## CodeBook

(Note I created a separate file after the original submission. I originally included the codebook as part of the ReadMe file)

For each record it is provided (and files are included in the repo):

* X\_train and X\_test: A 561-feature vector with time and frequency domain variables. It's a large file that can be retrieved here: <http://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCI%20HAR%20Dataset.zip>
* features.txt: A list of the 561 measures Note: t represents time, and f represents frequency 1. body = body movement 2. gravity = acceleration of gravity 3. std()=StandardDeviation 4. mean()=Mean 5. Acc=Accelerometer 6. Gyro=Gyroscope 7. Mag=Magnitude
* The units given are g’s for the accelerometer and rad/sec for the gyro and g/sec and rad/sec/sec for the corresponding jerks.
* Y\_train and Y\_test: activity data. files than can be found using the link above.
* activity labels.txt: table showing the activity code and description
* subject\_train.txt and subject\_test.txt: An identifier of the subject (volunteer) who carried out the experiment.
* 'features\_info.txt': An informational file with descriptions of the variables used on the feature vector.

Tidy Dataset - For each combination of Volunteer and Activity (180 rows), the mean of features representing the mean and standard deviation is calculated (69 columns). The file: MeanData2.txt

The columns are the following. Other than the first 3 columns, the mean of each measure is in the MeanData2.txt file.: Volunteer  
activityName activityNum TimeBodyAccelerometer-Mean()-X TimeBodyAccelerometer-Mean()-Y  
TimeBodyAccelerometer-Mean()-Z  
TimeBodyAccelerometer-StandardDeviation()-X  
TimeBodyAccelerometer-StandardDeviation()-Y  
TimeBodyAccelerometer-StandardDeviation()-Z  
TimeGravityAcceleration-Mean()-X  
TimeGravityAcceleration-Mean()-Y  
TimeGravityAcceleration-Mean()-Z  
TimeGravityAcceleration-StandardDeviation()-X  
TimeGravityAcceleration-StandardDeviation()-Y  
TimeGravityAcceleration-StandardDeviation()-Z  
TimeBodyAccelerometerJerk-Mean()-X  
TimeBodyAccelerometerJerk-Mean()-Y  
TimeBodyAccelerometerJerk-Mean()-Z  
TimeBodyAccelerometerJerk-StandardDeviation()-X  
TimeBodyAccelerometerJerk-StandardDeviation()-Y  
TimeBodyAccelerometerJerk-StandardDeviation()-Z  
TimeBodyGyroscope-Mean()-X  
TimeBodyGyroscope-Mean()-Y  
TimeBodyGyroscope-Mean()-Z  
TimeBodyGyroscope-StandardDeviation()-X  
TimeBodyGyroscope-StandardDeviation()-Y  
TimeBodyGyroscope-StandardDeviation()-Z  
TimeBodyGyroscopeJerk-Mean()-X  
TimeBodyGyroscopeJerk-Mean()-Y  
TimeBodyGyroscopeJerk-Mean()-Z  
TimeBodyGyroscopeJerk-StandardDeviation()-X  
TimeBodyGyroscopeJerk-StandardDeviation()-Y  
TimeBodyGyroscopeJerk-StandardDeviation()-Z  
TimeBodyAccelerometerMagnitude-Mean()  
TimeBodyAccelerometerMagnitude-StandardDeviation()  
TimeGravityAccelerationMagnitude-Mean()  
TimeGravityAccelerationMagnitude-StandardDeviation()  
TimeBodyAccelerometerJerkMagnitude-Mean()  
TimeBodyAccelerometerJerkMagnitude-StandardDeviation()  
TimeBodyGyroscopeMagnitude-Mean()  
TimeBodyGyroscopeMagnitude-StandardDeviation()  
TimeBodyGyroscopeJerkMagnitude-Mean()  
TimeBodyGyroscopeJerkMagnitude-StandardDeviation()  
FrequencyBodyAccelerometer-Mean()-X  
FrequencyBodyAccelerometer-Mean()-Y  
FrequencyBodyAccelerometer-Mean()-Z  
FrequencyBodyAccelerometer-StandardDeviation()-X  
FrequencyBodyAccelerometer-StandardDeviation()-Y  
FrequencyBodyAccelerometer-StandardDeviation()-Z  
FrequencyBodyAccelerometerJerk-Mean()-X  
FrequencyBodyAccelerometerJerk-Mean()-Y  
FrequencyBodyAccelerometerJerk-Mean()-Z  
FrequencyBodyAccelerometerJerk-StandardDeviation()-X  
FrequencyBodyAccelerometerJerk-StandardDeviation()-Y  
FrequencyBodyAccelerometerJerk-StandardDeviation()-Z  
FrequencyBodyGyroscope-Mean()-X  
FrequencyBodyGyroscope-Mean()-Y  
FrequencyBodyGyroscope-Mean()-Z  
FrequencyBodyGyroscope-StandardDeviation()-X  
FrequencyBodyGyroscope-StandardDeviation()-Y  
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FrequencyBodyAccelerometerMagnitude-Mean()  
FrequencyBodyAccelerometerMagnitude-StandardDeviation()  
FrequencyBodyBodyAccelerometerJerkMagnitude-Mean()  
FrequencyBodyBodyAccelerometerJerkMagnitude-StandardDeviation()  
FrequencyBodyBodyGyroscopeMagnitude-Mean()  
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