TEAM X

RFID-BASED SMART HALL TICKET & SEAT VERIFICATION SYSTEM

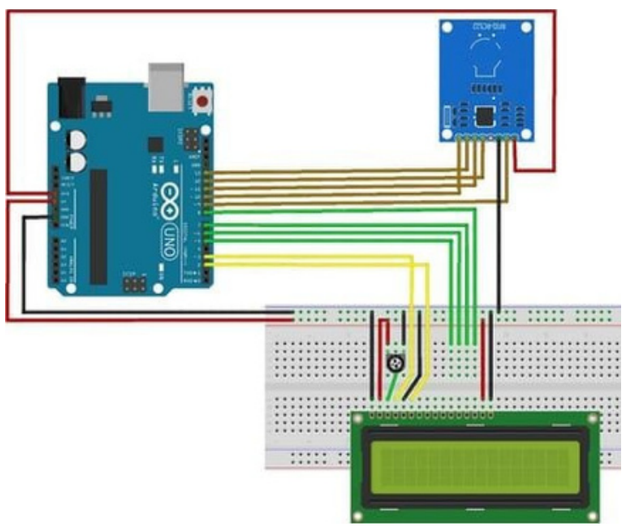
The RFID-Based Smart Hall Ticket / ID Verifier is an automated attendance and verification system designed for exam halls and events. Each student uses an RFID card/ID, which is scanned at entry. The system validates authenticity, allocates seat numbers, and displays details on an LCD. This reduces manual errors, prevents impersonation, and ensures faster verification.

INFO

Problem Statement	Manual exam hall verification is slow, error-prone, and allows proxy entries. A low-cost RFID-based system can automate verification, prevent malpractice, and ensure smooth seating management.
Components Used	Arduino UNO (Microcontroller), RFID Module (RC522), RFID Cards/Tags, 16×2 LCD Display (Parallel Interface), 10k Potentiometer (for LCD contrast), Jumper wires, breadboard, resistors

DESIGN

Circuit Diagram



A Student Scanning RFID Card To Enter The Exam Hall

RESULT

Working	When a student scans their RFID card, the Arduino reads the UID and checks it against the database. If matched, the LCD shows the student's name and seat number; otherwise, it displays "Access Denied." The system can also maintain a real-time attendance log for record keeping.
Conclusion	The project enhances exam hall/event security by eliminating manual ID checking. With RFID automation, entry becomes faster, safer, and error-free. This system is scalable for universities, conferences, and large gatherings.