*Florida International University*

*School of Computing and Information Sciences*

Feature Document

User Story ID 203

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**Project:** Biosensing 2.0

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**User Story:** Display line graph on app

### **Description:**

* As a user, I want to be able to access a line graph that clearly represents temperature data.

### **Acceptance Criteria:**

1. The app generates test temperature data
2. The app displays a line graph with the test data plotted on it

**Use Case:**

* **I**D: 203-01 - Display line graph of test temperature data
* **Actor:** User
* **Entry Condition:** This use case starts when the user opens the app.
* **Flow of Events:**
  + The user opens the app.
  + The system generates random numbers as test temperature values.
  + The system plots the test data on a line graph and displays it.
* **Exit Condition:** This use case ends when the system displays the line graph.

**Use Case Diagram**

sprint 3 use case diagram.png

**Sequence Diagram**

sprint 3 sequence.png

**Testing**

* Test Case ID: 203-001
* Purpose: To test if the mobile app can display a line graph of randomly generated data.
* Preconditions: Android application package installed on mobile device
* Expected Result: The app generates 100 random numbers between 70 and 80 and displays a line graph with the values plotted on it.
* Actual Result: The app successfully generated the test data and displayed the graph.

**User Guide**

In this simple app, the user can take no actions after opening the app, aside from closing it and terminating the program. When opened, the app will generate 100 random numbers between 70 and 80 to serve as test temperature data. The app will then plot these values onto a line graph and display the graph on the screen. The user may then use their fingers to manipulate the screen. They are able to zoom in and out, as well as scroll sideways. A screenshot of the line graph is shown below.

