Bill of Materials

|  |  |  |
| --- | --- | --- |
| **Component Name** | **Quantity** | **Buy Link (International)\*** |
| Raspberry Pi 4 Model B 1GB | 1 | [https://www.amazon.com/Raspberry-Model-2019-Quad-Bluetooth/dp/B07TD43PDZ/](https://www.amazon.com/Raspberry-Model-2019-Quad-Bluetooth/dp/B07TD43PDZ/ref=sr_1_3?keywords=raspberry+pi+4+1gb&qid=1574926648&sr=8-3) |
| 5 V 3 A Power Supply | 1 | [https://www.amazon.com/OKRAY-Charger-Portable-Charging-Compatible/dp/B07LBMLVQN/](https://www.amazon.com/OKRAY-Charger-Portable-Charging-Compatible/dp/B07LBMLVQN/ref=sr_1_3?keywords=5v+3a+usb+charger&qid=1574926980&sr=8-3) |
| USB C Cable | 1 | [https://www.amazon.com/AmazonBasics-Type-C-USB-Male-Cable/dp/B01GGKYN0A/](https://www.amazon.com/AmazonBasics-Type-C-USB-Male-Cable/dp/B01GGKYN0A/ref=sr_1_14?crid=1SGMEEFZQZD0D&keywords=usb+c+cable&qid=1574926801&sprefix=usb+c+%2Caps%2C404&sr=8-14) |
| Micro HDMI to HDMI | 2 | [https://www.amazon.com/Rankie-Micro-Supports-Ethernet-Return/dp/B00Z07JYLE/](https://www.amazon.com/Rankie-Micro-Supports-Ethernet-Return/dp/B00Z07JYLE/ref=sr_1_4?crid=1IQDTWFULTTKF&keywords=micro+hdmi+to+hdmi&qid=1574926734&sprefix=micro+hdmi+%2Caps%2C473&sr=8-4) |
| 32 GB Class 10 MicroSD Card | 1 | [https://www.amazon.com/SanDisk-Ultra-microSDXC-Memory-Adapter/dp/B073JWXGNT/](https://www.amazon.com/SanDisk-Ultra-microSDXC-Memory-Adapter/dp/B073JWXGNT/ref=sr_1_3?crid=TVS9402FESTX&keywords=32gb+class+10+micro+sd+card&qid=1574926844&sprefix=32+gb+clas%2Caps%2C392&sr=8-3) |
| Cooling Case with Heatsink | 1 | [https://www.amazon.com/GeeekPi-Acrylic-Raspberry-Cooling-Heatsinks/dp/B07TXSQ47L/](https://www.amazon.com/GeeekPi-Acrylic-Raspberry-Cooling-Heatsinks/dp/B07TXSQ47L/ref=sr_1_3?crid=2XRSPULDKRGF5&keywords=raspberry+pi+4+case+with+fan&qid=1574927029&sprefix=raspberry+pi+4+case+%2Caps%2C406&sr=8-3) |
| LEDs\*\* | 1 | <https://www.amazon.com/Gikfun-Assorted-Arduino-100pcs-EK8437/dp/B01ER728F6/> |
| Resistors\*\* | 1 | <https://www.amazon.com/Elegoo-Values-Resistor-Assortment-Compliant/dp/B072BL2VX1/> |
| Push Buttons\*\* | 1 | <https://www.amazon.com/OCR-180PcsTactile-Momentary-Switches-Assortment/dp/B01MRP025V/> |
| Multimeter | 1 | <https://www.amazon.com/AstroAI-Digital-Multimeter-Voltage-Tester/dp/B01ISAMUA6> |
| Breadboard | 1 | <https://www.amazon.com/EL-CP-003-Breadboard-Solderless-Distribution-Connecting/dp/B01EV6LJ7G/> |
| Soldering Iron Kit | 1 | <https://www.amazon.com/BAYKA-482-896%E2%84%89%EF%BC%88250-480%E2%84%83%EF%BC%89-Adjustable-Temperature-Auto-Sleep/dp/B07R4SDSP8/> |
| Hook-up and Jumper Wires\*\* | 1 | <https://www.amazon.com/AUSTOR-Preformed-Breadboard-Assorted-Prototyping/dp/B07PQKNQ22/> |
| LDR | 1 | <https://www.amazon.com/PODOY-Photoresistor-GL5537-Resistors-Light-Dependent/dp/B016D737Y4> |
| PIR Sensor | 1 | <https://www.amazon.com/Adafruit-LK-918O-SANV-FBACA-PIR-Motion-Sensor/dp/B00JOZTAC6/> |
| 2 Channel Relay | 1 | <https://www.amazon.com/SMAKN%C2%AE-Active-Channel-Arduino-Raspberry/dp/B00VH8926C/> |
| Ultrasonic Sensor | 1 | <https://www.amazon.com/SainSmart-HC-SR04-Ranging-Detector-Distance/dp/B004U8TOE6/> |
| Motor Driver | 1 | <https://www.amazon.com/Qunqi-Controller-Module-Stepper-Arduino/dp/B014KMHSW6/> |
| 2 DC Motors & Car  Chassis | 1 | <https://www.amazon.com/perseids-Chassis-Encoder-Wheels-Battery/dp/B07DNYQ3PX/> |
| FTDI USB to Serial Module | 1 | <https://www.amazon.com/HiLetgo-FT232RL-Converter-Adapter-Breakout/dp/B00IJXZQ7C/> |
| I2C 16x2 LCD | 1 | <https://www.amazon.com/HiLetgo-Display-Backlight-Controller-Character/dp/B00HJ6AFW6/> |
| RC522 RFID kit | 1 | <https://www.amazon.com/SunFounder-Mifare-Reader-Arduino-Raspberry/dp/B07KGBJ9VG/> |

**\*Check with your domestic online electronic stores before ordering from global online stores. You might get the components more quickly if ordered from domestic sellers. Also, these links might render useless if the seller removes the item from the online shop.**

**\*\*These are cheaper when ordered in bulk, and you will be needing extra components for the later sections.**