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**Getting and Cleaning Data Course Project**

The purpose of this project is to demonstrate your ability to collect, work with, and clean a data set. The goal is to prepare tidy data that can be used for later analysis. You will be graded by your peers on a series of yes/no questions related to the project. You will be required to submit: 1) a tidy data set as described below, 2) a link to a Github repository with your script for performing the analysis, and 3) a code book that describes the variables, the data, and any transformations or work that you performed to clean up the data called CodeBook.md. You should also include a README.md in the repo with your scripts. This repo explains how all of the scripts work and how they are connected.

Data Set Characteristics: Multivariate, Time-Series

Number of Instances: 10299

Area: Computer

**Attribute Information:**

For each record in the dataset it is provided:   
- Triaxial acceleration from the accelerometer (total acceleration) and the estimated body acceleration.   
- Triaxial Angular velocity from the gyroscope.   
- A 561-feature vector with time and frequency domain variables.   
- Its activity label.   
- An identifier of the subject who carried out the experiment.

The following observations were made:

**181 entries, 68 total columns**

Only mean and standard deviation values were extracted.

**Activities studied as part of the observation :**

WALKING

WALKING\_UPSTAIRS

WALKING\_DOWNSTAIRS

SITTING

STANDING

LAYING

Column Names :

activitylabel subject 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 tBodyAccJerk-mean()-Y tBodyAccJerk-mean()-Z tBodyAccJerk-std()-X tBodyAccJerk-std()-Y tBodyAccJerk-std()-Z 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 fBodyAccJerk-mean()-X fBodyAccJerk-mean()-Y