

SOFTWARE/HARDWARE LIST:-

Chapter Name	Chapter number	Software required (With version)	Hardware specifications	OS required
Setting up the Raspberry pi Zero and Arduino	1	Node.js 4.5 or later	Raspberry Pi Zero	Raspbian Jessie 4.4 or later
Connecting things to the Raspberry Pi Zero	2	Python 2.7.x or Python 3.x	Raspberry Pi Zero sensor DS18B20 MCP3008 ADC Converter	Raspbian Jessie 4.4 or later
Connecting sensors: Measure the real things	3	Arduino Software	Flow sensor MQ2 gas sensor Alcohol sensor Fire sensor Humidity sensor for plants DHT11 temperature and humidity sensor PIR sensor Reed switch Sensor Print sensor	Windows, Linux, MAC
Control-connected devices	4	Arduino Software Node.js for Windows V7.3.0 or later Node.js 4.5 or later	Raspberry Pi Zero Arduino UNO Wi-Fi shield CC3000 Ethernet shield W5100 LDR sensor Relay DHT11 sensor	Raspbian Jessie 4.4 or later Windows, Linux, MAC
Adding a WEB CAM to monitor your security system	5	Arduino Software Python 2.7.x or Python 3.x	Raspberry Pi Zero Arduino UNO Arduino YUN TTL camera USB camera Logitech C270	Raspbian Jessie 4.4 or later Windows, Linux, MAC
Building a monitor WEB and Control devices from a Dashboard	6	Arduino Software Node.js for Windows V7.3.0 or later Node.js 4.5 or later PHP myadmin Database MySQL module	Arduino UNO Ethernet Shield ESP8266 Wifi shield DC motor, L293D integrated circuit Relay Door lock Water Solenoid Current sensor	Raspbian Jessie 4.4 or later Windows, Linux, MAC

Building a Spy Police with the Internet of things dashboard	7	Arduino Software Configure an account at www.freboard.io	Arduino UNO Electret microphone MOC 3011, 4N25 Lamp RFID module and TAGS MW135 smoke sensor PIR sensor Buzzer DHT11 temperature and humidity sensor	Raspbian Jessie 4.4 or later Windows, Linux, MAC
Monitor and Control your devices from a Smart Phone	8	Arduino Software Node.js 4.5 or later Create and account in Gmail so that you can get in APP inventor Android Studio and SDK modules	Raspberry Pi Zero Arduino UNO Ethernet shield Relay DHT11 Temperature and humidity sensor DC motor, L293D integrated circuit Bluetooth module HC05	Raspbian Jessie 4.4 or later Windows, Linux, MAC
Putting all Together	9	Arduino Software Node.js 4.5 or later	Arduino UNO Raspberry Pi Zero Relay modules Matrix keyboard	Raspbian Jessie 4.4 or later