**No Mask No Entry**

**Objective:**

To create a face mask detector Door opener using Machine Learning.

**Table1: Required components**

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| --- | --- | --- | --- | --- | --- |
| **S.**No**.** | **Name** | **Quantity** | **Technical-Speciality** | **Cost** | **Usage** |
| **1** | Arduino Uno | 1 | Arduino Uno is a micrometer board based on the ATmega328P.It has 14 digital pins, 6 analog inputs, a 16 MHz quartz crystal, a USB connection, a power jack, an ICSP header and a rest button. | 770 | Arduino UNO acts as the main controlling part |
| **2** | PIR Sensor | 1 | The PIR Motion sensor module is an automatic control module based on infrared technology. It adopts LHI788 probe, which has high sensitivity, high reliability, low voltage working mode and low power consumption. | 159 | Detecting human motion is done with the help of PIR Sensor |
| **3** | L298N Motor Driver Module | 1 | L298N Motor Driver Module is a high power motor driver module for driving DC and Stepper motors. It consists of an L298 motor drive IC and a 78M05 5V regulator. It control up to 4 DC motors. | 303 | It is responsible for driving the motor of the door |
| **4** | CD Tray with 5V Motor | 1 | It consists of 5V motor and can work up to 12V power supply. | 200(app.) | Work as a Door |
| **5** | Breadboard | 1 | Breadboard consists of grid of contacts with contacts typically spaced one-tenth of an inch apart. This spacing reflects the spacing of the pins of all transistor packages and most integrated circuits, enables to connect all electronic components within the current, frequency, and voltage restrictions of most breadboard. | 215 | To build and test circuits quickly before finalizing any circuit design |
| **6** | Connecting Wires | 10 | It allows electric current to travel from one point on a circuit to another. | 115 | To connect the devices |
| **7** | Power Supply up to 12volts | 1 | It supplies power to the circuit. | 1000 | Provides the power supply |
| **8** | 5 Push Buttons | 2 | Mode of Operation: Tactile feedback, Power Rating: MAX 50mA 24V DC, Insulation Resistance: 100M ohm at 100v, Operating Force: 2.55 +- 0.69 N, Temperature Range: -20 to 70 degree C. | 20 |  |
| **9** | 5MP Camera | 1 | Up to 1920\*1080 high resolution, 1/2.7” Progressive scan CMOS, 3.6mm Megapixel lens, support Smart IR, support smart functions, support Defog, ROI, support triple stream. | 1000 | To record and train the system |