

PS-ID: TV-HW-02

Title: Smart Attendance System Using RFID

Problem Statement:

Manual attendance systems are time-consuming and prone to errors, leading to inefficiency and potential discrepancies in attendance records. A more efficient, automated solution is needed.

Goal:

Develop a system that uses RFID technology to quickly and contactlessly record attendance, providing a fast and reliable method for tracking student presence.

Must-Have Features:

- RFID tag scanning system to register attendance
- Timestamped attendance logs for accurate record-keeping
- Display of attendance reports (using an LCD or basic output method)

Expected Outcome:

A fast, contactless, and trackable attendance system that eliminates the need for manual entry and increases efficiency in the classroom or other environments.

Required Components:

- Microcontroller: Arduino or Raspberry Pi (RPi)
- Sensors: RFID Reader, RFID Tags
- Display: LCD (optional for displaying data)
- Storage/Database: Firebase or Excel for logging and reports