Code Book for DataCleansProject1

body_movement_observation_sample.csv

Column Name	Description	Source & Transformations
tBodyAcc.mean.X	time domain body Accelerometer mean on the X axis	X_test, X_train
tBodyAcc.mean.Y	time domain body Accelerometer mean on the Y axis	X_test, X_train
tBodyAcc.mean.Z	time domain body Accelerometer mean on the Z axis	X_test, X_train
tGravityAcc.mean.X	time domain gravity Accelerometer mean on the X axis	X_test, X_train
tGravityAcc.mean.Y	time domain gravity Accelerometer mean on the Y axis	X_test, X_train
tGravityAcc.mean.Z	time domain gravity Accelerometer mean on the Z axis	X_test, X_train
tBodyAccJerk.mean.X	time domain body Accelerometer Jerk mean on the X axis	X_test, X_train
tBodyAccJerk.mean.Y	time domain body Accelerometer Jerk mean on the Y axis	X_test, X_train
tBodyAccJerk.mean.Z	time domain body Accelerometer Jerk mean on the Z axis	X_test, X_train
tBodyGyro.mean.X	time domain body Gryroscope mean on the X axis	X_test, X_train
tBodyGyro.mean.Y	time domain body Gryroscope mean on the Y axis	X_test, X_train
tBodyGyro.mean.Z	time domain body Gryroscope mean on the Z axis	X_test, X_train
tBodyGyroJerk.mean.X	time domain body Gyroscope Jerk mean on the X axis	X_test, X_train
tBodyGyroJerk.mean.Y	time domain body Gyroscope Jerk mean on the Y axis	X_test, X_train
tBodyGyroJerk.mean.Z	time domain body Gyroscope Jerk mean on the Z axis	X_test, X_train
tBodyAccMag.mean	time domain body Accelerometer Magnitude mean	X_test, X_train
tGravityAccMag.mean	time domain gravity Accelerometer Magnitude mean	X_test, X_train
tBodyAccJerkMag.mean	time domain body Accelerometer Jerk Magnitude mean	X_test, X_train
tBodyGyroMag.mean	time domain body Gyroscope Magnitude mean	X_test, X_train
tBodyGyroJerkMag.mean	time domain body Gyroscope Jerk Magnitude mean	X_test, X_train
fBodyAcc.mean.X	Fast Fourier Transform (FFT) of body Accelerometer mean on the X axis	X_test, X_train
fBodyAcc.mean.Y	Fast Fourier Transform (FFT) of body Accelerometer mean on the Y axis	X_test, X_train
fBodyAcc.mean.Z	Fast Fourier Transform (FFT) of body Accelerometer mean on the Z axis	X_test, X_train
fBodyAcc.meanFreq.X	Fast Fourier Transform (FFT) of body Accelerometer mean Frequency on the X axis	X_test, X_train

Column Name	Description	Source & Transformations
fBodyAcc.meanFreq.Y	Fast Fourier Transform (FFT) of body Accelerometer mean Frequency on the Y axis	X_test, X_train
fBodyAcc.meanFreq.Z	Fast Fourier Transform (FFT) of body Accelerometer mean Frequency on the Z axis	X_test, X_train
fBodyAccJerk.mean.X	Fast Fourier Transform (FFT) of body Accelerometer Jerk mean on the X axis	X_test, X_train
fBodyAccJerk.mean.Y	Fast Fourier Transform (FFT) of body Accelerometer Jerk mean on the Y axis	X_test, X_train
fBodyAccJerk.mean.Z	Fast Fourier Transform (FFT) of body Accelerometer Jerk mean on the Z axis	X_test, X_train
fBodyAccJerk.meanFreq.X	Fast Fourier Transform (FFT) of body Accelerometer Jerk mean Frequency on the X axis	X_test, X_train
fBodyAccJerk.meanFreq.Y	Fast Fourier Transform (FFT) of body Accelerometer Jerk mean Frequency on the Y axis	X_test, X_train
fBodyAccJerk.meanFreq.Z	Fast Fourier Transform (FFT) of body Accelerometer Jerk mean Frequency on the Z axis	X_test, X_train
fBodyGyro.mean.X	Fast Fourier Transform (FFT) of body Gryroscope mean on the X axis	X_test, X_train
fBodyGyro.mean.Y	Fast Fourier Transform (FFT) of body Gryroscope mean on the Y axis	X_test, X_train
fBodyGyro.mean.Z	Fast Fourier Transform (FFT) of body Gryroscope mean on the Z axis	X_test, X_train
fBodyGyro.meanFreq.X	Fast Fourier Transform (FFT) of body Gryroscope mean Frequency on the X axis	X_test, X_train
fBodyGyro.meanFreq.Y	Fast Fourier Transform (FFT) of body Gryroscope mean Frequency on the Y axis	X_test, X_train
fBodyGyro.meanFreq.Z	Fast Fourier Transform (FFT) of body Gryroscope mean Frequency on the Z axis	X_test, X_train
fBodyAccMag.mean	Fast Fourier Transform (FFT) of body Accelerometer Magnitude mean	X_test, X_train
fBodyAccMag.meanFreq	Fast Fourier Transform (FFT) of body Accelerometer Magnitude mean Frequency	X_test, X_train
fBodyBodyAccJerkMag.mean	Fast Fourier Transform (FFT) of body Accelerometer Jerk Magnitude mean	X_test, X_train
fBodyBodyAccJerkMag.meanFreq	Fast Fourier Transform (FFT) of body Accelerometer Jerk Magnitude mean Frequency	X_test, X_train

Column Name	Description	Source & Transformations
fBodyBodyGyroMag.mean	Fast Fourier Transform (FFT) of body Gyroscope Magnitude mean	X_test, X_train
fBodyBodyGyroMag.meanFreq	Fast Fourier Transform (FFT) of body Gyroscope Magnitude mean Frequency	X_test, X_train
fBodyBodyGyroJerkMag.mean	Fast Fourier Transform (FFT) of body Gyroscope Jerk Magnitude mean	X_test, X_train
fBodyBodyGyroJerkMag.meanFreq	Fast Fourier Transform (FFT) of body Gyroscope Jerk Magnitude mean Frequency	X_test, X_train
angletBodyAccMean.gravity	angular time domain body Accelerometer Mean.gravity	X_test, X_train
angletBodyAccJerkMean.gravityMean	angular time domain body Accelerometer Jerk gravity Mean	X_test, X_train
angletBodyGyroMean.gravityMean	angular time domain body Gyroscope gravity Mean	X_test, X_train
angletBodyGyroJerkMean.gravityMean	angular time domain body Gyroscope Jerk gravity Mean	X_test, X_train
angleX.gravityMean	angular X axis gravity Mean	X_test, X_train
angleY.gravityMean	angular Y axis gravity Mean	X_test, X_train
angleZ.gravityMean	angular Z axis gravity Mean	X_test, X_train
tBodyAcc.std.X	time domain body Accelerometer standard deviation on the X axis	X_test, X_train
tBodyAcc.std.Y	time domain body Accelerometer standard deviation on the Y axis	X_test, X_train
tBodyAcc.std.Z	time domain body Accelerometer standard deviation on the Z axis	X_test, X_train
tGravityAcc.std.X	time domain gravity Accelerometer standard deviation on the X axis	X_test, X_train
tGravityAcc.std.Y	time domain gravity Accelerometer standard deviation on the Y axis	X_test, X_train
tGravityAcc.std.Z	time domain gravity Accelerometer standard deviation on the Z axis	X_test, X_train
tBodyAccJerk.std.X	time domain body Accelerometer Jerk standard deviation on the X axis	X_test, X_train
tBodyAccJerk.std.Y	time domain body Accelerometer Jerk standard deviation on the Y axis	X_test, X_train
tBodyAccJerk.std.Z	time domain body Accelerometer Jerk standard deviation on the Z axis	X_test, X_train
tBodyGyro.std.X	time domain body Gryroscope std on the X axis	X_test, X_train
tBodyGyro.std.Y	time domain body Gryroscope std on the Y axis	X_test, X_train
tBodyGyro.std.Z	time domain body Gryroscope std on the Z axis	X_test, X_train
tBodyGyroJerk.std.X	time domain body Gyroscope Jerk standard deviation on the X axis	X_test, X_train
tBodyGyroJerk.std.Y	time domain body Gyroscope Jerk standard deviation on the Y axis	X_test, X_train
tBodyGyroJerk.std.Z	time domain body Gyroscope Jerk standard deviation on the Z axis	X_test, X_train
tBodyAccMag.std	time domain body Accelerometer Magnitude standard deviation	X_test, X_train
tGravityAccMag.std	time domain gravity Accelerometer Magnitude standard deviation	X_test, X_train
tBodyAccJerkMag.std	time domain body Accelerometer Jerk Magnitude standard deviation	X_test, X_train

Column Name	Description	Source & Transformations
tBodyGyroMag.std	time domain body Gyroscope Magnitude standard deviation	X_test, X_train
tBodyGyroJerkMag.std	time domain body Gyroscope Jerk Magnitude standard deviation	X_test, X_train
fBodyAcc.std.X	Fast Fourier Transform (FFT) of body Accelerometer standard deviation on the X axis	X_test, X_train
fBodyAcc.std.Y	Fast Fourier Transform (FFT) of body Accelerometer standard deviation on the Y axis	X_test, X_train
fBodyAcc.std.Z	Fast Fourier Transform (FFT) of body Accelerometer standard deviation on the Z axis	X_test, X_train
fBodyAccJerk.std.X	Fast Fourier Transform (FFT) of body Accelerometer Jerk standard deviation on the X axis	X_test, X_train
fBodyAccJerk.std.Y	Fast Fourier Transform (FFT) of body Accelerometer Jerk standard deviation on the Y axis	X_test, X_train
fBodyAccJerk.std.Z	Fast Fourier Transform (FFT) of body Accelerometer Jerk standard deviation on the Z axis	X_test, X_train
fBodyGyro.std.X	Fast Fourier Transform (FFT) of body Gryroscope std on the X axis	X_test, X_train
fBodyGyro.std.Y	Fast Fourier Transform (FFT) of body Gryroscope std on the Y axis	X_test, X_train
fBodyGyro.std.Z	Fast Fourier Transform (FFT) of body Gryroscope std on the Z axis	X_test, X_train
fBodyAccMag.std	Fast Fourier Transform (FFT) of body Accelerometer Magnitude standard deviation	X_test, X_train
fBodyBodyAccJerkMag.std	Fast Fourier Transform (FFT) of body Accelerometer Jerk Magnitude standard deviation	X_test, X_train
fBodyBodyGyroMag.std	Fast Fourier Transform (FFT) of body Gyroscope Magnitude standard deviation	X_test, X_train
fBodyBodyGyroJerkMag.std	Fast Fourier Transform (FFT) of body Gyroscope Jerk Magnitude standard deviation	X_test, X_train
activity_code	code for the activity being observed.	Y_test, Y_train
activity	activity related to activity code	activity_labels - matched to activity_code value
subject_code	unique code to identify each testing or training subject	subject_test, subject_train

Column Name	Description	Source & Transformations
	values are test for testing group, train for training group	X_test observations are marked "test", X_train are marked "train"

body_movement_observation_means.csv

Source is dataframe that created body_movement_observation_sample.csv

Column Name	Description	Transformations
activity	code for the activity being observed.	group by field
activity_code	activity related to activity code	group by field
group	unique code to identify each testing or training subject	group by field
subject_code	values are test for testing group, train for training group	group by field
mean_tBodyAcc.mean.X	Mean of time domain body Accelerometer mean on the X axis	mean of referenced column
mean_tBodyAcc.mean.Y	Mean of time domain body Accelerometer mean on the Y axis	mean of referenced column
mean_tBodyAcc.mean.Z	Mean of time domain body Accelerometer mean on the Z axis	mean of referenced column
mean_tGravityAcc.mean.X	Mean of time domain gravity Accelerometer mean on the X axis	mean of referenced column
mean_tGravityAcc.mean.Y	Mean of time domain gravity Accelerometer mean on the Y axis	mean of referenced column
mean_tGravityAcc.mean.Z	Mean of time domain gravity Accelerometer mean on the Z axis	mean of referenced column
mean_tBodyAccJerk.mean.X	Mean of time domain body Accelerometer Jerk mean on the X axis	mean of referenced column

mean_tBodyAccJerk.mean.Y	Mean of time domain body Accelerometer Jerk mean on the Y axis	mean of referenced column
mean_tBodyAccJerk.mean.Z	Mean of time domain body Accelerometer Jerk mean on the Z axis	mean of referenced column
mean_tBodyGyro.mean.X	Mean of time domain body Gryroscope mean on the X axis	mean of referenced column
mean_tBodyGyro.mean.Y	Mean of time domain body Gryroscope mean on the Y axis	mean of referenced column
mean_tBodyGyro.mean.Z	Mean of time domain body Gryroscope mean on the Z axis	mean of referenced column
mean_tBodyGyroJerk.mean.X	Mean of time domain body Gyroscope Jerk mean on the X axis	mean of referenced column
mean_tBodyGyroJerk.mean.Y	Mean of time domain body Gyroscope Jerk mean on the Y axis	mean of referenced column
mean_tBodyGyroJerk.mean.Z	Mean of time domain body Gyroscope Jerk mean on the Z axis	mean of referenced column
mean_tBodyAccMag.mean	Mean of time domain body Accelerometer Magnitude mean	mean of referenced column
mean_tGravityAccMag.mean	Mean of time domain gravity Accelerometer Magnitude mean	mean of referenced column
mean_tBodyAccJerkMag.mean	Mean of time domain body Accelerometer Jerk Magnitude mean	mean of referenced column
mean_tBodyGyroMag.mean	Mean of time domain body Gyroscope Magnitude mean	mean of referenced column
mean_tBodyGyroJerkMag.mean	Mean of time domain body Gyroscope Jerk Magnitude mean	mean of referenced column
mean_fBodyAcc.mean.X	Mean of Fast Fourier Transform (FFT) of body Accelerometer mean on the X axis	mean of referenced column
mean_fBodyAcc.mean.Y	Mean of Fast Fourier Transform (FFT) of body Accelerometer mean on the Y axis	mean of referenced column

mean_fBodyAcc.mean.Z	Mean of Fast Fourier Transform (FFT) of body Accelerometer mean on the Z axis	mean of referenced column
mean_fBodyAcc.meanFreq.X	Mean of Fast Fourier Transform (FFT) of body Accelerometer mean Frequency on the X axis	mean of referenced column
mean_fBodyAcc.meanFreq.Y	Mean of Fast Fourier Transform (FFT) of body Accelerometer mean Frequency on the Y axis	mean of referenced column
mean_fBodyAcc.meanFreq.Z	Mean of Fast Fourier Transform (FFT) of body Accelerometer mean Frequency on the Z axis	mean of referenced column
mean_fBodyAccJerk.mean.X	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk mean on the X axis	mean of referenced column
mean_fBodyAccJerk.mean.Y	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk mean on the Y axis	mean of referenced column
mean_fBodyAccJerk.mean.Z	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk mean on the Z axis	mean of referenced column
mean_fBodyAccJerk.meanFreq.X	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk mean Frequency on the X axis	mean of referenced column
mean_fBodyAccJerk.meanFreq.Y	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk mean Frequency on the Y axis	mean of referenced column
mean_fBodyAccJerk.meanFreq.Z	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk mean Frequency on the Z axis	mean of referenced column
mean_fBodyGyro.mean.X	Mean of Fast Fourier Transform (FFT) of body Gryroscope mean on the X axis	mean of referenced column
mean_fBodyGyro.mean.Y	Mean of Fast Fourier Transform (FFT) of body Gryroscope mean on the Y axis	mean of referenced column
mean_fBodyGyro.mean.Z	Mean of Fast Fourier Transform (FFT) of body Gryroscope mean on the Z axis	mean of referenced column
mean_fBodyGyro.meanFreq.X	Mean of Fast Fourier Transform (FFT) of body Gryroscope mean Frequency on the X axis	mean of referenced column
mean_fBodyGyro.meanFreq.Y	Mean of Fast Fourier Transform (FFT) of body Gryroscope mean Frequency on the Y axis	mean of referenced column

mean_fBodyGyro.meanFreq.Z	Mean of Fast Fourier Transform (FFT) of body Gryroscope mean Frequency on the Z axis	mean of referenced column
mean_fBodyAccMag.mean	Mean of Fast Fourier Transform (FFT) of body Accelerometer Magnitude mean	mean of referenced column
mean_fBodyAccMag.meanFreq	Mean of Fast Fourier Transform (FFT) of body Accelerometer Magnitude mean Frequency	mean of referenced column
mean_fBodyBodyAccJerkMag.mean	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk Magnitude mean	mean of referenced column
mean_fBodyBodyAccJerkMag.meanFreq	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk Magnitude mean Frequency	mean of referenced column
mean_fBodyBodyGyroMag.mean	Mean of Fast Fourier Transform (FFT) of body Gyroscope Magnitude mean	mean of referenced column
mean_fBodyBodyGyroMag.meanFreq	Mean of Fast Fourier Transform (FFT) of body Gyroscope Magnitude mean Frequency	mean of referenced column
mean_fBodyBodyGyroJerkMag.mean	Mean of Fast Fourier Transform (FFT) of body Gyroscope Jerk Magnitude mean	mean of referenced column
mean_fBodyBodyGyroJerkMag.meanFreq	Mean of Fast Fourier Transform (FFT) of body Gyroscope Jerk Magnitude mean Frequency	mean of referenced column
mean_angletBodyAccMean.gravity	Mean of angular time domain body Accelerometer Mean.gravity	mean of referenced column
mean_angletBodyAccJerkMean.gravityMean	Mean of angular time domain body Accelerometer Jerk gravity Mean	mean of referenced column
mean_angletBodyGyroMean.gravityMean	Mean of angular time domain body Gyroscope gravity Mean	mean of referenced column
mean_angletBodyGyroJerkMean.gravityMean	Mean of angular time domain body Gyroscope Jerk gravity Mean	mean of referenced column
mean_angleX.gravityMean	Mean of angular X axis gravity Mean	mean of referenced column
mean_angleY.gravityMean	Mean of angular Y axis gravity Mean	mean of referenced column

mean_angleZ.gravityMean	Mean of angular Z axis gravity Mean	mean of referenced column
mean_tBodyAcc.std.X	Mean of time domain body Accelerometer standard deviation on the X axis	mean of referenced column
mean_tBodyAcc.std.Y	Mean of time domain body Accelerometer standard deviation on the Y axis	mean of referenced column
mean_tBodyAcc.std.Z	Mean of time domain body Accelerometer standard deviation on the Z axis	mean of referenced column
mean_tGravityAcc.std.X	Mean of time domain gravity Accelerometer standard deviation on the X axis	mean of referenced column
mean_tGravityAcc.std.Y	Mean of time domain gravity Accelerometer standard deviation on the Y axis	mean of referenced column
mean_tGravityAcc.std.Z	Mean of time domain gravity Accelerometer standard deviation on the Z axis	mean of referenced column
mean_tBodyAccJerk.std.X	Mean of time domain body Accelerometer Jerk standard deviation on the X axis	mean of referenced column
mean_tBodyAccJerk.std.Y	Mean of time domain body Accelerometer Jerk standard deviation on the Y axis	mean of referenced column
mean_tBodyAccJerk.std.Z	Mean of time domain body Accelerometer Jerk standard deviation on the Z axis	mean of referenced column
mean_tBodyGyro.std.X	Mean of time domain body Gryroscope std on the X axis	mean of referenced column
mean_tBodyGyro.std.Y	Mean of time domain body Gryroscope std on the Y axis	mean of referenced column
mean_tBodyGyro.std.Z	Mean of time domain body Gryroscope std on the Z axis	mean of referenced column
mean_tBodyGyroJerk.std.X	Mean of time domain body Gyroscope Jerk standard deviation on the X axis	mean of referenced column
mean_tBodyGyroJerk.std.Y	Mean of time domain body Gyroscope Jerk standard deviation on the Y axis	mean of referenced column

mean_tBodyGyroJerk.std.Z	Mean of time domain body Gyroscope Jerk standard deviation on the Z axis	mean of referenced column
mean_tBodyAccMag.std	Mean of time domain body Accelerometer Magnitude standard deviation	mean of referenced column
mean_tGravityAccMag.std	Mean of time domain gravity Accelerometer Magnitude standard deviation	mean of referenced column
mean_tBodyAccJerkMag.std	Mean of time domain body Accelerometer Jerk Magnitude standard deviation	mean of referenced column
mean_tBodyGyroMag.std	Mean of time domain body Gyroscope Magnitude standard deviation	mean of referenced column
mean_tBodyGyroJerkMag.std	Mean of time domain body Gyroscope Jerk Magnitude standard deviation	mean of referenced column
mean_fBodyAcc.std.X	Mean of Fast Fourier Transform (FFT) of body Accelerometer standard deviation on the X axis	mean of referenced column
mean_fBodyAcc.std.Y	Mean of Fast Fourier Transform (FFT) of body Accelerometer standard deviation on the Y axis	mean of referenced column
mean_fBodyAcc.std.Z	Mean of Fast Fourier Transform (FFT) of body Accelerometer standard deviation on the Z axis	mean of referenced column
mean_fBodyAccJerk.std.X	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk standard deviation on the X axis	mean of referenced column
mean_fBodyAccJerk.std.Y	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk standard deviation on the Y axis	mean of referenced column
mean_fBodyAccJerk.std.Z	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk standard deviation on the Z axis	mean of referenced column
mean_fBodyGyro.std.X	Mean of Fast Fourier Transform (FFT) of body Gryroscope std on the X axis	mean of referenced column
mean_fBodyGyro.std.Y	Mean of Fast Fourier Transform (FFT) of body Gryroscope std on the Y axis	mean of referenced column
mean_fBodyGyro.std.Z	Mean of Fast Fourier Transform (FFT) of body Gryroscope std on the Z axis	mean of referenced column

mean_fBodyAccMag.std	Mean of Fast Fourier Transform (FFT) of body Accelerometer Magnitude standard deviation	mean of referenced column
mean_fBodyBodyAccJerkMag.std	Mean of Fast Fourier Transform (FFT) of body Accelerometer Jerk Magnitude standard deviation	mean of referenced column
mean_fBodyBodyGyroMag.std	Mean of Fast Fourier Transform (FFT) of body Gyroscope Magnitude standard deviation	mean of referenced column
mean_fBodyBodyGyroJerkMag.std	Mean of Fast Fourier Transform (FFT) of body Gyroscope Jerk Magnitude standard deviation	mean of referenced column