

INTRUDER ALERT SYSTEM

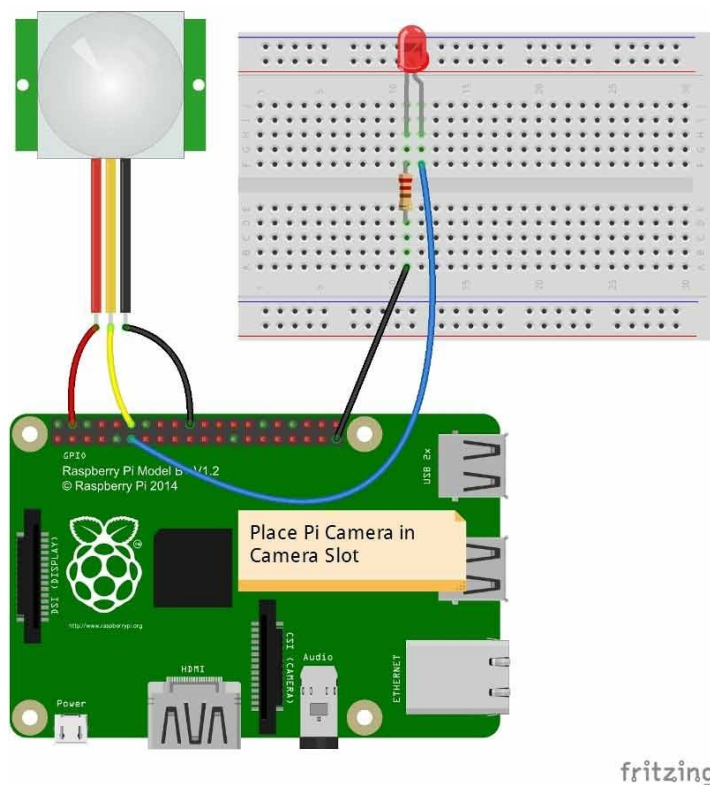
1. Testing of Components:

- The LEDs:
Test each LED individually
Test LEDs together
- Checking the python code
- Testing pir sensor:
the PIR detects motion, the output pin will go "high" to 3.3V and light up the LED.
- Enabling the raspberry Pi camera

2. Integration testing:

Circuit description:

- In this Intruder Alert System, we only need to connect Pi Camera module and PIR sensor to Raspberry Pi 3. Pi Camera is connected at the camera slot of the Raspberry Pi and PIR is connected to GPIO pin 18. A LED is also connected to GPIO pin 17 through a 1k resistor



- Checking for the compilation of the python program.
- Sending email after detection of intruder: After enabling pi Camera and installing required libraries
We can test it by sending a test mail by issuing below command, you shall get the mail on the mentioned email address if everything is working fine:

```
echo "Hello sarah" | mail -s "Testing..."
```

- Working of the entire system:

The PIR sensor detects the presence of any person and the Pi Camera is used to capture the images when the presence is detected. After this, Raspberry Pi creates a mail and sends it to the defined mail address with recently clicked images.