ACCESS CONTROLLR FOR INDIAN ARMY GATE USING ARDUINO

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Abstract
The primary purpose of project is it to offer security to army gate, for most of commercial & residential area is we can use this system. Gate control system is the essential access control system is helping security teams actively defend & monitor the entry points, detect would be objects & grant the access to authorized person. The benefits of access control security and we can use this project residence & commercial area.

1.   Introduction -Security System plays an important role to prevent unauthorized personal entry into secured environment, which may include physical &rescuesarea. various gate locks such mechanical locks or electrical locks designed to attain basic security requirement.Basically, these locks can easily be hacked by unwanted people thereby following unauthorized personal into security premises. The automatic access control including in this project**.**

This is proposed an RFID based security & access control project. It is the design of RFID based security and access control system for use in Indian army gate, security area and the doors. This project combines the RFID Technology and Arduino UNO to accomplish the required task.

When the RFID Reader installed at the entrance of gate detects UID Number and the System captures the user's image and matches a registered user, access is granted Otherwise access will denied & the system turns on alarm to alert the security personal.

2. Future Scope of project–As we noticed the outcome of from this project is the manufacturing of project is simple & efficient to have use this project security purpose used in this area for e.g., Material Room, Army Gate, safety purpose

The project making cost & maintenance cost should be low. The major point of access control system it is one type of controller it needed all area for Protection Purpose.

3. Objectives of the project–
-    The most efficient & simple project for all Protection.
-    To advantages of access control for army gate is given below:
-    The simplified management to access control for gate offer a centralized platform for managing people, Entrance Security,
-    Tracking
-    Flexible access time

4. Block Diagram of Project:
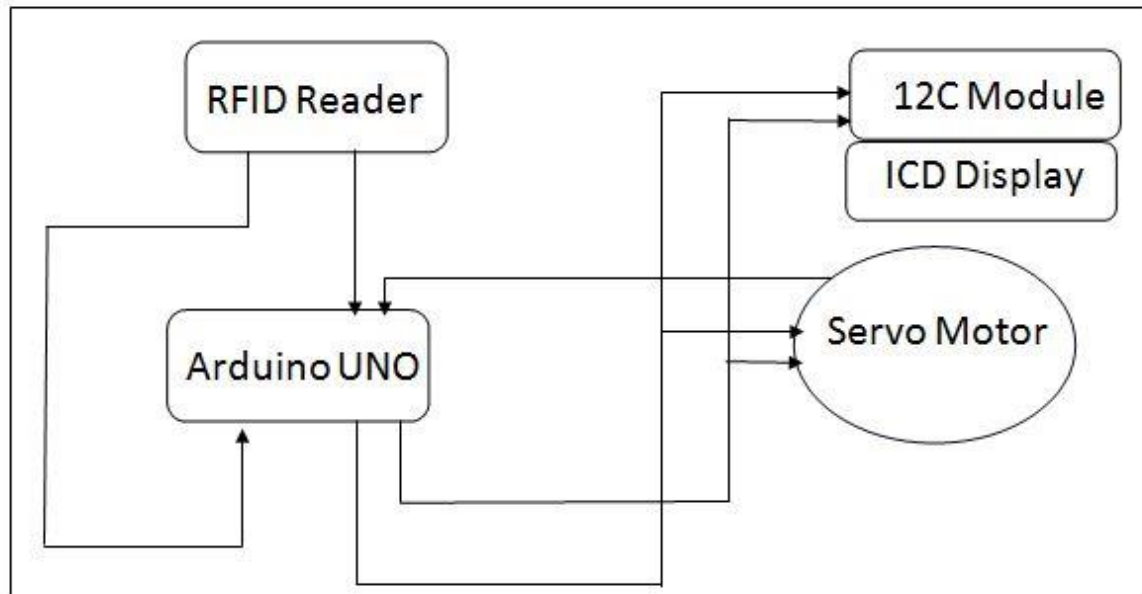
Block Diagram of Project

5. Working of Project:

In this project automatic RFID based access control project,in this project using Arduino UNO was designed. The RFID Technology to Arduino accomplish to required task. In this project we want to be identified transceiver & or receiver now as tag is powered it can extract & transmit the message from the reader, sending back to reader.

First, must set the master tag then the access control project goes to normal state. If we scan the unknown tags then entry access will be denied but if we scan the master so enter the program mode, for we can add to authorize the unknown tags so now if scan the tag again access will be granted to so we can open the gate.

The gate will automatically lock after will close the gate, if we want to remove the tag from the reader, we just must to go again into program mode scan the tags & will be removed.

6. Problem Statement

In this project becomes in so difficult to know can give access a given object. And also, difficult to revoke all access right to an object. Its which costly material & Breakdown charges also costly.

7. Proposed Methodology

In our project we are giving an authorized ID to the Arduino board, when the person having RFID Tag comes near to RFID reader at the door, then ID number on the tag is given to Arduino board through the reader, Arduino board compares the valid ID with received, if the ID is valid then, signal passes through the servomotor then allows the person into gate otherwise not allowed.

- Firstly, we decided project name and how it work.
- Then Collect the components as per requirements.
- Then Discussed how it make model and the start up.

8. Conclusion:

In this project we learn and conclude that the outcome of the project we get is most advantages. For the security we have to use on arriving at the gate where the access control one is asked is approximate their RFID tag to the reader as show on the output window the reader reads access no match.

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