



**Flinders Digital Health  
Research Centre**

# **Fitbit Data Extractor User Installation Guide**

## **CONTACT US**

FLINDERS DIGITAL HEALTH RESEARCH CENTRE (FDHRC)  
Flinders University Level 2, Building 1, Tonsley Campus,  
Flinders University  
1284 South Road, Clovelly Park  
South Australia 5042, AUSTRALIA  
Phone: (+618) 8201 3107 / 2023  
Email: [digitalhealth@flinders.edu.au](mailto:digitalhealth@flinders.edu.au)

## Table of Contents

<b>1. Introduction.....</b>	<b>3</b>
<b>2. System Requirements.....</b>	<b>3</b>
<b>3. Installation.....</b>	<b>3</b>
<b>4. How to run the Fit Bit Data Extractor.....</b>	<b>6</b>
<b>5. Sample Data.....</b>	<b>10</b>

## 1. Introduction

Fitbit devices allow user to have controlled access to the collected data. However, the viewable data is not easily exported as raw data. Instead, the data is either locked to the Fitbit website or is summarised in daily statistics. If user have full access to the Fitbit raw data, there are several potential uses. The aim of this application is to enable a user to download their personal Fitbit device's data and view or edit it in applications like Excel.

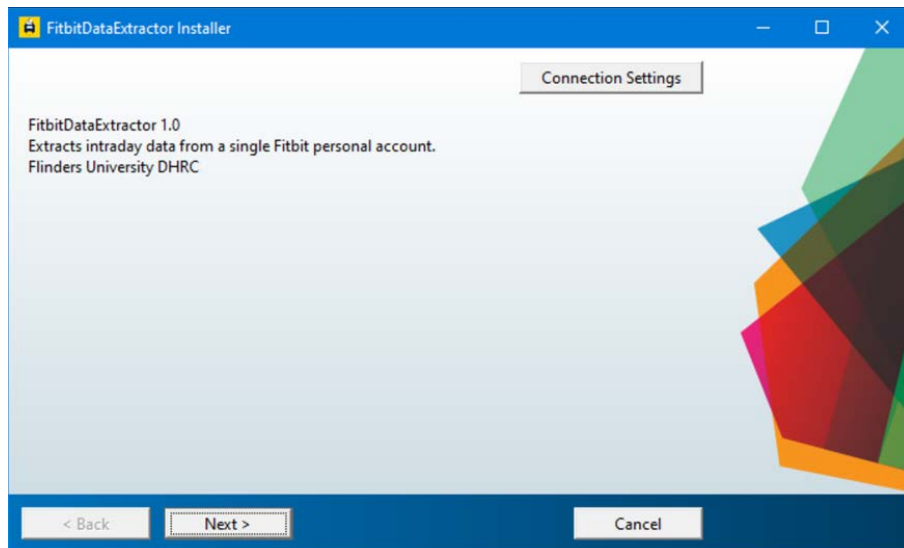
## 2. System Requirements

The Fitbit Data Extractor was demonstrated on system with below configuration, while this may work on prior OS versions as well.

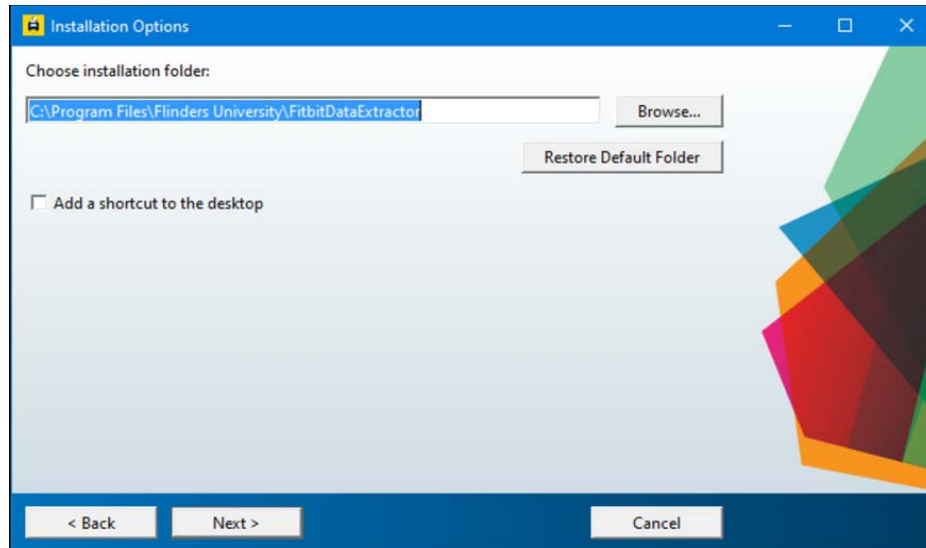
- Operating System: Microsoft Windows 10.
- Software Tools: Microsoft Excel 2016.

## 3. Installation

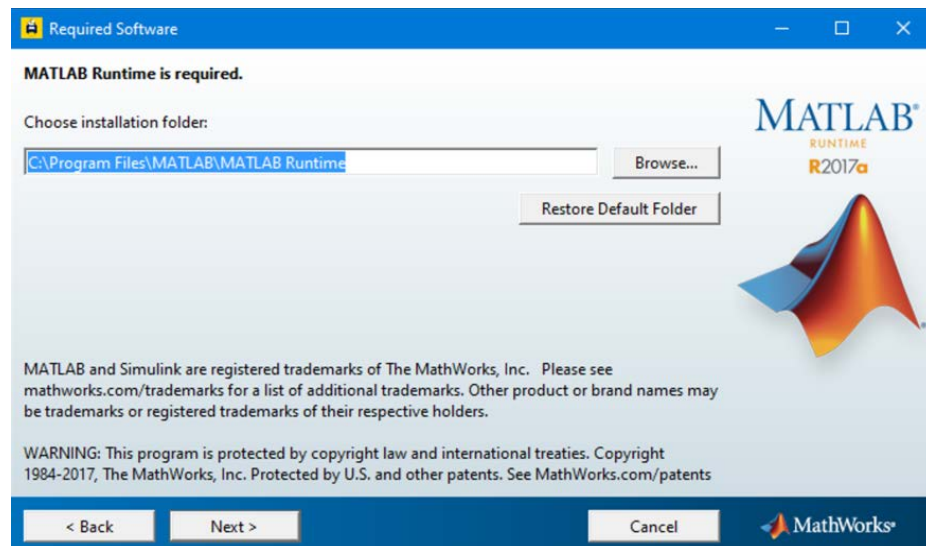
**Step 1:** Ensure you have administrative privilege on the computer. Click the Fitbit data Extractor Installer. On the below screen, select 'Next' to continue with installation.



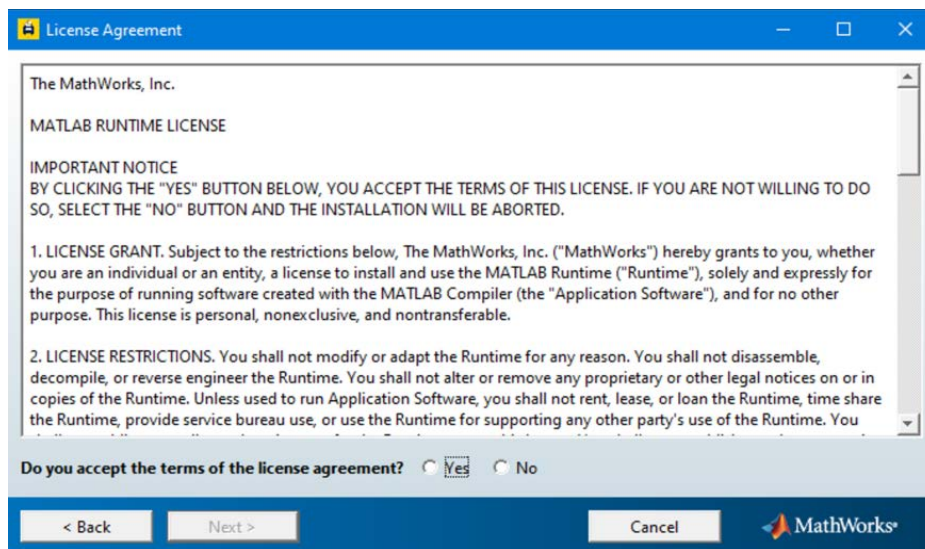
**Step 2:** "Browse" to select the installation folder. Default location is "C:\Program Files\". Select 'Add a shortcut to Desktop' checkbox, for easy access of the tool once installed.



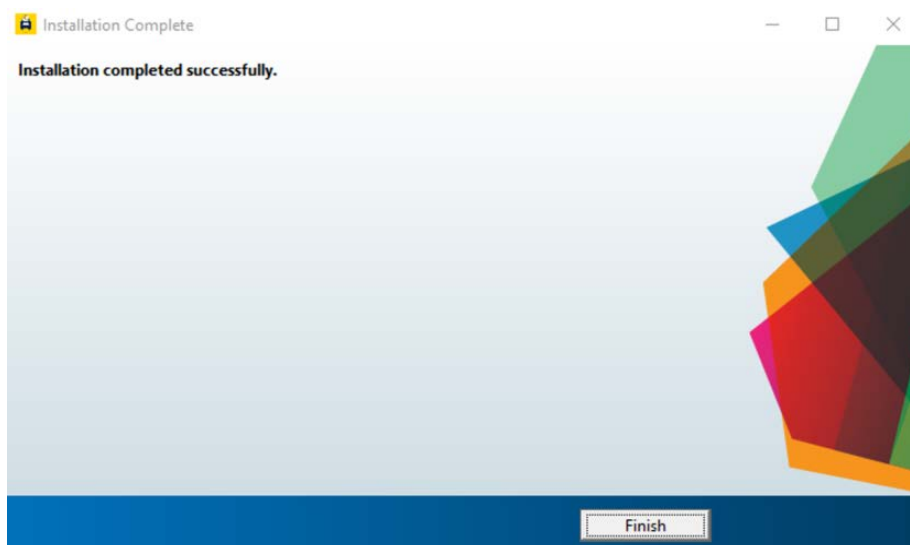
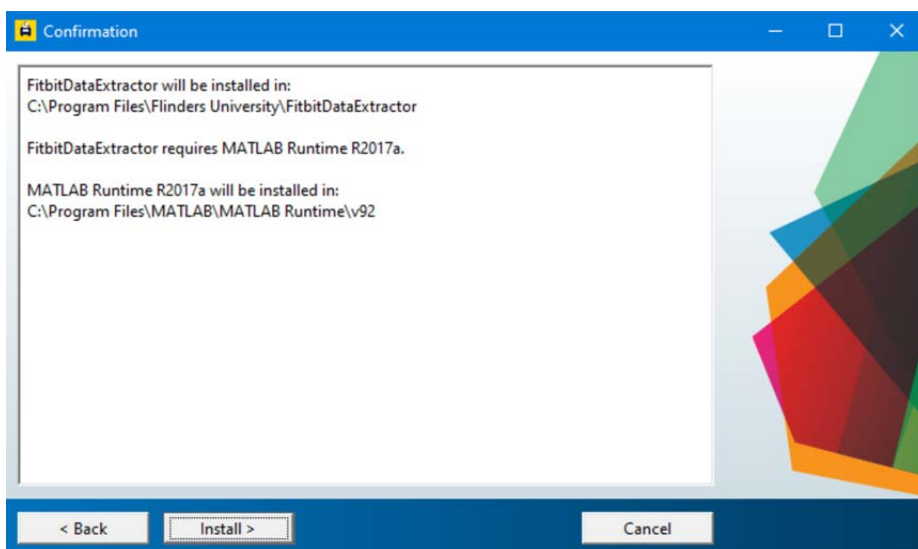
**Step 3:** "Browse" to select the installation folder and install Matlab Runtime which is required software for Fitbit data extractor.



**Step 4:** Accept license agreement.

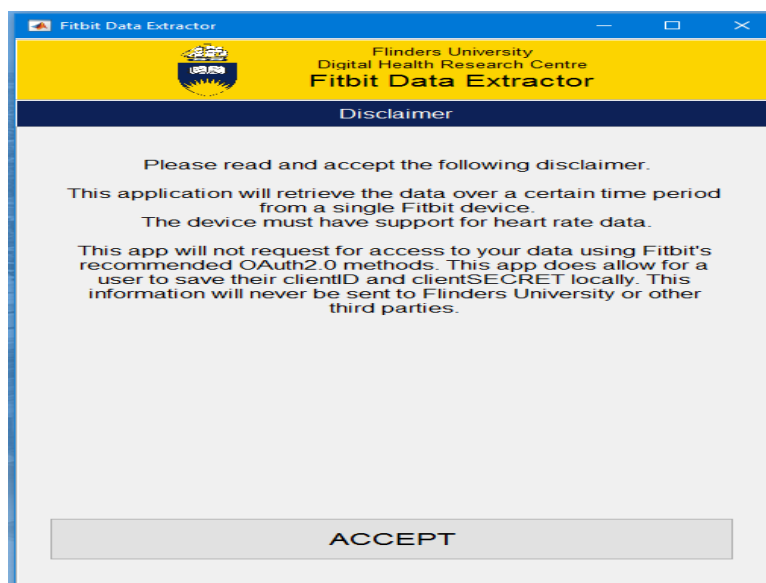


**Step 5:** Confirm the installation option by selecting "Install"

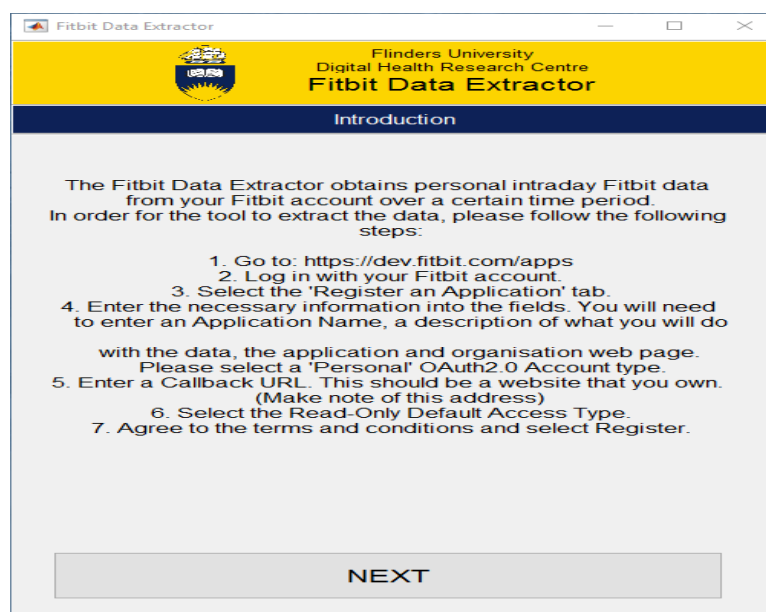


## 4. How to run the Fit Bit Data Extractor

- a. Double click on the Fitbit Data Extractor icon on desktop.
- b. User is presented with a 'Disclaimer' screen. The authorisation process is not the one recommended by Fitbit and therefore Flinders University will not store their account data. The user must accept the terms to proceed with the application.



- c. User is given a list of tasks that must be completed in order to obtain a personal Fitbit account. This step is compulsory. The user selects 'NEXT' when they have completed the tasks as specified from step i to iii (steps i to iii are required only at the time of registration).



- i. To configure a connection with Fitbit, you need to register a new application in Fitbit.
- ii. Logon to Fitbit Developers site: <https://dev.fitbit.com/apps>, Click 'Register an APP' tab on the top right. This displays the below screen. Fill all the required information.

Below snapshot gives an example on how to fill the form. Please make sure that the callback URL is entered as shown in the picture (<https://www.flinders.edu.au/>). Other URLs could be different.

The screenshot shows the 'Register an application' form on the Fitbit Developers site. The form is titled 'Register an application' and has a '\* Required' label in the top right corner. The form fields are as follows:

- Application Name \***: MyHealthApp
- Description \***: Description on My HealthApp
- Application Website \***: <https://www.fitbit.com/>
- Organization \***: na
- Organization Website \***: <https://www.fitbit.com/>
- OAuth 2.0 Application Type \***:  Server  Client  Personal
- Callback URL \***: <https://www.flinders.edu.au/>
- Default Access Type \***:  Read & Write  Read-Only

There are also two buttons at the bottom: 'Register' and 'Cancel'. A checkbox at the bottom is checked, indicating 'I have read and agree to the terms of service'.

- iii. Click Register.

dev.fitbit.com OVERVIEW REGISTER AN APP MANAGE MY APPS

Visit Dev Forum

Read API Docs

Fitbit Logos  
Download our logos and read trademark guidelines and terms of service

Download All

Get affiliated  
Become a Fitbit Affiliate and make money from your users who buy a Fitbit.

Learn more

## Applications I registered

[+ Register a new app](#)

### Application MyApp

MyApp for health track

Edit Application Settings Delete Application

Reset Client Secret Revoke Client Access Tokens

**OAuth 2.0 Client ID**  
22CL3G

**Client Secret**  
032bfe665bb6cf9f572f3c030a9bec94

**Callback URL**  
https://www.flinders.edu.au/

**OAuth 2.0: Authorization URI**  
https://www.fitbit.com/oauth2/authorize

**OAuth 2.0: Access/Refresh Token Request URI**  
https://api.fitbit.com/oauth2/token

[OAuth 2.0 tutorial page](#)

[← View all applications](#)

- d. Click Next on the screen shown on step C.
- e. User must copy and paste client ID, client secret and the redirect (callback URL) website from the figure above to form below. You can select option to 'remember me' where client information will be saved. You can use 'Back' button to return to the previous screen. When the 'Next' button is selected a website will open in the user's default internet browser.



Fitbit Data Extractor

Flinders University  
Digital Health Research Centre  
Fitbit Data Extractor

Step 1/5

BACK

Please enter the following information:

Client ID: 22CL3G

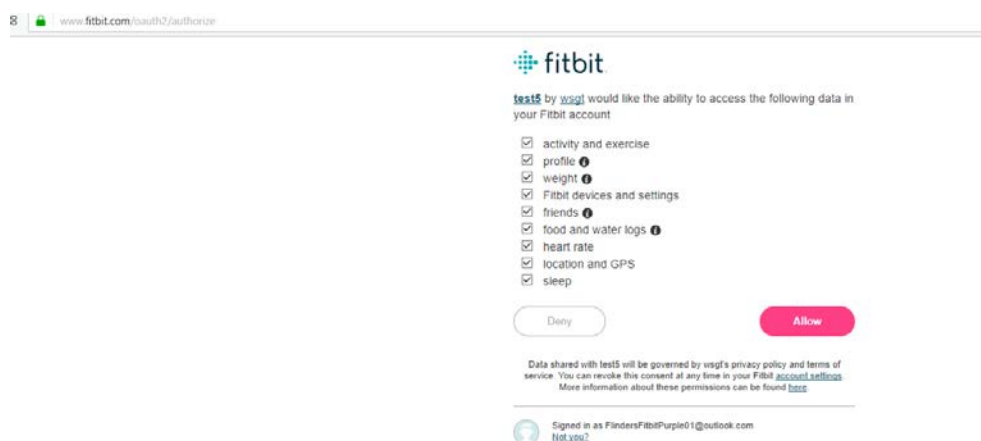
Client Secret: 665bb6cf9f572f3c030a9bec94

Redirect Website: https://www.flinders.edu.au/

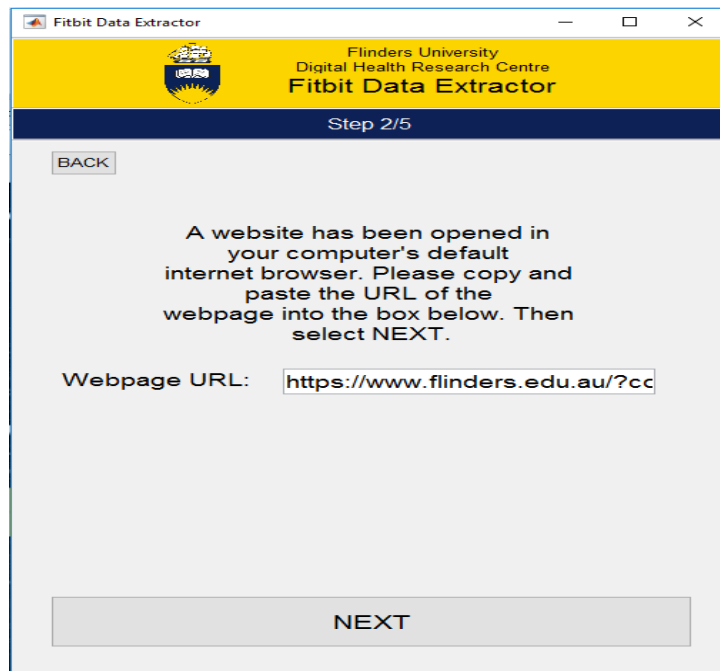
Remember me

NEXT

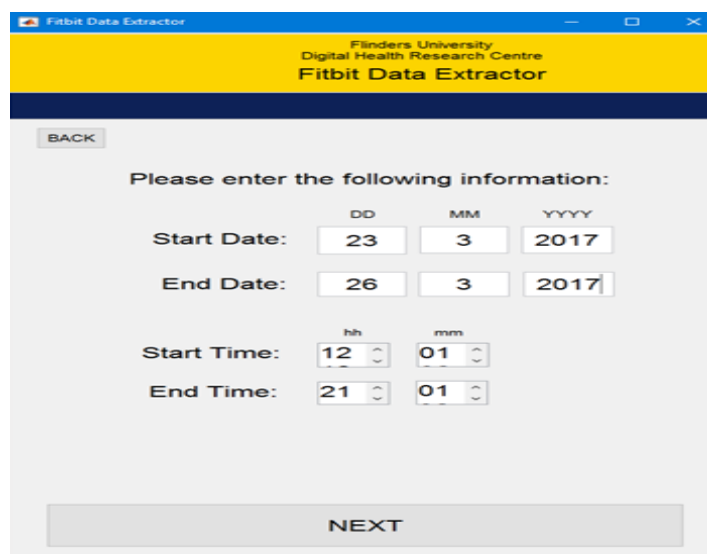
- f. Click allow on the resulting screen, as follows:



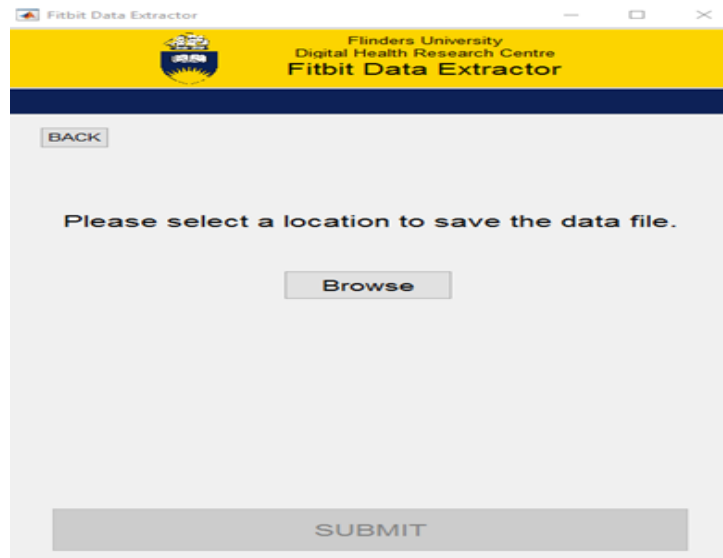
- g. You should copy and paste the website URL that opened in the browser. Then select 'NEXT'. A code will be extracted from the given URL. If the code is not accepted by the Fitbit API, user may not be able to proceed.



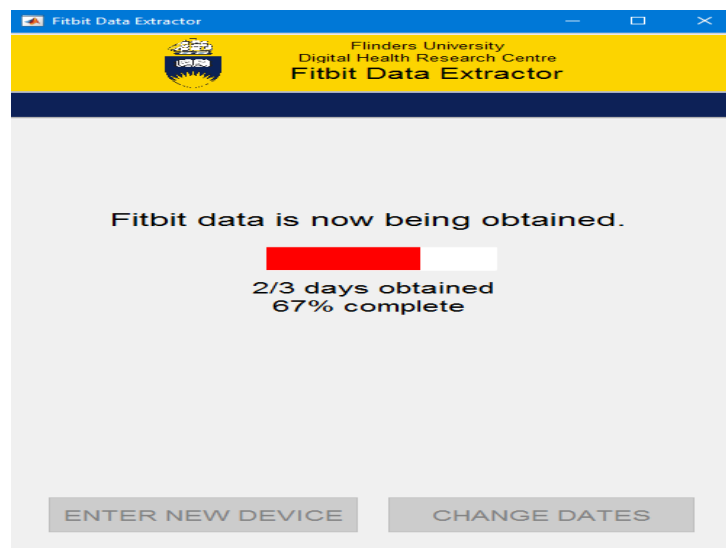
- h. Select the dates that you wish to extract the data. You can only proceed when valid dates are entered.



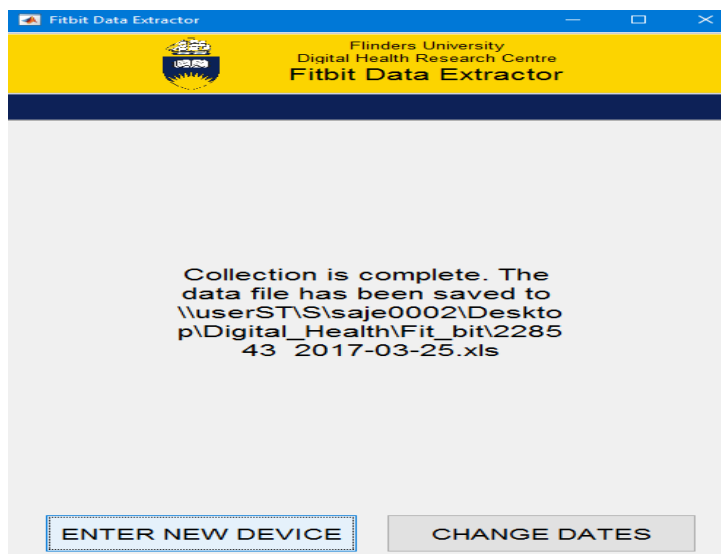
- i. Select a location to save the data file. Use 'Browse' button to choose a location on your local drive. Once the location is selected, a text appears on screen to show the absolute file location. Then select the 'SUBMIT' button.



- j. The Fitbit data is then extracted. You can see a progress bar showing the percentage of data that has been extracted. Once all data is extracted, the data is exported into an .xls file at the location specified in previous step.



- k. The location of the file is shown again to the user. The user can now either choose to enter a new device or change the dates.



## 5. Sample Data

Time	Step	Distance	Calories	Floors	Elevation	Heart Rate
23/03/2017 8:00	0	0	1.3238	0	0	93
23/03/2017 8:01	0	0	1.0183	0	0	88
23/03/2017 8:02	0	0	1.0183	0	0	90
23/03/2017 8:03	0	0	1.0183	0	0	89
23/03/2017 8:04	0	0	1.222	0	0	91
23/03/2017 8:05	7	0.00523	2.6476	0	0	93
23/03/2017 8:06	0	0	1.222	0	0	92
23/03/2017 8:07	0	0	1.0183	0	0	90
23/03/2017 8:08	0	0	1.1201	0	0	87
23/03/2017 8:09	0	0	1.1201	0	0	89
23/03/2017 8:10	0	0	1.3238	0	0	90
23/03/2017 8:11	24	0.01793	3.0549	0	0	96
23/03/2017 8:12	0	0	1.3238	0	0	98
23/03/2017 8:13	35	0.02615	3.4622	1	3.048	98
23/03/2017 8:14	0	0	1.3238	0	0	106
23/03/2017 8:15	0	0	1.3238	0	0	104
23/03/2017 8:16	43	0.03212	3.8695	0	0	107
23/03/2017 8:17	2	0.00149	2.4439	0	0	109
23/03/2017 8:18	23	0.01718	3.4622	0	0	109
23/03/2017 8:19	0	0	1.3238	0	0	108
23/03/2017 8:20	17	0.0127	3.0549	0	0	103
23/03/2017 8:21	14	0.01046	3.0549	0	0	103
23/03/2017 8:22	14	0.01046	3.0549	0	0	105
23/03/2017 8:23	47	0.03511	3.8695	0	0	111
23/03/2017 8:24	18	0.01345	3.4622	0	0	112
23/03/2017 8:25	9	0.00672	3.4622	0	0	115
23/03/2017 8:26	31	0.02316	4.0732	0	0	120
23/03/2017 8:27	25	0.01868	3.4622	0	0	109
23/03/2017 8:28	46	0.03436	3.8695	0	0	105

\*\* End of Document \*\*