

Chapter number	Software required (With version)	Hardware specifications	OS required
1	<ul style="list-style-type: none"> • Arduino software • Python 2.7.x or Python 3.x 	<ul style="list-style-type: none"> • Arduino • Raspberry Pi with installed Raspbian OS • LDR sensor • Temperature sensor (DHT-22) 	Desktop/Notebook with installed Windows, Linux or Mac
2	Python 2.7.x or Python 3.x	<ul style="list-style-type: none"> • Raspberry Pi with installed Raspbian OS • Relay • Temperature sensor (DHT-22) 	Desktop/Notebook with installed Windows, Linux or Mac
3	<ul style="list-style-type: none"> • Python 2.7.x or Python 3.x • OpenCV 2.4.x 	<ul style="list-style-type: none"> • Raspberry Pi with installed Raspbian OS • Webcam or USB Camera • Pixy CMUcam5 and Pan/Tilt 	Desktop/Notebook with installed Windows, Linux or Mac
4	<ul style="list-style-type: none"> • Arduino software • Google maps engine 	<ul style="list-style-type: none"> • Arduino • Ultrasonic HC-SR04 module • Bluetooth HC-06 • GPS U-blox NEO-6M module • Pololu Zumo Robot for Arduino 	Desktop/Notebook with installed Windows, Linux or Mac
5	<ul style="list-style-type: none"> • Arduino software • Python 2.7.x or Python 3.x 	<ul style="list-style-type: none"> • Arduino • Raspberry Pi with installed Raspbian OS • Electret microphone 	Desktop/Notebook with installed Windows, Linux or Mac

		module <ul style="list-style-type: none"> • 10 segment LED bar graph • EasyVR 3 and EasyVR shield 3 modules • External speaker 	
6	<ul style="list-style-type: none"> • Arduino software • Python 2.7.x or Python 3.x • Arduino Cloud • Microsoft Azure 	<ul style="list-style-type: none"> • Arduino MKR1000 • Raspberry Pi with installed Raspbian OS 	Desktop/Notebook with installed Windows, Linux or Mac