SMART LECTURE HALL CONTROL SYSTEM USING MICROCONTROLLER

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ABSTRACT

This paper proposes a smart system for controlling the air-conditioners and lighting system in a lecture hall. The idea is to read the information of person who is entering the lecture hall by using a Radio Frequency Identification (RFID) reader and activate the Air-Conditioning and Mechanical Ventilating System (ACMV) and lighting system. The system consists of a Radio Frequency Identification (RFID) reader, microcontroller and a Graphical User Interface (GUI) that will be used as a secondary control panel substituting the RFID reader. By applying this system, the energy consumption is reduced compared to the conventional method. As a preliminary result, a 35% reduction in the energy consumption of the air-conditioning and lighting system in UMP lecture room has been achieved.