

IOT PROJECT

Team Name - Buffering...

Members-

- Swayam Agrawal (2021101068) || Yash Adivarekar (2021101008)
- Madhav Tank (2021101108) || Amogha Halhalli (2021101007)

Project Idea- Smart Home Security Device

Description:

To build a smart IOT device which if detects motion, and sends data to the cloud. Hence, we get notified when someone enters or leaves the environment in which the IoT device is kept.

Parameters Measured:

HC-SR501 PIR Motion Sensor detects human movement.

HC-SR04 Ultrasonic Sensor helps us to detect how far the object is.

It increments the count of people entered if the sensor detects motion entering into the range of the sensor and decrements the count if someone exits the range of the sensor.

Analysis:

The sensed motion is transferred to cloud and helps us to keep a track of number of people entering in and out of the range of the sensor. Over the course of the data collected we can analyze patterns pertaining to the data over cloud.

Project Components:

- ESP-32 : 2
- HC-SR04 Ultrasonic Sensor : 3
- HC-SR501 PIR Motion Sensor : 2
- I2C Module : 1
- B-10 Buzzer : 2
- 2 Red LED's and 2 Green LED's
- Breadboard : 2
- Jumper Wires and Resistors (as required)
- Arduino Cable : 2
- D830D Multimeter : 1
- LDR Sensor/Module : 2