Operation of the burglar alarm system.

A reset button for users to reset the system to it original function should there be any error.

It uses ultrasonic sensor to detect an object distance from it. User can specify the distance for which it should cause the alarm to sound when being approach by an object or a person.

Alarm goes on anytime the specified distance is exceeded.

Then the GSM module sends a notification alert to the user that an intruder has invaded his or her compound.

There are two LEDs (red and green), the Red LED goes on when the object is close to the ultrasonic sensor, and the Green LED goes on when the object is far from the ultrasonic.

The LCD displays whether the ultrasonic sensor has been triggered or not.

Use case:

Actor: User

function: reset, see lcd display, receive alert, see LEDs.

Operation or flowchart:

1. Turn on by connecting to power.
2. press reset button to set the system
3. The LCD turns on.
4. Allow the system to operate.
5. When an object is brought close to the ultrasonic sensor at a distance of 10cm, turn on LED red, turn on alarm, and GSM sends an alert to inform the user. (Sensor detects).
6. If the distance is beyond 10cm, turn on only Green LED.