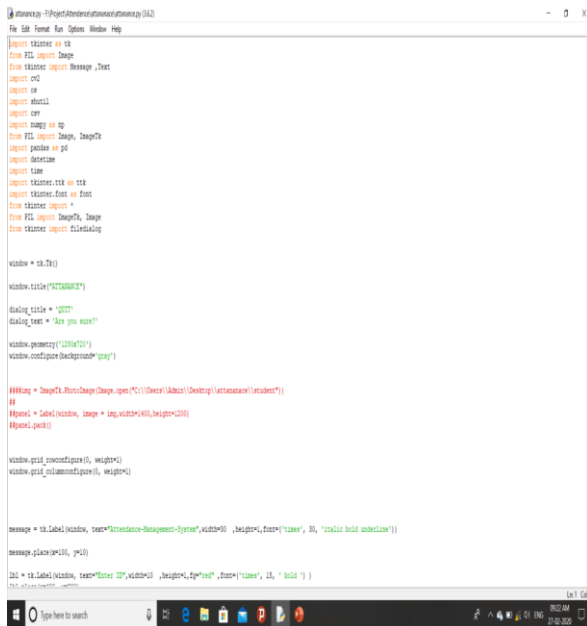
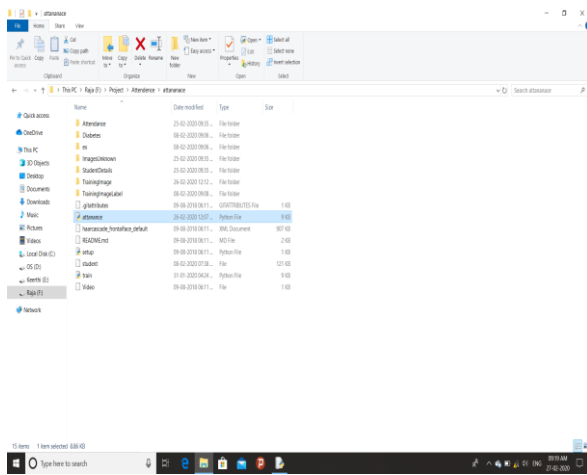
People faces was trained level by level , Camera is using the training purpose

D. Track face images using Open CV , Create the Data Sets:

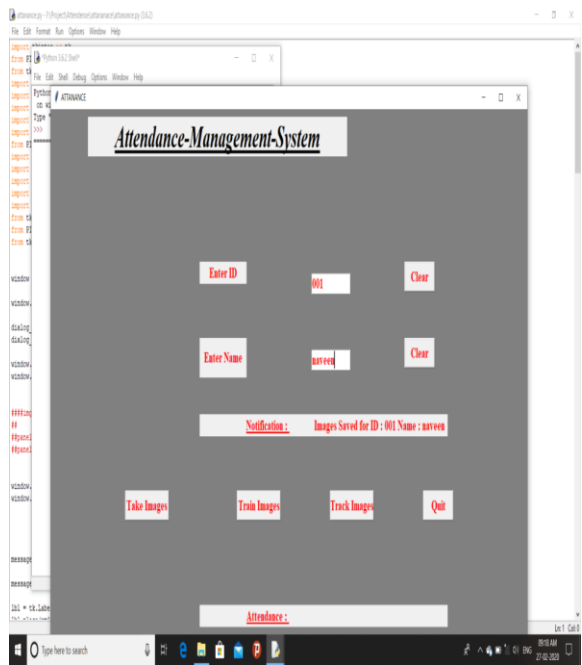
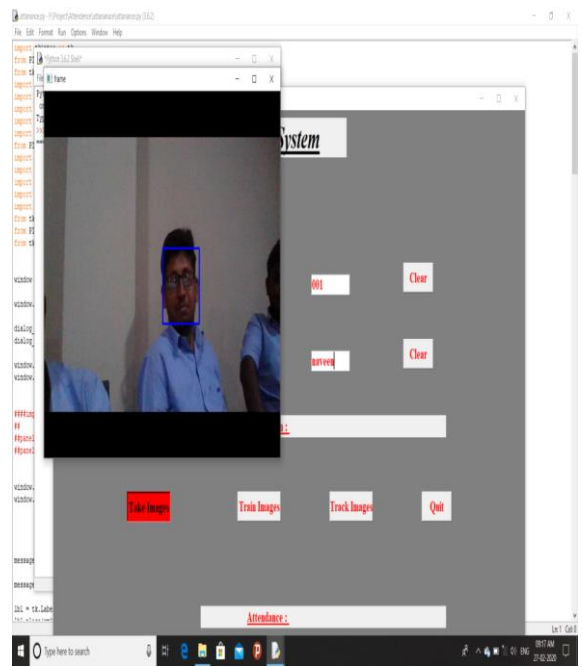
Open Computer Vision is library of programming functions , Create the Data sets and srored in Excel sheet.

E. Edit the DataSets when it is Necessary:

Set a Time limitation and Change the Datasets.



V. OUTPUT



VI. CONCLUSION

- This system is a necessary tool for many Organizations such as schools, colleges, office, etc.
- Its consuming and require manual work.
- Any changes based on the environment can also be incorporated into the system.
- This system makes use of the new trending technologies to effectively perform the day to day activities.

REFERENCES

1. Savitha, G., and G. S. Keerthi. "Video based Face Recognition Using Image Processing Techniques." *International Research Journal of Engineering and Technology* (2019).
2. Al-Badri, Rajaa, Sulaiman Al Hasani, and Oman Muscat. "class attendance record based face recognition using raspberry pi." *GSIJ* 7.5 (2019).
3. Sharma, Aman, Soham Kansodaria, and Raj Upadhyay. "Automatic Attendance Management System." (2019).
4. LuxandFaceSDK "Face Detection and Recognition Library" Developer's Guide (2019).
5. Kosov S., Scherbaum K., Faber K., Thormahlen T. and Seidel H.-P., "Rapid stereo-vision enhanced face detection", *Image Processing (ICIP)*, 2019 16th IEEE International Conference on, IEEE, 1221-1224 (2019)
6. E. A. Abusham, A. T. B. Jin, W. E. Kiong, "Face Recognition Based on Nonlinear Feature Approach", *American Journal of Applied Sciences*, (2019)