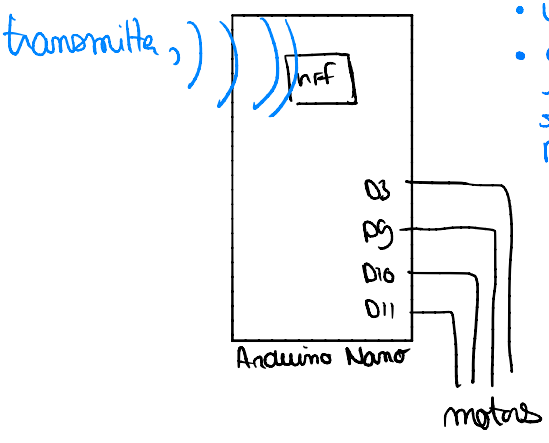
My configuration (receiver embedded in the arduino nano)

Signal : • Bluetooth classic or BLE 5.0?
- which rate?
- can I use interrupt fonctions and input_capture_mode (timers) to read the data received by the Bluetooth module



According to Arduino.cc (BLE Library)

A characteristic value can be up to 512 bytes long. This is a key constraint in designing services. Given this limit, you should consider how best to store data about your sensors and actuators most effectively for your application. The simplest design pattern is to store one sensor or actuator value per characteristic, in ASCII encoded values.

Characteristic	Value
Accelerometer X	200
Accelerometer Y	134
Accelerometer Z	150

option 1

This is also the most expensive in memory terms, and would take the longest to read. But it's the simplest for development and debugging.

You could also combine readings into a single characteristic, when a given sensor or actuator has multiple values associated with it.

Characteristic	Value
Motor Speed, Direction	150,1
Accelerometer X, Y, Z	200,133,150

option 2

This is more efficient, but you need to be careful not to exceed the 512-byte limit. The accelerometer characteristic above, for example, takes 11 bytes as a ASCII-encoded string.