

| Chapter number | Software required (With version) | Hardware specifications | OS required |
|----------------|----------------------------------|--|--|
| 1-10 | | <p>Intel Core i3 or higher CPU, at least 4 GB RAM</p> <p>Intel Galileo Gen 2 board</p> <p>830 tie points (holes for connections) with 2 power lanes breadboard</p> | <p>Windows 7 or greater</p> <p>Mac OS X Mountain Lion or greater</p> <p>Any Linux version capable of running Python 2.7.x and any modern browser with JavaScript support</p> |
| 3 | | <p>Three red ultrabright 5mm LEDs</p> <p>Three white ultrabright 5mm LEDs</p> <p>Three green ultrabright 5mm LEDs</p> <p>Nine 270Ω resistors with 5% tolerance (red violet brown gold)</p> | |
| 4 | | <p>One red ultrabright 5mm LED</p> <p>One green ultrabright 5mm LED</p> <p>One blue ultrabright 5mm LED</p> <p>Three 270Ω resistors with 5% tolerance (red violet brown gold)</p> | |

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| | | One common cathode 5mm RGB LED | |
| 5 | | Two pushbuttons with two pins Two 120Ω resistors with 5% tolerance (brown red brown gold) | |
| 6 | | Two AA or AAA 1.25 V rechargeable batteries or two AA or AAA 1.5 V standard batteries. An appropriate battery holder to plug the two selected batteries in series and simplify wirings. For example, in case you use two AA 1.25 rechargeable batteries, you will need a 2 x AA battery holder. A 2200Ω (2k2Ω) resistor with 5% tolerance (red red red gold). A photoresistor A 10,000Ω (10kΩ) resistor with 5% tolerance (brown black orange gold) A preformatted USB thumb drive compatible with USB 2.0 | |
| 7 | | A SparkFun triple axis accelerometer breakout ADXL335: https://www.sparkfun.com/products/9269 or a Seeedstudio Grove 3-axis analog accelerometer: http://www.seeedstudio.com/depot/Grove-3Axis-Analog-Accelerometer-p-1086.html . A SparkFun triple axis accelerometer breakout ADXL345: https://www.sparkfun.com/products/9836 or a Seeedstudio Grove 3-axis digital accelerometer: http://www.seeedstudio.com/depot/Grove-3Axis-Digital-Accelerometer16g-p-1156.html . A Seeedstudio Grove temperature sensor: http://www.seeedstudio.com/depot/Grove-Temperature-Sensor-p-774.html . A SeeedStudio Grove temperature & humidity sensor (high-accuracy & mini) breakout: http://www.seeedstudio.com/depot/Grove-TemperatureHumidity-Sensor-HighAccuracy-Mini-p- | |

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| 8 | | <p>A SeeedStudio Grove temperature & humidity sensor (high-accuracy & mini) breakout: http://www.seeedstudio.com/depot/Grove-TemperatureHumidity-Sensor-HighAccuracy-Mini-p-1921.html.</p> <p>A SeeedStudio Grove LCD RGB backlight breakout: http://www.seeedstudio.com/depot/Grove-LCD-RGB-Backlight-p-1643.html</p> <p>A Grove OLED Display 0.96", 96-by-96 dot matrix OLED display module: http://www.seeedstudio.com/depot/Grove-OLED-Display-096-p-824.html.</p> <p>A SeeedStudio Grove Servo or a EMAX 9g ES08A High Sensitive Mini Servo: http://www.seeedstudio.com/depot/Grove-Servo-p-1241.htmland http://www.seeedstudio.com/depot/EMAX-9g-ES08A-High-Sensitive-Mini-Servo-p-760.html.</p> | |