

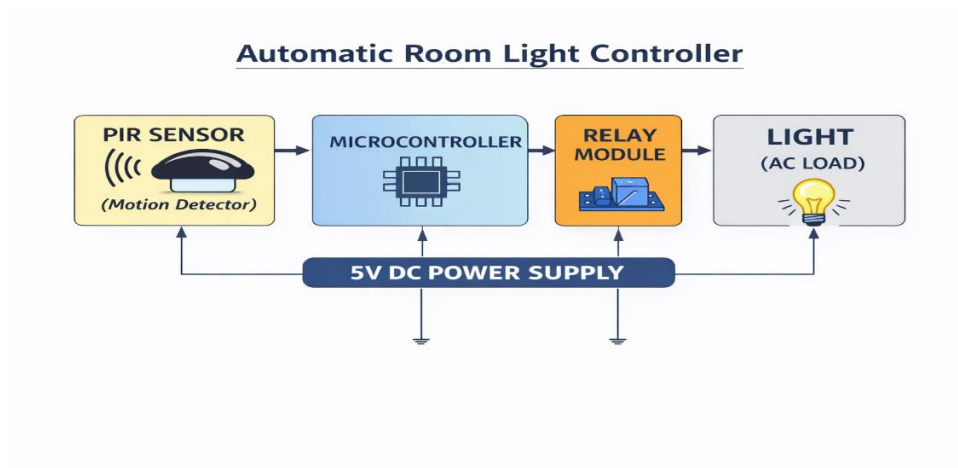
Name: A.Leenitha

Title: Automatic Room Light Controller using PIR Sensor

Introduction:

The Automatic Room Light Controller is a microcontroller-based project to control the operation of room lights automatically based on the presence of humans. The primary goal of this project is to minimize manual effort and reduce wasteful use of electricity. Motion detection within the room is accomplished using a PIR sensor and the signal generated from the sensor is processed through the microcontroller, the output of which activates a relay to turn the light ON or OFF. This project is low-cost and economical as it uses minimal and easily available components. It helps in reducing power wastage by ensuring that lights operate only when required.

Circuit diagram:



Reference link:

[A. Jogdand, B. Thakur, and R. Pame, "Automatic Room Lights Controller Using Arduino and PIR Sensor," International Journal for Research in Applied Science & Engineering Technology \(IJRASET\), vol. 9, no. 8, 2021.](#)