

❖ Hardware Requirements

1. **Arduino:** Used for sending commands to lock and unlock the door.(Uno or Nano).
2. **Servo Motor:** Connected to the Arduino to physically lock/unlock the door.(Sg_90 or mg_90s servo motors).
3. **Webcam:** For capturing images to detect faces. (optional).
4. **Speaker:** To play audio messages (optional).
5. **Microphone:** For speech input, allowing the system to recognize user commands. (optional).
6. **USB to Arduino Cable:** For communication between the Arduino and computer.
7. **DOOR lock push or pull mechanism (your design)**

❖ Software Requirements

1. **VS CODE or PYcharm**
2. **Arduino IDE:** Download and install the Arduino IDE from Arduino's website for uploading code to the Arduino.