

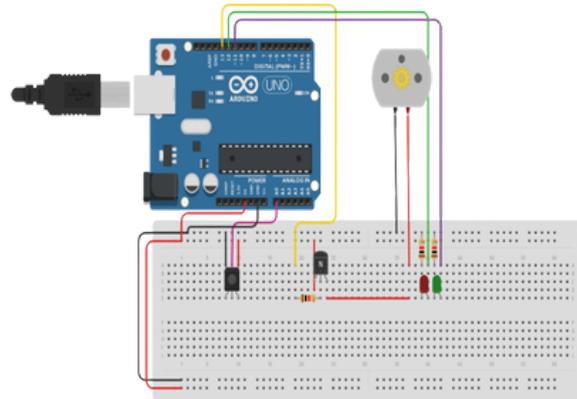


This project deals with a problem faced by the whole world due to pandemic Covid-19. Using this sanitizer machine people don't have to touch the sanitizer they just have to move their hand towards the sensor then the IR Sensor detects the blockage in front of it and gets activated then the DC Motor will get activated and the sanitizer will come outside from the bottle automatically.

In this project we have used IR Sensor to sense the hands and DC Motor water pump to ejaculate the sanitizer from the bottle.

Hardware required

- Arduino Uno R3
- DC Motor
- IR Sensor
- NPN Transistor
- Resistor
- LED
- Jumper Wires



Arduino Code

```
const int IRSensor = A0;
const int motor = 13;
const int LedRed = 12;
const int LedGreen = 11;
```

```
void setup() {
  Serial.begin(9600);
  pinMode(IRSensor, INPUT);
  pinMode(motor, OUTPUT);
  pinMode(LedRed, OUTPUT);
  pinMode(LedGreen, OUTPUT);
  delay(2000);
}
```

```
void loop() {
  int statusSensor = digitalRead (IRSensor);
```

```
  if (statusSensor == 1){
    digitalWrite(motor, HIGH);
    digitalWrite(LedRed, HIGH);
    digitalWrite(LedGreen, LOW);
  }
  else {
    digitalWrite(motor, LOW);
    digitalWrite(LedRed, LOW);
    digitalWrite(LedGreen, HIGH);
  }

  delay(1000);
}
```



Precautions

1. Connections should be done properly.
2. Arduino is case Sensitive so code accordingly.
3. Give different colours to the wires.