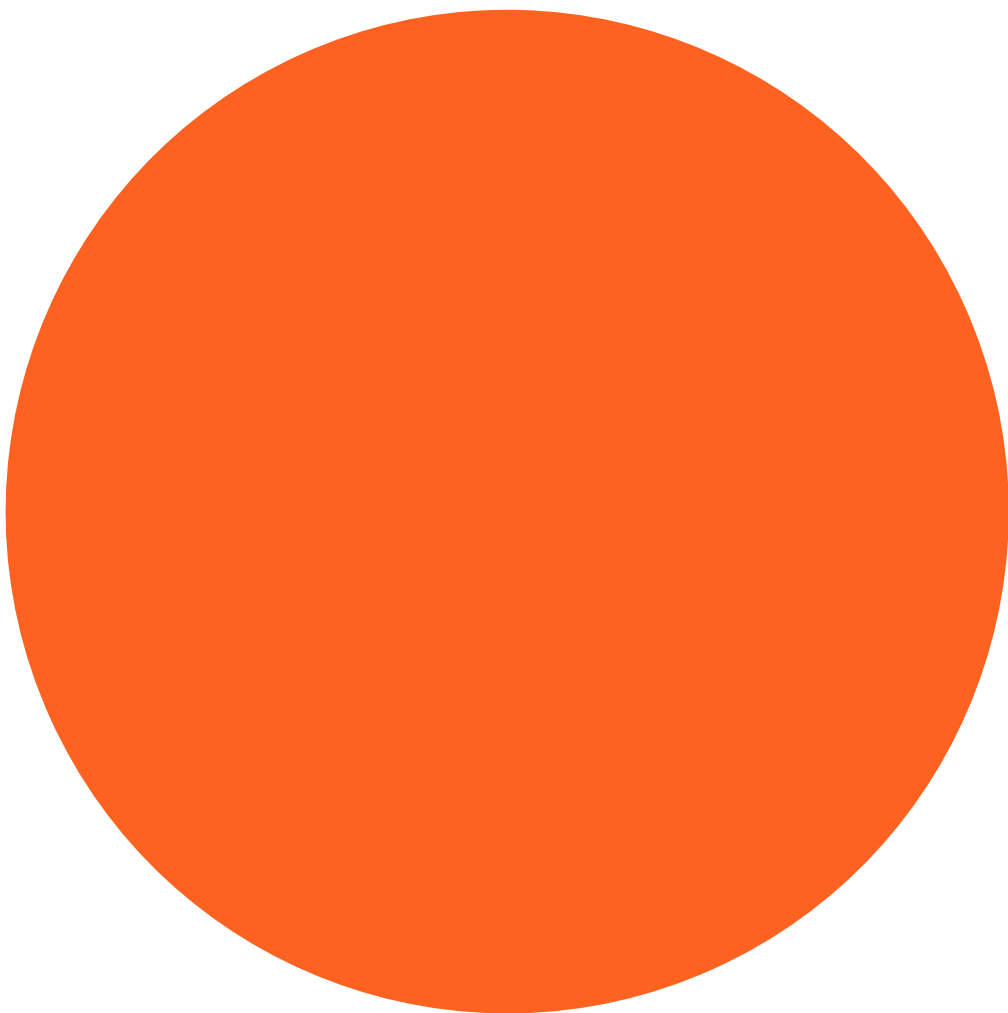






Educational institutions rely on accurate attendance records for various administrative and academic purposes. However, traditional methods like manual roll calls or paper-based sign-ins are prone to human error, time-consuming, and lack security. There is a critical need for an automated, secure, and efficient system that can streamline the attendance process while maintaining data integrity and accessibility.



**INTERDUCTION**

The QR Attendance System aims to modernize attendance tracking by integrating QR code technology with a network-based approach. In educational institutions, accurate attendance records are crucial for administrative purposes and student evaluation. Traditional methods often fall short due to their manual nature, leading to inefficiencies and errors. This project addresses these issues by providing a robust, automated solution that enhances both accuracy and security.

**LATERAL SURVEY**

# Overview of Attendance Systems:



Attendance systems have evolved significantly over the years, from traditional manual methods to modern automated solutions. This section provides a comprehensive review of various attendance systems, highlighting their evolution, features, and limitations.

A large, solid orange circle occupies the center of the image. Inside this circle, the number '1' is written in a bold, white, sans-serif font. The number is positioned slightly to the left of the vertical center of the circle.

1

# Traditional Manual Systems:



2

Manual attendance systems typically involve calling out names or using sign-in sheets. While simple, these methods are time-consuming, prone to human error, and lack real-time data access. They also require substantial administrative effort to compile and analyze attendance records.

# Electronic Attendance Systems:



3

Electronic systems, such as RFID and biometric systems, introduced automation into attendance tracking. RFID systems use radio-frequency identification tags, while biometric systems use physical characteristics like fingerprints or facial recognition. These systems offer improved accuracy and efficiency but come with higher costs and privacy concerns





