

Hardware list for AiTLE + CityU App Lab : Arduino Workshop (Elementary & Advanced)

✦ Arduino Starter Kit

- Used in both workshop
- Any Arduino Starter Kit that contain
 - Arduino Uno r3
 - Battery with case
 - 10K and 1K resistors
 - Breadboard
 - At least 2 LED in any two color (total 4 LED)
 - At least 20Jumper wire
 - Buzzer x 1
 - servo motor x 1
 - LDR (Light Dependent Resistors) x 1
- Reference URL : http://item.taobao.com/item.htm?spm=a1z09.2.9.90.AimV6X&id=18153652489&_u=j1uk64k7e813
- Price : ~\$145 RMB

✦ Extra hardware needed:

• Elementary Workshop

- Sensors
 - ❖ HC-SR04 Ultrasonic module
 - ☞ Reference URL : http://item.taobao.com/item.htm?spm=a1z09.2.9.118.AimV6X&id=3125174163&_u=j1uk64k75bc6
 - ☞ Price : ~\$4.3 RMB
- Modules
 - ❖ HC-06 Bluetooth
 - ☞ Reference URL : http://detail.tmall.com/item.htm?spm=a230r.1.0.0.iP9cd7&id=19556723539&ad_id=&am_id=&cm_id=140105335569ed55e27b&pm_id=&abbucket=5#
 - ☞ Price : ~\$21 RMB ()

- **Advanced Workshop**

- **Sensors**

- ❖ dht11 temperature & humidity sensor

- ☞ Reference URL : http://item.taobao.com/item.htm?spm=a1z09.2.9.104.AimV6X&id=35902935857&_u=j1uk64k7d28c

- ☞ Price : ~6.8 RMB

- ❖ itead PIR Motion Sensor Module

- ☞ Reference URL : http://item.taobao.com/item.htm?spm=a1z09.2.9.76.AimV6X&id=20455692951&_u=j1uk64k73173

- ☞ Price : ~12 RMB

- **Modules**

- ❖ Arduino car base

- ☞ with motor x 2

- ☞ Reference URL : http://item.taobao.com/item.htm?spm=a1z09.2.9.62.AimV6X&id=21201512835&_u=j1uk64k783a4

- ☞ Price : ~35 RMB

- ❖ Arduino Ethernet W5100

- ☞ Reference URL : http://detail.tmall.com/item.htm?id=38628268194&spm=a1z09.2.9.36.AimV6X&_u=j1uk64k76e23

- ☞ Price : ~\$42 RMB

- ❖ Ethernet crossover cable

- ❖ motor control shield L293D

- ☞ Reference URL : http://detail.tmall.com/item.htm?id=38628168346&spm=a1z09.2.9.24.AimV6X&_u=j1uk64k7fb97

- ☞ Price : ~\$21 RMB

- ❖ HC-06 Bluetooth (*same as Elementary workshop*)

- ☞ Reference URL : http://detail.tmall.com/item.htm?spm=a230r.1.0.0.iP9cd7&id=19556723539&ad_id=&am_id=&cm_id=140105335569ed55e27b&pm_id=&abbucket=5#

- ☞ Price : ~\$21 RMB

- ❖ (Optional) CC3000 WiFi Shield for Arduino R3

- ☞ Reference URL : http://item.taobao.com/item.htm?spm=a1z09.2.9.48.JshjMv&id=39317438435&_u=j1uk64k73fed

- ☞ Price : ~\$198 RMB

Remark: Participants should have their own google account to login app inventor 2 for the workshop