**INTRODUCTION**

A solid attendance record is essential to assessing student performance. In fact, most universities in the UK require at least 90% attendance in order to receive the final grade. Other countries follow this practice (Riya et al., 2015). This good practice contributes to a high degree of control over the personal and knowledge development of our graduates. This is because hands-on participation in lectures helps students master the art and science of the subjects discussed in the classroom. Higher attendance means better grades, higher retention, and a more positive school life. Frequent absenteeism makes it difficult for teachers and students to form strong bonds. This makes it difficult for teachers and students to develop and improve their talents. Many institutions base their funding on the average daily attendance of their students. Low attendance puts pressure on university budgets. As a result, universities have less money to meet their students' basic educational needs and the quality of their education suffers. Therefore, educational institutions must have high quality attendance statistics. These figures provide the Institute with important information for developing policies, programs and practices to increase participation. Many teachers give good grades to well-attended students in order to increase student attendance.

## BACKGROUND

The primary pioneers of facial acknowledgment were Woody Bledsoe, Helen Chan Wolf, and Charles Bisson. In 1964 and 1965, they started testing with a computer to perceive human faces. They physically highlighted distinctive markers on the confront, such as eye centers, noses, and mouths. Afterward, they utilized the computer to pivot hypothetically to adjust for pose fluctuation. To coordinate the distinguishing proof, the separations between the facial points of interest were assessed consequently and compared to the picture. This was the beginning of facial acknowledgment technology.

Sirovich and Kirby used straight variable-based math to form confront acknowledgment of an attainable commercial biometric. They made the "Eigenface" innovation, which required less than one hundred values to legitimately code the facial picture. Turk and Pentland's revelation of confront distinguishing proof interior a picture in 1991 stamped the starting of mechanized facial acknowledgment. This cleared the way for facial acknowledgment innovation to extend and thrive. DARPA and NIST launched the FERET program for commercial facial acknowledgment in the early 1990s. They created a database of facial pictures, which had 2413 photographs speaking to 856 people. FRVTs were made at the start of the 2000s to empower fair government audits of confront acknowledgment frameworks and their model innovation. These examinations provided the required information for law requirement organizations and the government to best utilize confront acknowledgment innovation. The Confront Acknowledgment Fantastic Challenge was created in 2006 to test the existing confront acknowledgment calculations. For the test, it utilized high-resolution pictures, 3D facial filters, and iris photographs. The modern calculation was found to be ten times more exact than the strategies of 2002 as well as more than 100 times more exact than the calculation of 1995. In later a long time, Facebook has included confronting acknowledgment capabilities to assist users perceive individuals who show up in their everyday overhauls. The iPhone-X, which Apple discharged in 2017, was exceptional, to begin with, iPhone utilized confront acknowledgment to open the device.

**OBJECTIVES**

To create a portable Smart Attendance System that is both portable and self-powered. To guarantee that the attendance recording procedure is speedier than the prior system, which could record attendance in as little as 3 seconds for each student. Have enough RAM to hold the database. Capable of properly recognising a person's face using a face database. Create a database for the attendance tracking system. Provide an easy-to-use online interface for administrators to view the attendance database. Allow new students or employees to store their faces in the database using a graphical user interface. Capable of informing the user if the face-recognition operation was successful or not.

**RESEARCH QUESTIONS**

1. How does the deployment of a face recognition attendance system affect educational institutions' overall efficiency and productivity?
2. What are the primary advantages and drawbacks face recognition attendance system?

# **Hypothesis**

## The null hypothesis

***H0:*** No, the system-based face recognition attendance system is not an optimal solution overall.

## The alternative hypothesis

***Halt:*** Yes, the system-based face recognition attendance system is the perfect optimal solution.

LITERATURE REVIEW

There are numerous novels confront acknowledgment strategies which had been connected within the participation administration space. A few of them incorporate the eigenface, fisher confront, neural arrange, versatile bunch strategy, chart coordinating, and so on (Riddhi and Shruti, 2013). Face Acknowledgment could be a challenging issue within the field of picture handling and computer vision and inquire about as of now looks to move forward the productivity and execution of the calculations.

Taking after a proposition to diminish the mistakes that happen within the conventional participation framework utilizing confront acknowledgment, Anushka et al. (2018) displayed a demonstration utilizing profound learning calculations with the exactness of 98.3% in recognizing the client. The framework too handles the issue of confront acknowledgment in a biometric framework that's subjected to real-time scenarios such as light, turn, and scaling. The show makes utilize a camera to capture the input pictures and applies the direct back vector machine to distinguish a confront from the input picture and check the participation in a spreadsheet and afterward change over it into a PDF record. Riya et al. (2015) created a Participation Administration Framework utilizing the standard Bluetooth innovation in Mumbai College which guarantees a 75% course participation by an understudy sometime recently composing an examination. The framework employments electronic labels (serial numbers) to encourage programmed remote distinguishing proof through a Bluetooth shrewd-based gadget which is modified and designed such that it works in association with an Android application and records participation as the speaker moves around the lesson to distinguish the labels. Within the same vein, an android-based course participation framework utilizing confront acknowledgment had moreover been created by Sunaryono et al. (2019). The impediment of this approach is an over-dependence on the possession and utilization of a Bluetooth-compliant Android phone subsequently shortchanging speakers and understudy without it.

A screenshot of a computer

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Flow Chart

Login

A diagram of a computer program

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Registrations

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Forgot Password

A diagram of a mail

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Change Password

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