Notes on Core Bluetooth: (from <https://developer.apple.com/library/archive/documentation/NetworkingInternetWeb/Conceptual/CoreBluetooth_concepts/CoreBluetoothOverview/CoreBluetoothOverview.html#//apple_ref/doc/uid/TP40013257-CH2-SW1>)

1. The Core Bluetooth framework lets your iOS and Mac apps communicate with Bluetooth Low Energy (BLE) devices.
2. There are two major players involved in all BLE communication: the central and the peripheral.
   1. A *peripheral* has data that is needed by other devices. Equivalent to server.
   2. A *central* typically uses the information served up by peripherals to accomplish some particular task. Equivalent to client.

Diagram

Description automatically generated

When a Bluetooth device connects to another Bluetooth enabled device, it measures the signal strength as [RSSI](https://www.bluetooth.com/blog/proximity-and-rssi/) ( received signal strength indicator). The connection strength depends on the distance between the devices — The connection will be strong if two devices are nearby. As the device move apart, the connection weakens.

This means that there is a direct correlation between physical distance and RSSI!!! For the conversion, see the graph and data points in the Meters vs RSSI Excel spreadsheet.

From: https://smartsensordevices.com/distance-measuring-solution-for-covid-19-using-bluetooth-low-energy/