RFID Based Door Access Control

Abstract:

- The RFID-based Door Access Control project focuses on implementing a secure and efficient entry management system using Radio Frequency Identification (RFID) technology.
- This project utilizes RFID tags and readers to authenticate and grant access to authorized personnel through a controlled door or entry point.
- The system consists of RFID tags (carried by users), RFID readers installed at the door, and a microcontroller unit to manage the authentication process.
- When an authorized user presents their RFID tag near the reader, the reader detects the tag's unique identifier and sends it to the microcontroller for validation.
- The RFID-based Door Access Control project offers an efficient and convenient solution for managing access to restricted areas in various environments, including offices, residential buildings, and secure facilities.
- It enhances security by replacing traditional key-based systems with contactless RFID technology, reducing the risk of unauthorized access and providing a scalable solution for access control.