ABSTRACT

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AUTOMATIC HOME DOOR SYSTEM WITH RFID BASED ARDUINO
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(xii + 43 + Attachments)

Automatic Door System At Home Using RFID and IR Sensors based on Arduino Uno is a device designed to provide convenience for homeowners when they want to open doors in their housing and as security.The purpose of this device is to make automatic doors in housing open and close automatically.The microcontroller used as a device controller is Arduino Uno.The components used by the Automatic Door System are RFID,IR Sensors,Servo Motors.The workings of this device is that when a registered RFID Tag is attached to the RFID reader,the door will open automatically,The RFID tag is not registered,the Servo Motor does not move,the door remains closed.If you want to get out,the IR sensor will read whether there are objects blocking it,if there are objects blocking the IR sensor,the door will open automatically,if there are no objects blocking the IR sensor,the door will open.Automatically does not open.Field Study,Tool Making.From the results of research and discussion,it can be concluded that the Arduino-based automatic door system tool with RFID functions to identify that it is the owner of the house who opens the door.Based on the results of tests that have been carried out,the success rate of several tests carried out as esar 100%.from the RFID sensor module functions well to detect and read RFID tags have a reading distance of up to a distance of 5 cm then from the IR sensor module functions to detect people approaching the door of the house and has a sensor reading distance of up to 5 cm In realization for the door of the house can be installed parallel,so this indicates the system is running properly according to its function.

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