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Team 3

ECE 388

Design Project Statement

The project we have selected to design for this project is a room occupancy and climate control system. This system should be capable of detecting an individual’s presence inside an enclosed area as well as monitoring and controlling the temperature inside the area. The goal of the design project is to build a system that is capable of displaying such information in a simple manner and providing a means of controlling the temperature within a particular location. To accomplish this task, the following apparatus will be necessary for our system:

**Outputs**

* Character LED Display
* LED
* Fan

**Inputs**

* PIR sensor
* Temperature sensor
* Tactile switches
* DC power supply

The PIR sensor will be used to track motion within the modeled environment. If motion is detected, that information will be displayed to the user through an illuminated LED light. The temperature sensor will connect with the character LED display to provide the user with the currently measured temperature value. The tactile switches will allow the user to set a desired temperature, which in turn will enable the fan to control the temperature within the environment.