

Project 3- Problem Definition

This Project will be inspired on a fire alarm. Fire alarms are essential in people's lives since it can potentially avoid major physical damages to humans in case of a fire to start and spread unintentionally. However, often times the fire alarms can be exaggerated, meaning they might get activated in minor situations, where fire might not even be present, and it usually stays activated for an annoying (and embarrassing) period of time.

The goal of this project is to properly and efficiently activate a fire alarm, giving the user feedback on when the fire alarm is about to be activated. To accomplish this, the project will simulate a fire alarm with a DHT11 sensor, an LED, and Buzzer. The LED will light up whenever the DHT11 reaches a certain "high, but not worrisome", temperature. And when the alarm is activated after it reaches a temperature considered dangerous, the LED will now blink, and the Buzzer will turn on.

A Keypad will be used as an overall enable (turn on and off the alarm); and an LCD will be used to display the state of the alarm (ON/OFF/FIRE!).