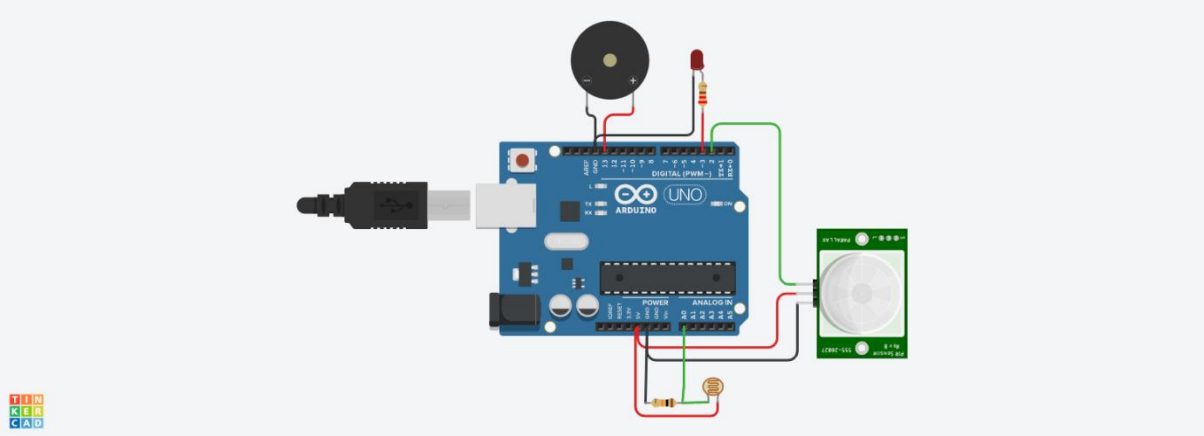
SMART HOME

Circuit:



Components Used:

1. Arduino UNO
2. Buzzer
3. LED
4. Resister – 10 Ω, 221 Ω
5. PIR sensor
6. Photoresistor

Code:

```
int buzz = 13;              // the pin that the LED is atteched to
int sensor = 2;             // the pin that the sensor is atteched to
int state = LOW;            // by default, no motion detected
int val = 0;                // variable to store the sensor status (value)

int ldr=A0;//Set A0(Analog Input) for LDR.
int led = 3;
int value=0;

void setup() {
  pinMode(buzz, OUTPUT);      // initalize buzzer as an output
  pinMode(sensor, INPUT);     // initialize sensor as an input

  pinMode(led,OUTPUT);

  Serial.begin(9600);       // initialize serial
}

void loop(){

  value=analogRead(ldr);//Reads the Value of LDR(light).
  Serial.println("LDR value is :");//Prints the value of LDR to Serial Monitor.
  Serial.println(value);
  val = digitalRead(sensor);   // read sensor value

  if(value<250)
  {
```

```
  digitalWrite(led,HIGH);//Makes the LED glow in Dark.
 }
 else
 {
  digitalWrite(led,LOW);//Turns the LED OFF in Light.
 }

 if (val == HIGH) {           // check if the sensor is HIGH
  digitalWrite(buzz, HIGH);   // turn buzzer ON

  delay(500);                 // delay 100 milliseconds

  if (state == LOW) {
    Serial.println("Motion detected!");
    state = HIGH;       // update variable state to HIGH
  }
 }
 else {
    digitalWrite(buzz, LOW); // turn buzzer OFF
    delay(500);             // delay 200 milliseconds

    if (state == HIGH){
      Serial.println("Motion stopped!");
      state = LOW;       // update variable state to LOW
  }
 }
}
```