

METHODOLOGY

As we switch on the device , the sensors attached to the Arduino gets activated. We have two systems to work simultaneously to each other. First the automatic sanitizer and secondly the contacted temperature sensing.

The ultrasonic sensor and PIR sensor is attached to the Arduino for detection of human/object ranging and motion respectively.

PIR sensor has a range of around 5m – 12m and any detection in the specified range will activate the sanitizer and it will sanitize the surroundings with activation of spray pump 1 accompanied with a blower so that the sanitizer reaches the surrounding . The ultrasonic sensor on the other side has been specified with a range of less than 30cm, any movement especially hand near(<30cm) the device will activate the spray pump 2 and the sanitizer reaches the hand through a small pipe.

The sanitization is done simultaneously with the activation of the sensors , keeping the particular region sanitize and free from virus or bacteria or any infectious agents.

The temperature sensor senses the body temperature of the person as soon as it is touched, and displays the temperature in °F in the lcd display(as it is programmed to convert °C to °F). If the temperature sensed is above the normal body temperature(98.6 ° F) the buzzer starts alarming and the RGB led attached turns red, if the sensed value of the sensor is equal or below 98.6 ° F then the buzzer is off and the RGB led is green. Depicting a symbol of safe and safety.