CODEBOOK_CourseraGCD_CourseProject

The original 'Human Activity Recognition Using Smartphones Data Set' can be downloaded here: http://archive.ics.uci.edu/ml/datasets/Human+Activity+Recognition+Using+Smartphones.

It contains 10299 observations on 561 variables. A total of 6 activities were performed by 30 subjects, randomly partitioned into two sets (a training set with 9 and a test set with 21 subjects, respectively). The observations of the test and training sets were merged. Only data on the measurements on the mean and standard deviation for each measurement of the original data were used. The tidy data set contains the mean values for each of the six activities across the 30 subjects.

The data set contains the following variables:

[01] - "subject"" number of the test subject, ranging between 1 and 30

[02] - "activity"" type of activity performed (1 WALKING, 2 WALKING_UPSTAIRS, 3 WALKING_DOWNSTAIRS, 4 SITTING, 5 STANDING, 6 LAYING)

[03] - "subject_activity"" An interaction of [01] and [02]

variables [04] through [89]:

Mean values** of the following original measurements for each combination of [01] and [02]:

[4] "tBodyAcc-mean()-X"
[5] "tBodyAcc-mean()-Y"
[6] "tBodyAcc-mean()-Z"
[7] "tBodyAcc-std()-X"
[8] "tBodyAcc-std()-Y"
[9] "tBodyAcc-std()-Z"
[10] "tGravityAcc-mean()-X"
[11] "tGravityAcc-mean()-Y"
[12] "tGravityAcc-mean()-Z"
[13] "tGravityAcc-std()-X"
[14] "tGravityAcc-std()-Y"
[15] "tGravityAcc-std()-Z"
[16] "tBodyAccJerk-mean()-X"
[17] "tBodyAccJerk-mean()-Y"
[18] "tBodyAccJerk-mean()-Z"
[19] "tBodyAccJerk-std()-X"
[20] "tBodyAccJerk-std()-Y"
[21] "tBodyAccJerk-std()-Z"

[22] "tBodyGyro-mean()-X"
[23] "tBodyGyro-mean()-Y"
[24] "tBodyGyro-mean()-Z"
[25] "tBodyGyro-std()-X"
[26] "tBodyGyro-std()-Y"
[27] "tBodyGyro-std()-Z"
[28] "tBodyGyroJerk-mean()-X"
[29] "tBodyGyroJerk-mean()-Y"
[30] "tBodyGyroJerk-mean()-Z"
[31] "tBodyGyroJerk-std()-X"
[32] "tBodyGyroJerk-std()-Y"
[33] "tBodyGyroJerk-std()-Z"
[34] "tBodyAccMag-mean()"
[35] "tBodyAccMag-std()"
[36] "tGravityAccMag-mean()"
[37] "tGravityAccMag-std()"
[38] "tBodyAccJerkMag-mean()"
[39] "tBodyAccJerkMag-std()"
[40] "tBodyGyroMag-mean()"
[41] "tBodyGyroMag-std()"
[42] "tBodyGyroJerkMag-mean()"
[43] "tBodyGyroJerkMag-std()"
[44] "fBodyAcc-mean()-X"
[45] "fBodyAcc-mean()-Y"
[46] "fBodyAcc-mean()-Z"
[47] "fBodyAcc-std()-X"
[48] "fBodyAcc-std()-Y"
[49] "fBodyAcc-std()-Z"
[50] "fBodyAcc-meanFreq()-X"
[51] "fBodyAcc-meanFreq()-Y"
[52] "fBodyAcc-meanFreq()-Z"
[53] "fBodyAccJerk-mean()-X"
[54] "fBodyAccJerk-mean()-Y"
[55] "fBodyAccJerk-mean()-Z"
[56] "fBodyAccJerk-std()-X"
[57] "fBodyAccJerk-std()-Y"
[58] "fBodyAccJerk-std()-Z"
[59] "fBodyAccJerk-meanFreq()-X"
[60] "fBodyAccJerk-meanFreq()-Y"
[61] "fBodyAccJerk-meanFreq()-Z"
[62] "fBodyGyro-mean()-X"
[63] "fBodyGyro-mean()-Y"
[64] "fBodyGyro-mean()-Z"
[65] "fBodyGyro-std()-X"
[66] "fBodyGyro-std()-Y"
[67] "fBodyGyro-std()-Z"

[68] "fBodyGyro-meanFreq()-X"
[69] "fBodyGyro-meanFreq()-Y"
[70] "fBodyGyro-meanFreq()-Z"
[71] "fBodyAccMag-mean()"
[72] "fBodyAccMag-std()"
[73] "fBodyAccMag-meanFreq()"
[74] "fBodyBodyAccJerkMag-mean()"
[75] "fBodyBodyAccJerkMag-std()"
[76] "fBodyBodyAccJerkMag-meanFreq()"
[77] "fBodyBodyGyroMag-mean()"
[78] "fBodyBodyGyroMag-std()"
[79] "fBodyBodyGyroMag-meanFreq()"
[80] "fBodyBodyGyroJerkMag-mean()"
[81] "fBodyBodyGyroJerkMag-std()"
[82] "fBodyBodyGyroJerkMag-meanFreq()"
[83] "angle(tBodyAccMean,gravity)"
[84] "angle(tBodyAccJerkMean),gravityMean)" [85]
"angle(tBodyGyroMean,gravityMean)"
[86] "angle(tBodyGyroJerkMean,gravityMean)" [87] "angle(X,gravityMean)"
[88] "angle(Y,gravityMean)"
[89] "angle(Z,gravityMean)"

** Please refer to original data set and documentation for specific units and how the measurements were obtained.