

Echipa 6

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Nume proiect: Senzor de miscare cu trimitere mail



Descriere: Cu ajutorul unui Raspberry Pi Zero WH se detecteaza miscarea aprinzand un led timp de 3 secunde. Concomitant se trimite un email de alerta.

Componente:

- Raspberry Pi Zero WH cu Raspbian OS + alimentator
- Led
- Female/Female Jumper Wires
- Rezistor 470 ohm
- PIR Motion Sensor

Cod:

```
import RPi.GPIO as GPIO
import time
import smtplib
```

```
from email.mime.text import MIMEText
from email.mime.multipart import MIMEMultipart
from email.mime.base import MIMEBase
from email import encoders
```

```
email_user = "mail@gmail.com"
email_password = "parola"
email_send = "madalin_ghirvu@yahoo.com"
subject = "Senzor Miscare"
```

```
msg = MIMEMultipart()
msg["From"] = email_user
msg["To"] = email_send
msg["Subject"] = subject
```

```
body = "S-a detectat miscare"
msg.attach(MIMEText(body,"plain"))
```

```
text = msg.as_string()
server = smtplib.SMTP("smtp.gmail.com",587)
server.starttls()
server.login(email_user,email_password)
```

```
iSensorPin = 7
iLedPin = 16
```

```
GPIO.setmode(GPIO.BOARD)
GPIO.setup(iSensorPin, GPIO.IN)
GPIO.setup(iLedPin, GPIO.OUT)
```

```
GPIO.output(iLedPin, False)
```

```
def MotionDetected(iSensorPin):
    print("Motion Detected!")
    server.sendmail(email_user,email_send,text)
    GPIO.output(iLedPin, True)
    time.sleep(3)
    GPIO.output(iLedPin, False)
```

```
time.sleep(2)  
print("Ready!")
```

Link video: https://youtu.be/rZEE_Fgtxck