G.FIT iOS Demo App User Manual

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Revision History

Revision	Effective Date	Description
1.0	September 2017	Initial Release

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Table of Contents

List of Figures

1   Overview

The G.FIT demo iOS application provides an interface that allows a user to monitor data transmitted from a G.FIT device on an iOS device. Users can connect to a device and view their data in real time. The app logs the user's data and can save the data to a FIT file.

There are 4 main components to the app:

- Device List Screen: Expose user to a list of nearby G.FIT devices

- Filters Scene: Allow user to tune the device scan to include only devices that are close to the user

- Data Screen: Display the user's data

- Device Information screen: Show information about the device the user is connected to

2   Usage Instructions

2.1   Connecting to a Device

When the app loads, the user is shown the "Device List Screen". To connect to a device, simply tap the device in the list.
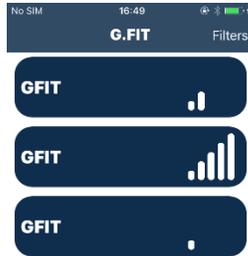
Figure 2-1. Devices Table View

2.2   Filtering Devices

Tapping the "Filters" button on the "Device List Screen" will bring the user to the "Filters Screen". This simple screen includes a slider control that allows the user to change a threshold RSSI used in the device scan. The further left the slider is set, the lower the RSSI threshold, meaning more devices will show up in the scan. Tapping the "Set" button will apply the filter and bring the user back to the "Device List Screen" where the filtered list of devices will be displayed.
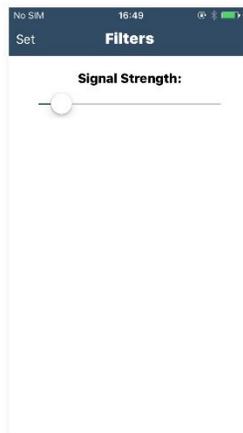

Figure 2-2. Filter View

2.3   Viewing Data

Tapping on a device in the "Device List Screen" will bring the user to the "Data Screen". The app will connect to the device and scan to find the BLE characteristics supported by the G.FIT device. All the data fields related to the supported

characteristics will be shown on screen with the default value: "---". As the device transmits data, the app will decode and display the data on the screen for the user to see. The data fields are continuously updated as information is received.


Figure 2-3. Data View

2.4   Device Information

Tapping the "Info" button in the "Data Screen" will bring the user to the "Device Information Screen". This screen will read the BLE characteristics from the Device Information Service and display some of this data on the screen. Tapping the back button will bring the user back to the "Data Screen".

2.5   Saving Data

When the user taps the "Back" button from the "Data Screen", they will be prompted to save or delete their data from the session (from the time they initially connected to the device to when they select an option to save or delete their data). Selecting the "Save Session Data" option will save the data to a '.fit' file and return the user to the "Device List Screen". Selecting the "Delete Data" will delete the data from the session and return the user to the "Device List Screen". Selecting the "Cancel" option will continue to log the data and return the user to the "Data Screen".
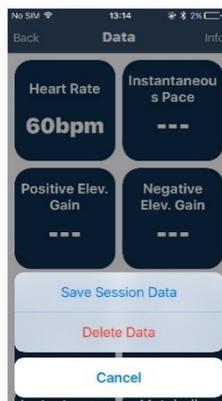
Figure 2-4. Save Data Prompt

3   Running the App

Use Xcode to run and debug the app. For more details see:
https://developer.apple.com/library/content/documentation/IDEs/Conceptual/AppDistributionGuide/LaunchingYourApponDevices/LaunchingYourApponDevices.html

- You will require files from the FIT SDK found here:

  https://www.thisisant.com/resources/fit/

- To add the required files, copy the folder './cpp/include' from the FIT SDK into your project directory. Right click on the project icon at the top of the Xcode file navigator and select "Add files to "g.fit"..."

- Clean and build your Xcode Project

4   Retrieving FIT files

To retrieve the '.fit' files from the iPhone:

1.   Connect the iPhone to a computer with iTunes installed

2.   Open iTunes and select the iPhone icon in the toolbar near the top left of the iTunes window

3.   Select the "Apps" option in the Settings panel on the left

4.   Scroll down to the "File Sharing" section of the "Apps" page

5.   Select the "g.fit" app from the left side list

6.   Drag and drop the files from the right-side list to a location on your computer