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Data Code Book

Getting and Cleaning Data Course Final Project

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This code book —as a good habit for a data scientist to have when working on an analytical project by some sort- tries to describe the variables/columns, data, and transformations done to in order to clean up the data and make it ready to next stage of the analytical project.

The data was obtained from:

http://archive.ics.uci.edu/ml/datasets/Human+Activity+Recognition+Using+Smartphones

The data used for the project:

https://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCl%20HAR%20Dataset.zip

What have done is:

The following transformations were done on the origin dataset described above to create the tidy dataset.

- 1. downloaded the data and a local directory created—see the R program accompanied-and unzipped and then we read the data
- 1. The test and train data were combined together
- 2. Columns with mean() and std() were retained. All other columns were discarded.
- 3. The mean() and std() columns were averaged over all participants and activities.
- 4. This averaging was accomplished using the melt and dcast functions from the reshape2 library.

The resulting tidy dataset contains one row for each unique combination of participant and activity.