

CleaningData Final Project Codebook

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Origin of Data

The data in the set were collected by Samsung as part of a study on their accelerometer. The data were collected from 30 people, ages 19-48. Each person performed six activities (WALKING, WALKING_UPSTAIRS, WALKING_DOWNSTAIRS, SITTING, STANDING, LAYING) while wearing a smartphone. Accelerometer and gyroscopic data were collected.

Sensor signals included motion information in three directions (x, y, z).

This work extracts mean and standard deviation from the x, y, and z data and then further processes it to generate information for each subject on their average x, y and z accelerometer readings while performing each activity. The resulting data are recorded in this file:

summarydata.txt

Structure of data output

The following files are included in this output:

This codebook README.txt summarydata.txt run_analysis.R

Documentation of run_analysis.R is included in the readme file.

The format of the summarydata.txt file is as follows:

There are eight columns:

subject- an integer designating the assigned subject id. The range is 1-30

activity- factor variable describing the activity observed in each record. The possible values are WALKING, WALKING_UPSTAIRS, WALKING_DOWNSTAIRS, SITTING, STANDING, LAYING.

xmean- a numeric variable representing the mean of all measurements in the x direction

ymean- a numeric variable representing the mean of all measurements in the y direction

zmean- a numeric variable representing the mean of all measurements in the z direction

xstddev- a numeric variable representing the standard deviation of all measurements in the x direction

ystddev- a numeric variable representing the standard deviation of all measurements in the y direction

zstddev- a numeric variable representing the standard deviation of all measurements in the z direction