Codebook for the Samsung Dataset used in the assignment

All variables and descriptions are already provided in the project files. Below is a summary table of the information on variables. The first two variables names were added.

Variables	Functions applied	Units	Range
Subjects (represents the people who participated in this experiment)	None	numeric	1-30
Activity(represents the activity recorded) Options	None	character	1-6 or 'WALKING', 'WALKING_UPSTAIRS', 'WALKING_DOWNSTAIRS', 'SITTING', 'STANDING', 'LAYING'
tBodyAcc – X tBodyAcc – Y tBodyAcc - Z	Mean() std() mad() maxmin() sma() energy() iqr() entropy() arCoeff()X,1-X,4 correlation(), XY, XZ, YZ	numeric	
tGravityAcc – X tGravityAcc – Y tGravityAcc – Z	Mean() std() mad() maxmin() sma() energy() iqr() entropy() arCoeff()X,1-X,4 correlation(), XY, XZ, YZ	numeric	
tBodyAccJerk – X tBodyAccJerk – Y tBodyAccJerk – Z	Mean() std() mad() maxmin() sma() energy() iqr()	numeric	

	entropy() arCoeff()X,1-X,4 correlation(), XY, XZ, YZ		
tBodyGyro – X tBodyGyro – Y tBodyGyro – Z	Mean() std() mad() maxmin() sma() energy() iqr() entropy() arCoeff()X,1-X,4 correlation(), XY, XZ, YZ	numeric	
tBodyGyroJerk – X tBodyGyroJerk – Y tBodyGyroJerk – Z	Mean() std() mad() maxmin() sma() energy() iqr() entropy() arCoeff()X,1-X,4 correlation(), XY, XZ, YZ	numeric	
tBodyAccMag -	std() mad() maxmin() sma() energy() iqr() entropy() arCoeff()1-4	numeric	
tGravityAccMag	std() mad() maxmin() sma() energy() iqr() entropy() arCoeff()1-4	numeric	
tBodyAccJerkMag –	std()	numeric	

X	mad() maxmin() sma() energy() iqr() entropy() arCoeff()1-4		
tBodyGyroMag – X	std() mad() maxmin() sma() energy() iqr() entropy() arCoeff()1-4	numeric	
tBodyGyroJerkMag – X	std() mad() maxmin() sma() energy() iqr() entropy() arCoeff()1-4	numeric	
fBodyAcc – X fBodyAcc – Y fBodyAcc – Z	Mean() std() mad() min() max() sma() energy() iqr() entropy() maxInds meanFreq() skewness() kurtosis() bandsEnergy() - different ranges	numeric	
fBodyAccJerk – X fBodyAccJerk – Y fBodyAccJerk – Z	Mean() std() mad() min() max() sma() energy() iqr()	numeric	

	entropy() maxInds meanFreq() skewness() kurtosis() bandsEnergy() - different ranges		
fBodyGyro – X fBodyGyro – Y fBodyGyro – Z	Mean() std() mad() min() max() sma() energy() iqr() entropy() maxInds meanFreq() skewness() kurtosis() bandsEnergy() - different ranges	numeric	
fBodyAccMag	Mean() std() mad() min() max() sma() energy() iqr() entropy() maxInds meanFreq() skewness() kurtosis()	numeric	
fBodyBodyAccJerkMag	Mean() std() mad() min() max() sma() energy() iqr() entropy() maxInds	numeric	

	meanFreq() skewness() kurtosis()		
fBodyBodyGyroMag	Mean() std() mad() min() max() sma() energy() iqr() entropy() maxInds meanFreq() skewness() kurtosis()	numeric	
fBodyBodyGyroJerk Mag	Mean() std() mad() min() max() sma() energy() iqr() entropy() maxInds meanFreq() skewness() kurtosis()	numeric	
angle(tBodyAccMean, gravity)		numeric	
angle(tBodyAccJerkM ean),gravityMean)		numeric	
angle(tBodyGyroMea n,gravityMean) angle(tBodyGyroJerk Mean,gravityMean)		numeric	
angle(X,gravityMean)		numeric	
angle(Y,gravityMean)		numeric	
angle(Z,gravityMean)		numeric	
