Shaqra University
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Face Recognition Based Attendance System

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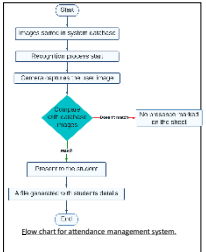
Introduction

Face recognition based smart attendance system using IoT. The proposed system is based on face recognition to maintain the attendance record of students. As the process of attendance taking starts the system takes live video of the attendees and then applies face detection and recognition technique to the given image and the recognized students are marked as present. We have used deep learning techniques to develop this project.

Diagrams/Figs



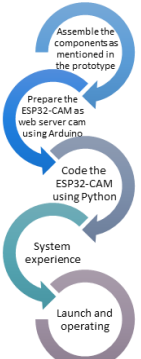
Flow chart for attendance management system.

Generally a facial recognition system consists the following steps as illustrated in figure.

Methods

Materials:- ESP32-CAM, USP-to-TTL CON, USB Cable, and 5 Jumper Wires.

Method:-



Conclusion

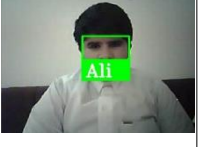
We have developed a system that automatically detects and recognizes students' faces and displays their information and whether he was registered or not. This would be possible by applying deep learning and image analysis algorithms to detect student's faces.

Results

The results were great and accurate. The process done in several stages, as follows:

1- ESP32 CAM is used to capture live video.

2- Detection of the face by drawing a boundary around the face.



3- Give an attendance mark to a student whose face has been identified.

2			
3	Ali	21:49	441500800
4			
5			

References

[1] Face Recognition-based on Lecture Attendance System. (2018, July 30). IJERT.

[2] Shankhdhar, P. (2022, August 20). Face Recognition Based Attendance System using ESP32 CAM. How to Electronics.