

POC 1: Connectivity

Dario A Lencina Talarico

Dec 25/2015

Objectives

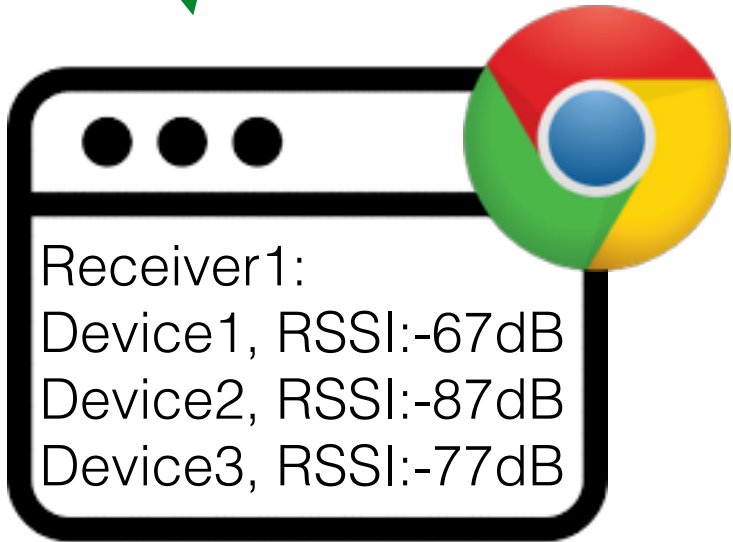
- Design and test connectivity between receivers and backend.
- Design receiver Bluetooth scanner logic.
- Design method to distinguish between receivers.

- 1 Receiver App scans for nearby Bluetooth Low Energy Devices.
- 2 Receiver App sends a JSON document with it's identifier and a list of Bluetooth Devices to the backend.
- 3 The backend pushes that list to all the connected monitors.

Backend
(hosted on Amazon
web services)

WebSocket
live connection

Receiver1:
Device1, RSSI:-67dB
Device2, RSSI:-87dB
Device3, RSSI:-77dB



Monitor Browser

Receiver App



Bluetooth LE
Device 1

Bluetooth LE
Device 2

Bluetooth LE
Device 3

RSSI: Received signal strength indication

- Is a measurement of the power present in a received radio signal.
- The higher the RSSI number, the stronger the signal.