## AUTOMATIC LIGHTING SYSTEM

Prepared by: Batzaya Bold

## ABSTRACT

Nowadays, the modern technologies have made our life greater and easier by making almost everything automated. The automate devices provide for countless benefits in the life of people and they now are becoming more comfortable, more convenient and easier to use. The project is one of those devices, automate lighting system. The aim of the project is to control the room light for three rooms and to show the room number where the user is in. Basically, when person enters the room, the room light turns on and when the last person leaves the room, the light turns off automatically. The project consists of main control circuit to activate all process, and the sensor circuit to check the user whether the user enters or leaves the room. The sensor circuits are placed at the door of each three rooms and output from the sensor circuit sent to the PIC16F877A. Microcontroller PIC16F877A controls the room lights and sends output to LCD to display room number and the number of people. This report contains Literature review, the methodology which covers the technical explanations about the sensor circuit, main circuit and relay circuit. The project achieved its aim and can be implemented in many different areas to provide the lighting in comfortable and convenient way.