

Getting and Cleaning Data Course Project - Readme

This is the readme for the course project of the Coursera Getting and Cleaning Data course. This repo consists of the following files: `readme.md`, `codebook.md` (detailing the variables, data and transformation), the `run_analysis.R` (with the script on performing the task) and the output dataset `meanData.txt`.

The dataset contains information about an experiment with 30 volunteers performing different activities (WALKING, WALKING_UPSTAIRS, etc. - see `activity_labels.txt`) while they are wearing a smartphone. The sensor signals of the movements are captured.

The task was to create an R script, which:

- 1) merges the data of the training dataset and the test dataset,
- 2) extracts only the measurements for mean and standard deviation for each measurement,
- 3) has descriptive names to label the activities
- 4) contains appropriate labels for the variables
- 5) creates an additional tidy dataset with the average of each variable for each activity and subject.

The scripts start at step one, by loading the data. It does not include downloading/unzipping, it is assumed this is done before starting the script.

The output is a tidy dataset (`meanData.txt`) which can be used for further processing.

A full description of the source datasets can be found here:

<https://archive.ics.uci.edu/ml/datasets/Human+Activity+Recognition+Using+Smartphones>

The inertial signal datasets were not part of the processing in this analysis.