DATA DICTIONARY

The original Data can be found here :
https://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCI%20HAR%20Dataset.zip.

The first dataset includes the following files:
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- 'README.txt'

- 'features_info.txt': Shows information about the variables used on the feature vector.

- 'features.txt': List of all features.

- 'activity_labels.txt': Links the class labels with their activity name.

- 'train/X_train.txt': Training set.

- 'train/y_train.txt': Training labels.

- 'test/X_test.txt': Test set.

- 'test/y_test.txt': Test labels.

We merged all the test and train data together and extracted the measurements related to mean and deviation.
Now, the tidy data has 88 columns and 180 rows which are all different pairs of subject and activity which we had in our original data base.
In the 86 column of variables, we have the average of each variable for each activity and each subject.

1.activity

Activity Type
1 WALKING
2 WALKING_UPSTAIRS
3 WALKING_DOWNSTAIRS
4 SITTING
5 STANDING
6 LAYING

2.subject

subject who performed the activity for each window sample.
1...30

Other 86 columns for different kinds of measurement related to mean and standard deviation

[3]	"tBodyAcc-mean()-X"	"tBodyAcc-mean()-Y"
[5]	"tBodyAcc-mean()-Z"	"tBodyAcc-std()-X"
[7]	"tBodyAcc-std()-Y"	"tBodyAcc-std()-Z"
[9]	"tGravityAcc-mean()-X"	"tGravityAcc-mean()-Y"
[11]	"tGravityAcc-mean()-Z"	"tGravityAcc-std()-X"
[13]	"tGravityAcc-std()-Y"	"tGravityAcc-std()-Z"
[15]	"tBodyAccJerk-mean()-X"	"tBodyAccJerk-mean()-Y"
[17]	"tBodyAccJerk-mean()-Z"	"tBodyAccJerk-std()-X"
[19]	"tBodyAccJerk-std()-Y"	"tBodyAccJerk-std()-Z"
[21]	"tBodyGyro-mean()-X"	"tBodyGyro-mean()-Y"
[23]	"tBodyGyro-mean()-Z"	"tBodyGyro-std()-X"
[25]	"tBodyGyro-std()-Y"	"tBodyGyro-std()-Z"
[27]	"tBodyGyroJerk-mean()-X"	"tBodyGyroJerk-mean()-Y"
[29]	"tBodyGyroJerk-mean()-Z"	"tBodyGyroJerk-std()-X"
[31]	"tBodyGyroJerk-std()-Y"	"tBodyGyroJerk-std()-Z"

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[33] "tBodyAccMag-mean()"                  "tBodyAccMag-std()"
[35] "tGravityAccMag-mean()"               "tGravityAccMag-std()"
[37] "tBodyAccJerkMag-mean()"              "tBodyAccJerkMag-std()"
[39] "tBodyGyroMag-mean()"                 "tBodyGyroMag-std()"
[41] "tBodyGyroJerkMag-mean()"             "tBodyGyroJerkMag-std()"
[43] "fBodyAcc-mean()-X"                   "fBodyAcc-mean()-Y"
[45] "fBodyAcc-mean()-Z"                   "fBodyAcc-std()-X"
[47] "fBodyAcc-std()-Y"                    "fBodyAcc-std()-Z"
[49] "fBodyAcc-meanFreq()-X"               "fBodyAcc-meanFreq()-Y"
[51] "fBodyAcc-meanFreq()-Z"               "fBodyAccJerk-mean()-X"
[53] "fBodyAccJerk-mean()-Y"               "fBodyAccJerk-mean()-Z"
[55] "fBodyAccJerk-std()-X"                "fBodyAccJerk-std()-Y"
[57] "fBodyAccJerk-std()-Z"                "fBodyAccJerk-meanFreq()-X"
[59] "fBodyAccJerk-meanFreq()-Y"           "fBodyAccJerk-meanFreq()-Z"
[61] "fBodyGyro-mean()-X"                  "fBodyGyro-mean()-Y"
[63] "fBodyGyro-mean()-Z"                  "fBodyGyro-std()-X"
[65] "fBodyGyro-std()-Y"                   "fBodyGyro-std()-Z"
[67] "fBodyGyro-meanFreq()-X"              "fBodyGyro-meanFreq()-Y"
[69] "fBodyGyro-meanFreq()-Z"              "fBodyAccMag-mean()"
[71] "fBodyAccMag-std()"                   "fBodyAccMag-meanFreq()"
[73] "fBodyBodyAccJerkMag-mean()"          "fBodyBodyAccJerkMag-std()"
[75] "fBodyBodyAccJerkMag-meanFreq()"      "fBodyBodyGyroMag-mean()"
[77] "fBodyBodyGyroMag-std()"              "fBodyBodyGyroMag-meanFreq()"
[79] "fBodyBodyGyroJerkMag-mean()"         "fBodyBodyGyroJerkMag-std()"
[81] "fBodyBodyGyroJerkMag-meanFreq()"     "angle(tBodyAccMean,gravity)"
[83] "angle(tBodyAccJerkMean),gravityMean)" "angle(tBodyGyroMean,gravityMean)"
[85] "angle(tBodyGyroJerkMean,gravityMean)" "angle(X,gravityMean)"
[87] "angle(Y,gravityMean)"                "angle(Z,gravityMean)"
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