*Florida International University*

*School of Computing and Information Sciences*

Software Engineering Focus

Feature Document

User Story ID 208

**Name:** Format gathered data from device

**Team Member(s):** Galo Romero

**Project:** Biosensing 2.0

**Product Owner(s)**: Shekhar Bhansali, Yogeswaran Umasankar

**Mentor(s)**: Vishal Chopade, Apurva Sonawane

**Instructor**: Masoud Sadjadi

**User Story Name:**

* Description: As an app developer, I want to format the gathered data from the BLE device, so that, I can display the data properly.

Acceptance Criteria

* The Android app shows data formatted correctly.
* Make services and characteristics UUIDs easy to swap in code.
* Data should be collected and displayed dynamically.

**Use Case**

* Name: Format gathered data from device.
* Actor: App developer.
* Preconditions:

1. Android app is installed on mobile device.
2. Android app was successfully connect to BLE device.
3. Android app can obtain data from BLE device.

* Description <Flow of events>:

1. App developer queries for data from BLE device.
2. Android app displays a list of services.
3. App developer selects a service.
4. Android app displays a list of characteristics of selected service.
5. App developer selects a characteristic.
6. Android app formats selected data from BLE device.

**Use Case Diagram**

UseCaseDiagram.png

**Sequence Diagram**

SequenceDiagram.png

**Class Diagram**

ClassDiagram.png

**Unit Test**

* Test case ID: 208-001 (Sunny Day)
* Description/Summary of Test:
* Test if Android app formats BLE device data and displays it correctly.
* Pre-condition:
* Android app is connect to BLE device and the app can gather data from it.
* Expected Results:
* Android app displays formatted BLE data.
* Actual Result:
* The data collected from the BLE device was formatted correctly.
* Status (Fail/Pass):
* Pass.
* Test case ID: 208-002 (Rainy Day)
* Description/Summary of Test:
* Test what happens if Android app can’t collect data from BLE device.
* Pre-condition:
* Android app is connect to BLE device and the app can gather data from it.
* Expected Results:
* Android app data field shows no data string.
* Actual Result:
* The Android app displays the correct message.
* Status (Fail/Pass):
* Pass.

**Visual User Guide**

