## Codebook for UCI HAR average of means/std measurements tidydata

The dataset contains information regarding all 30 UCI HAR subjects, 6 activities performed by each subject, and 79 mean and standard deviation categories of smartphone measurements captured and processed by the UCI HAR team.

Subject: 1:30, subjects in the experiment, aged 19-48 years, with numbers as assigned by UCI HAR team.

Subjects # 2, 4, 9, 10, 12, 13, 18, 20, and 24 were test subjects (randomly assigned)

Subjects # 1, 3, 5, 6, 7, 8, 11, 14, 15, 16, 17, 19, 21, 22, 23, 25, 26, 27, 28, 29, 30 were training subjects (randomly assigned)

Activity: 6 activities performed

- Walking
- Walking upstairs
- Walking downstairs
- Sitting
- Standing
- Laying

For each subject and activity, there is a mean calculation of the following measurements. The test data is a mean of 2947 data points generated by the smartphone at 50Hz, while the training data has 7352 data points, also at 50Hz. The raw data contained 561 different features measurements however, the tidy data extracted only mean and standard deviation calculations, which are the following categories:

- "tBodyAcc-mean-X"
- "tBodyAcc-mean-Y"
- "tBodyAcc-mean-Z"
- "tBodyAcc-std-X"
- "tBodyAcc-std-Y"
- "tBodyAcc-std-Z"
- "tGravityAcc-mean-X"
- "tGravityAcc-mean-Y"
- "tGravityAcc-mean-Z"

- "tGravityAcc-std-X"
- "tGravityAcc-std-Y"
- "tGravityAcc-std-Z"
- "tBodyAccJerk-mean-X"
- $\bullet$  "tBodyAccJerk-mean-Y"
- "tBodyAccJerk-mean-Z"
- "tBodyAccJerk-std-X"
- "tBodyAccJerk-std-Y"
- "tBodyAccJerk-std-Z"
- $\bullet$  "tBodyGyro-mean-X"
- "tBodyGyro-mean-Y"
- "tBodyGyro-mean-Z"
- "tBodyGyro-std-X"
- "tBodyGyro-std-Y"
- "tBodyGyro-std-Z"
- "tBodyGyroJerk-mean-X"
- "tBodyGyroJerk-mean-Y"
- "tBodyGyroJerk-mean-Z"
- "tBodyGyroJerk-std-X"
- "tBodyGyroJerk-std-Y"
- "tBodyGyroJerk-std-Z"
- "tBodyAccMag-mean"
- "tBodyAccMag-std"
- "tGravityAccMag-mean"
- "tGravityAccMag-std"
- "tBodyAccJerkMag-mean"
- "tBodyAccJerkMag-std"
- "tBodyGyroMag-mean"

- "tBodyGyroMag-std"
- "tBodyGyroJerkMag-mean"
- "tBodyGyroJerkMag-std"
- "fBodyAcc-mean-X"
- "fBodyAcc-mean-Y"
- "fBodyAcc-mean-Z"
- "fBodyAcc-std-X"
- "fBodyAcc-std-Y"
- "fBodyAcc-std-Z"
- "fBodyAcc-meanFreq-X"
- $\bullet$  "fBodyAcc-meanFreq-Y"
- "fBodyAcc-meanFreq-Z"
- "fBodyAccJerk-mean-X"
- "fBodyAccJerk-mean-Y"
- "fBodyAccJerk-mean-Z"
- "fBodyAccJerk-std-X"
- "fBodyAccJerk-std-Y"
- "fBodyAccJerk-std-Z"
- "fBodyAccJerk-meanFreq-X"
- "fBodyAccJerk-meanFreq-Y"
- "fBodyAccJerk-meanFreq-Z"
- "fBodyGyro-mean-X"
- "fBodyGyro-mean-Y"
- "fBodyGyro-mean-Z"
- "fBodyGyro-std-X"
- "fBodyGyro-std-Y"
- "fBodyGyro-std-Z"
- "fBodyGyro-meanFreq-X"

- "fBodyGyro-meanFreq-Y"
- "fBodyGyro-meanFreq-Z"
- $\bullet$  "fBodyAccMag-mean"
- "fBodyAccMag-std"
- "fBodyAccMag-meanFreq"
- $\bullet \ \ "fBodyBodyAccJerkMag-mean"$
- $\bullet \ \ "fBodyBodyAccJerkMag-std"$
- "fBodyBodyAccJerkMag-meanFreq"
- $\bullet \ \ "fBodyBodyGyroMag-mean" \\$
- "fBodyBodyGyroMag-std"
- $\bullet$  "fBodyBodyGyroMag-meanFreq"
- $\bullet \ \ "fBodyBodyGyroJerkMag-mean"$
- $\bullet \ \ "fBodyBodyGyroJerkMag-std"$
- $\bullet \ \ "fBodyBodyGyroJerkMag-meanFreq"$