

# Wiring Details

## Arduino Nano

- **D10** connected to **TXD** of HC-05 Bluetooth Module
- **D11** connected to **RXD** of HC-05 Bluetooth Module
- **5V** connected to **VCC** of HC-05 Bluetooth Module
- **GND** connected to **GND** of HC-05 Bluetooth Module, L298N DC Motor Driver, and 18650 Li-ion Battery
- **VIN** connected to **5V** of L298N DC Motor Driver
- **D5** connected to **ENA** of L298N DC Motor Driver
- **D9** connected to **ENB** of L298N DC Motor Driver
- **D3** connected to **IN1** of L298N DC Motor Driver
- **D6** connected to **IN3** of L298N DC Motor Driver
- **D7** connected to **IN4** of L298N DC Motor Driver
- **D4** connected to **IN2** of L298N DC Motor Driver

## 18650 Li-ion Battery x 2

- + connected to **2** of Rocker Switch
- - connected to **GND** of HC-05 Bluetooth Module, L298N DC Motor Driver, and Arduino Nano

## Rocker Switch

- **1** connected to **12V** of L298N DC Motor Driver
- **2** connected to + of 18650 Li-ion Battery

## HC-05 Bluetooth Module

- **TXD** connected to **D10** of Arduino Nano
- **RXD** connected to **D11/MOSI** of Arduino Nano
- **VCC** connected to **5V** of Arduino Nano
- **GND** connected to **GND** of Arduino Nano, L298N DC Motor Driver, and 18650 Li-ion Battery

## L298N DC Motor Driver

- **12V** connected to **1** of Rocker Switch
- **GND** connected to **GND** of HC-05 Bluetooth Module, 18650 Li-ion Battery, and Arduino Nano
- **5V** connected to **VIN** of Arduino Nano
- **ENA** connected to **D5** of Arduino Nano
- **ENB** connected to **D9** of Arduino Nano
- **IN1** connected to **D3** of Arduino Nano
- **IN2** connected to **D4** of Arduino Nano

- **IN3** connected to **D6** of Arduino Nano
- **IN4** connected to **D7** of Arduino Nano
- **OUT1** connected to **3 - 6 VCC** of Motor 1
- **OUT2** connected to **GND** of Motor 1
- **OUT3** connected to **3 - 6 VCC** of Motor 2
- **OUT4** connected to **GND** of Motor 2

## Motor 1

- **3 - 6 VCC** connected to **OUT1** of L298N DC Motor Driver
- **GND** connected to **OUT2** of L298N DC Motor Driver

## Motor 2

- **3 - 6 VCC** connected to **OUT3** of L298N DC Motor Driver
- **GND** connected to **OUT4** of L298N DC Motor Driver