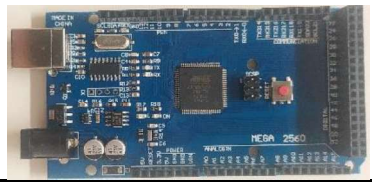
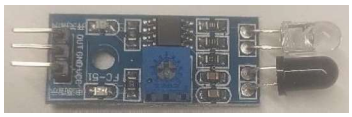
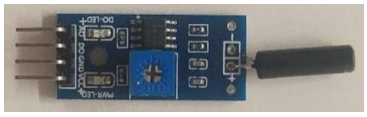
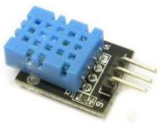
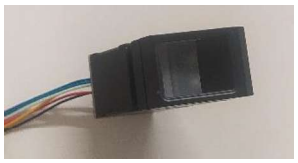
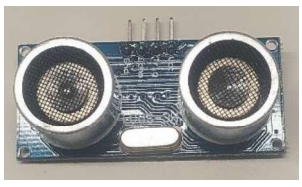
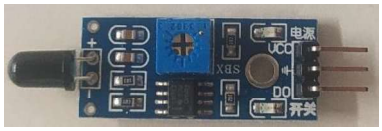
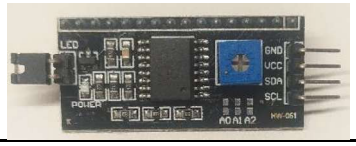
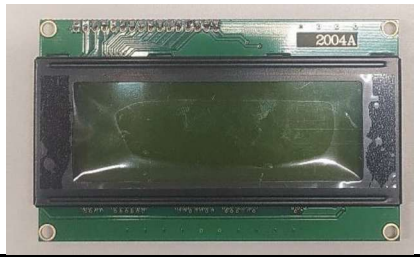
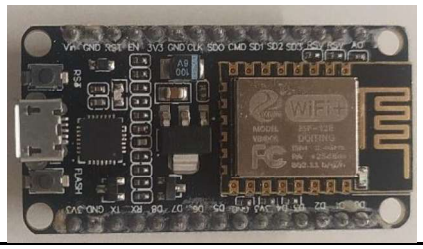
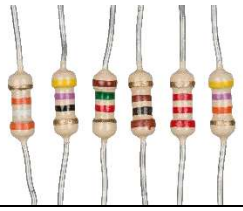
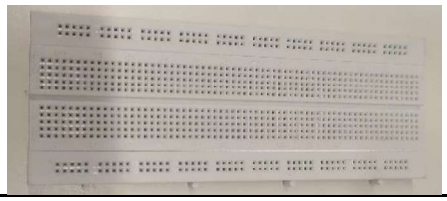
Detailed description of the Hardware Components

Hardware components are as follows:

S.No	Component		Description
1	Mega Arduino Board		The Arduino MEGA 2560 is an 8-bit board with 54 digital pins, 16 analog inputs, and4 serial ports.
2	PIR Sensor (Motion Sensor)		PIR sensors allow you to sense motion, almost always used to detect whether ahuman has moved in or out of the sensors range
3	IR Sensor		IR sensors are widely used in motion detectors, which are used in building servicesto switch on lamps or in alarm systems to detect unwelcome guests.
4	Vibration Sensor		Vibration sensors are piezoelectric accelerometers that sense vibration. They are used for measuring fluctuating accelerations or speeds or for normal vibration measurement.
5	Temperature and Humidity Sensor		They give you a measurement of the temperature and humidity of a place with onedevice.
6	Fingerprint Sensor		Fingerprint sensor will used for fingerprint detection and verification
7	Ultrasonic Sensor		An ultrasonic sensor is an electronic device that measures the distance of a target object by emitting ultrasonic sound waves, and converts the reflected sound into an electrical signal
8	Flame Sensor		A flame-sensor is one kind of detector which is mainly designed for detecting aswell as responding to the occurrence of a fire or flame
9	Smoke Sensor		A smoke detector is a device that senses smoke, typically as an indicator of fire.

10	Buzzer		A buzzer or beeper is an audio signaling device, which may be mechanical,electromechanical, or piezoelectric
11	EM-18 RFID Reader Module		EM18 is a RFID reader which is used to read RFID tags of frequency 125 kHz. Afterreading tags, it transmits unique ID serially to the PC or microcontroller using UART communication or Wiegand format on respective pins
12	RFID Cards		RFID cards are used for applications where tracking or identifying personnel isimportant
13	I2C Module		I2C Module has an inbuilt PCF8574 I2C chip that converts I2C serial data to paralleldata for the LCD display.
14	LCD Display		LCD (Liquid Crystal Display) is a type of flat panel display.
15	NodeMCU		NodeMCU is a low-cost open source IoT platform. It initially included firmware which runs on the ESP8266 Wi-Fi SoC from Espressif Systems, and hardware whichwas based on the ESP-12 module. Later, support for the ESP32 32-bit MCU was added.
16	LEDs		A light-emitting diode (LED) is a semiconductor device that emits light when anelectric current is passed through it

17	Resistors		A resistor is an electrical component that limits or regulates the flow of electrical current in an electronic circuit.
18	Breadboard		A breadboard, solderless breadboard, or terminal array board is aconstruction base used to build semi-permanent prototypes of electronic circuits
19	Switches		An electronic switch is an electronic component or device that can switch an electrical circuit, interrupting the current or diverting it from one conductor to another.
20	Multimeter		An instrument designed to measure electric current, voltage, and usually resistance,typically over several ranges of value.
21	Light Dependent Resistor (LDR)		An LDR is a resistor whose resistance changes as the amount of light falling on it changes.
22	GSM Module		The SIM800A Dual-Band GSM/GPRS Module with RS232 Interface is a complete solution for Dualband GSM/GPRS communication. With the SIM800A GSM module, you can transmit voice, texts, and data over mobile carriers and communicate with it using protocols such as RS232, UART, and I2C.