Bellabeat Case Study: Data Description Report

Mohamed Sofiene KADRI

2022-07-02

Report summary:

- 1. Bellabeat Case Study
- 2. FitBit Fitness Tracker Data
- 3. Data license
- 4. Data ROCCC
- 5. Full data description

1. Bellabeat Case Study

The Bellabeat case study is a data analysis project for a a high-tech manufacturer of health-focused products for women. The main objective of this data analysis project is to conduct a full and thorough analysis of smart device data to gain insight into how consumers are using their smart devices. The conducted analysis aims for extracting insights from the provided data to guide future marketing strategy for the Bellabeat marketing analytics team.

2. FitBit Fitness Tracker Data

The FitBit Fitness Tracker data set [1] is generated by respondents to a distributed survey via Amazon Mechanical Turk between 03.12.2016-05.12.2016. Thirty eligible Fitbit users consented to the submission of personal tracker data, including minute-level output for physical activity, heart rate, and sleep monitoring. Individual reports can be parsed by export session ID (column A) or timestamp (column B). Variation between output represents use of different types of Fitbit trackers and individual tracking behaviors / preferences.

3. Data license

The FitBit Fitness Tracker data set is under the CC0: Public Domain (Creative Commons Attribution 4.0 International).

4. Data ROCCC

A good data source is ROCCC which stands for Reliable, Original, Comprehensive, Current, and Cited.

- Reliable: MEDIUM The data is collected from a smart devices which means its accurate. However, the data is collected from only 30 participants which limits the sample to only 30 and cannot be reliable for extensive analysis.
- Original: LOW Data collected from Third party provider (Amazon Mechanical Turk).
- Comprehensive: LOW No metadata or any sort of description was provided along the collected data
- Current: LOW Data collected in 2016 which can be considered as outdated.

- ${\bf Cited}\colon$ — High — All information about the third party provider is available.

5. Full data description

Summary:

Fitabase Data:

Number of files: 18Files format: CSVFiles total size: 25.3 MB

• Data collection date: 4/12/2016 - 5/12/2016

• Data source: Amazon Mechanical Turk (third party provider)

Table 1: Table 1: Dataset Files Summary

DatasetFiles	FilesSize	VarNbre	ObsNbre
dailyActivity_merged.csv	111.3 kB	15	940
dailyCalories_merged.csv	$25.1~\mathrm{kB}$	3	940
dailyIntensities_merged.csv	$70.6~\mathrm{kB}$	10	940
dailySteps_merged.csv	$25.2~\mathrm{kB}$	3	940
heartrate_seconds_merged.csv	$89.6~\mathrm{MB}$	3	2483658
hourlyCalories_merged.csv	$801.5~\mathrm{kB}$	3	22099
hourlyIntensities_merged.csv	$898.8~\mathrm{kB}$	4	22099
hourlySteps_merged.csv	$796.6~\mathrm{kB}$	3	22099
$minute Calories Narrow_merged.csv$	$66.4~\mathrm{MB}$	3	1325580
$minute Calories Wide_merged.csv$	23.0 MB	62	21645
$minute Intensities Narrow_merged.csv$	$46.4~\mathrm{MB}$	3	1325580
$minute Intensities Wide_merged.csv$	$3.3~\mathrm{MB}$	62	21645
$minute METs Narrow_merged.csv$	$47.7~\mathrm{MB}$	3	1325580
$minuteSleep_merged.csv$	$8.8~\mathrm{MB}$	4	188521
$minuteStepsNarrow_merged.csv$	$46.5~\mathrm{MB}$	3	1325580
$minuteStepsWide_merged.csv$	$3.5~\mathrm{MB}$	62	21645
sleepDay_merged.csv	$18.1~\mathrm{kB}$	5	413
$weightLogInfo_merged.csv$	$6.7~\mathrm{kB}$	8	67

¹

 $^{^{1}}$ [1]: Furberg, R., Brinton, J., Keating, M., & Ortiz, A. (2016). Crowd-sourced Fitbit datasets 03.12.2016-05.12.2016 [Dataset].