*Florida International University*

*School of Computing and Information Sciences*

Software Engineering Focus

Feature Document

User Story ID 225

**Name:** Add capability to gather and display data from Sunny 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 gather and display data from the Sunny device, so that, patients can see their heart rate and temperature.

Acceptance Criteria

* The Android app can gather and display data from Sunny device.
* The Android app works on Android version 6.0.

**Use Case**

* Name: Add capability to gather and display data from Sunny device.
* Actor: App developer.
* Preconditions:

1. Android app is installed on mobile device.
2. Android app was successfully connect to Sunny device.

* Description <Flow of events>:

1. App developer requests to discover services and characteristics from the Sunny device.
2. Sunny device sends back a list of services and characteristics.
3. The list of services is shown on the Android app.
4. App developer chooses a specific service.
5. A list of characteristics of the service is shown from a drop down list.
6. App developer chooses a specific characteristic.
7. Data of the chosen characteristic is displayed.

**Use Case Diagram**

UseCaseDiagram.png

**Sequence Diagram**

SequenceDiagram.png

**Class Diagram**

ClassDiagram.png

**Unit Test**

* Test case ID: 225-001
* Description/Summary of Test:
* Test if Android app runs on Android version 6.0.
* Pre-condition:
* Android app is installed on Android device.
* Expected Results:
* The Android app ask for location access and if user selects ok, it can detect BLE devices.
* Actual Result:
* The Android app scans and finds BLE devices.
* Status (Fail/Pass):
* Pass
* Test case ID: 225-002
* Description/Summary of Test:
* Test if Android app can gather and display data from Sunny device.
* Pre-condition:
* Android app is connect to Sunny device.
* Expected Results:
* The Android app can gather and display data from Sunny device.
* Actual Result:
* The Android app receives and displays data from Sunny device.
* Status (Fail/Pass):
* Pass

**Visual User Guide**

