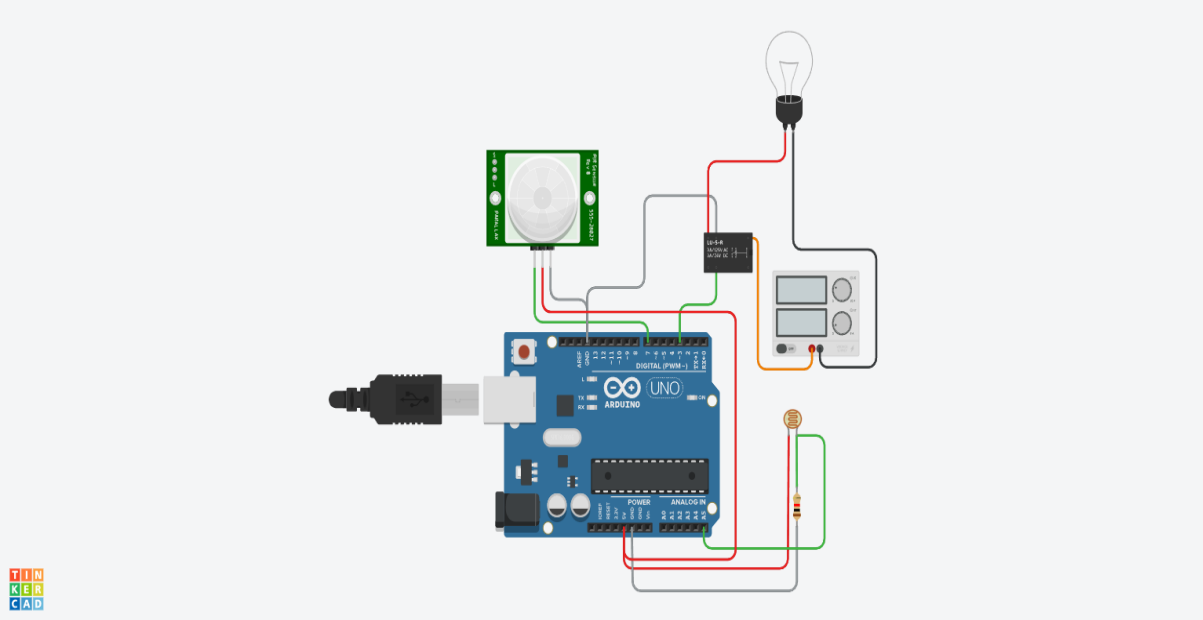


Automatic Lighting

Circuit :



Components Used :

TIN
KERN
CAD

Automated Lighting

All changes saved

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Name	Quantity	Component
U1	1	Arduino Uno R3
PIR2	1	8.263844729580455 , -177.31193026003942 , -191.83025702761273 , -235.53363697016093 PIR Sensor
R1	1	Photoresistor
R2	1	1 k Ω Resistor
K1	1	Relay SPDT
P1	1	7 , 0.6 Power Supply
L1	1	Light bulb

Project description :

Automated lighting system detects if anyone enters in the room (range of sensor used), the light bulb will glow. The intensity of light is adjusted automatically according to the brightness level present in the room already.

Code :

```
int PIR ,PS;
void setup ()
{
  pinMode( 7, INPUT);
  pinMode( 3, OUTPUT);
  pinMode( A5, INPUT);
  Serial.begin(9600);
}
void loop ()
{
  PIR= digitalRead(7);
  PS= analogRead(A5);

  Serial.println(PIR);
  Serial.println(PS);
  if ((PIR>0) && (PS<550))
  {
    analogWrite(3,map(PS,549,6,0,255));
    delay(5000);
  }
  else
    digitalWrite(3, 0);
}
```

Tinkercad link :

<https://www.tinkercad.com/embed/kw5ljSQhH7F?editbtn=1>