



Attendance Automation System

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ABSTRACT

Checking the presence of students and maintaining the attendance is a tedious process for the institute. Each institute has endorsed its method of taking attendance i.e., calling the names or passing the sheets. Several popular automatic attendance systems currently in use are RFID, IRIS, FINGERPRINT, etc. Since face is people's preliminary scheme of personal identification, the suitable solution to have both time and cost efficiency with no human involvement is facial recognition. With the rapid development in the fields of image processing, the efficiency of this system is keep on increasing.

I. INTRODUCTION

One can distinguish a particular face based on different factors. Computer Vision deals with how computers can gain high-level understanding from digital images or videos. Face recognition system is one of the primary objective of the computer vision. In recent years many researches in techniques of face

recognition have gained momentum significantly. It is because of the fact that it is not easily seen or noticed when compared to other techniques like biometric methods etc., Coming to implementation it is very challenging as it needs to check for all possible variations in appearance which are caused by change in facial features, changes in pose, image resolution, classification etc., There are many face recognition algorithms which have been developed and each algorithm has its own advantages. If we are already familiar with the face we can recognize the face instantaneously. Face detection methods which are presently available mostly depend on two approaches i.e., local face recognition system and global face recognition system. The local face recognition uses the features of face like nose, eyes, mouth etc.,

Objective:

Attendance Automation System is a system for managing attendance activities. It is used for managing attendance information. It manages the attendance information like the name of the student, timings, and the date on which the person is present. It is also used to generate reports of student attendance. It helps organization from the manual work from which it is very difficult to find the record of the students. It provides a valuable attendance service for both teachers and students.

EXISTING SYSTEM

The Existing system is a manual entry for the students. Here the attendance will be carried out in the handwritten registers. It will be a tedious job to maintain the record for the user. The human effort is more here. The retrieval of the information is not easy as the records are maintained in handwritten registers.

Disadvantages:

- Time Consuming
- More Human Error
- Fake attendances
- Difficult to update attendance information
- Inaccuracy of data

II. LITERATURE REVIEW

Some research papers related to attendance automation system have been studied and the following references shows influence on the Attendance Automation System. Mrunal Aware, Prasad Labade [1] have implemented the attendance automation system by using 'PYTHON' and 'TKINTER'. They have projected their ideas for implementing an "Automated Attendance System" based on face recognition. This includes identification of face which is time saving. It is completely based on software. It is time saving and eco-friendly because it reduces the use of paper. It also removes the chances of fake attendances because of the face. This system is designed in TKINTER platform supported with SQL database as well as script of python.

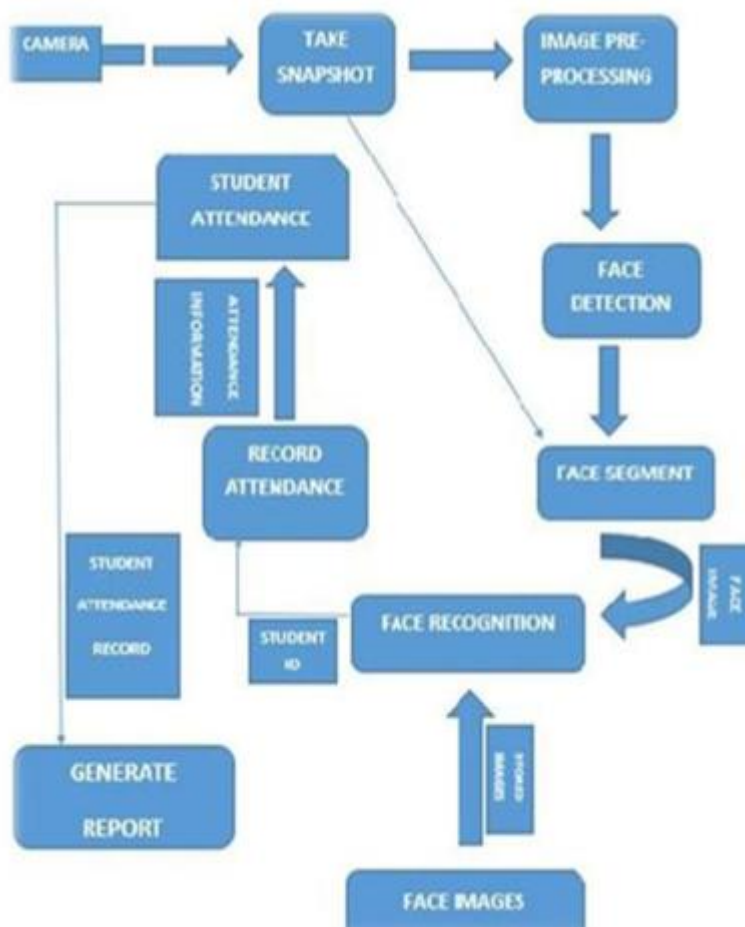
IV. PROPOSED SYSTEM

The drawback of the existing system is that it is very difficult to take the attendance of every student manually. It is less accurate and to keep the data in records for future reference because it may get destroyed. Moreover, it is very difficult to retrieve attendance information as it is taken manually. The manual system is so time-consuming. The proposed system is accurate and it prevents fake attendances because of the face recognition system.

ADVANTAGES:

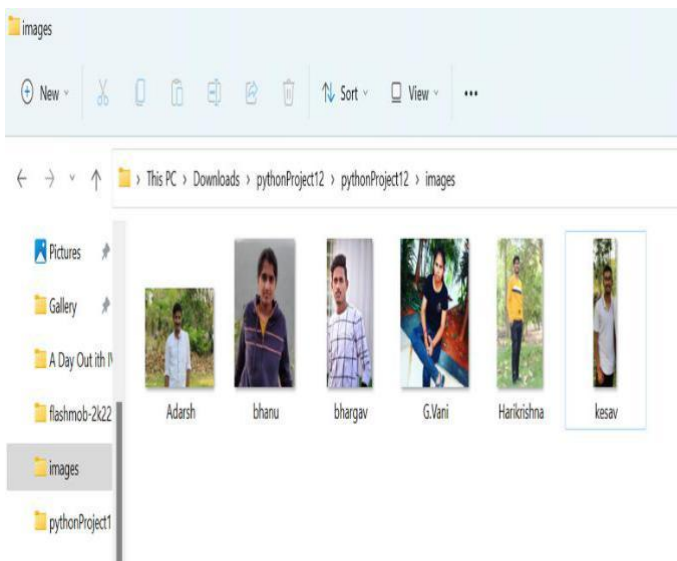
- Speed retrieval of attendance information.
- High accuracy.
- Easy to handle and update student attendance.
- Requires less human power.
- Prevents fake attendances.

V. SYSTEM ARCHITETURE

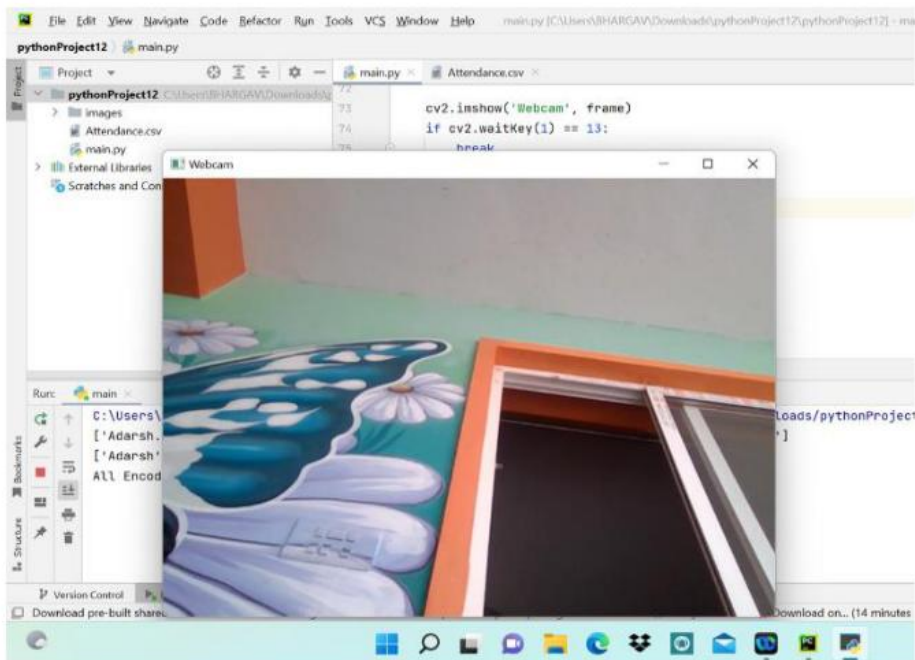


VI. OUTPUT SCREENSHOTS

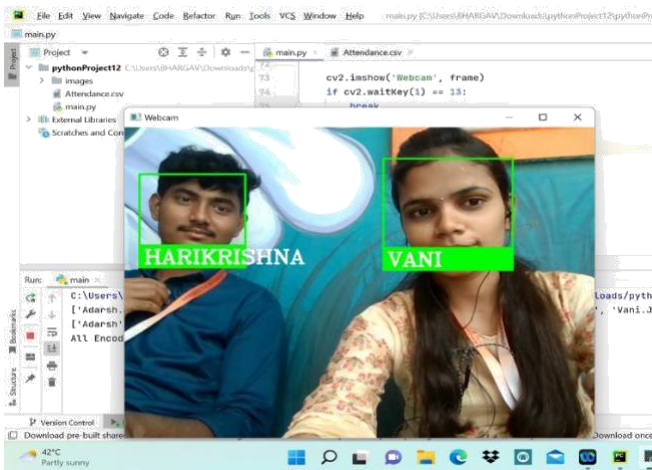
DATASET:



Web Cam Opens:



Face Detection:



Attendance Marking In Excel Sheet:

	A	B	C	D	E	F	G	H	I	J
28										
29										
30										
31	BHARGAV	16:03:16	#####							
32										
33	BHANU	16:03:30	#####							
34										
35	G.VANI	16:07:13	#####							
36										
37										
38	VANI	16:38:16	#####							
39										
40	HARIKRISH	16:41:49	#####							
41										
42	KESAV	16:44:15	#####							
43										
44										
45										
46										

VII. CONCLUSION

To maintain the attendance this system has been proposed. It replaces the manual system with an automated system which is fast, efficient, cost, and time-saving as replaces the stationary material and the paperwork. However, the proposed system is expected to give desired results. Also, the efficiency could be improved by integrating other efficient techniques. It is very efficient when compared to the paperwork that was used before the automation of the system.

VIII. FUTURE ENHANCEMENT

In the future work, we can extend our work to implement an android or iPhone compatible application in the future.

REFERENCES

- [1]Attendance Management System using Face-Recognition by Mrunal Aware, Prasad Labade, Manish Tambe, Aniket Jagtap, Chinmay Beldar dept of computer engineering, Pune, Maharashtra, India in IJSRCSEIT. Volume7 Issue 3,ISSN: 2456-3307
- [2]Face Recognition based Attendance Management System by Smitha, Pavithra S Hegde, Afshin Department of Computer Science and Engineering, Yenepoya Institute of Technology, Moodbidri, India in IJERT.Volume 9 Issue 05 ,issn: 2278-0181
- [3]Automated Attendance System Using Face Recognition by Akshara Jadhav, Akshay Jadhav, Tushar Ladhe, Krishna Yeolekar Department of Information Technology University of Pune NDMVP's KBT college of engineering, Nashik, India in IRJET.Volume 04 Issue 01, Jan – 2017
- [4]Attendance Management System Using Face Recognition by Chaitra T.K, M.C.Chandrashekar, Dr.M.Z.kurian, India in (JETIR) Vol 5, Issue 8, ISSN:2349-5162
- [5]Facial Recognition Attendance System Using Python and OpenCV Dr.V Suresh Assistant professor, Information Technology, Anil Neerukonda Institute of Technology and Sciences, Visakhapatnam, India in Quest Journals Journal of Software Engineering And Simulation, Vol. 05, Issue. 2,ISSN:2321-3795