DATA DICTIONARY - COURSERA COURSE 3 - GETTING AND CLEANING DATA, COURSE PROJECT

using the Human Activity Recognition Using Smartphones Dataset from the UCI Machine Learning Repository

This dictionary describes the tidy data set created in step 5 of the project. It contains the mean of each variable from the extracted data set described in steps 1 and 2. The extracted variables include only measurements on the mean() and std() variable by activity and subject.

subjectCode, values 1-30 representing the subject in the group of 30 volunteers performing the activities

activityDescription, Activity Description; 1. WALKING, 2. WALKING\_UPSTAIRS, 3. WALKING\_DOWNSTAIRS, 4. SITTING, 5. STANDING, 6. LAYING

THE DATA VALUES FOR THE NEXT 66 VARABLES ARE THE MEAN OF THE RESPECTIVE SUBJECT, ACTIVITY GROUPING. EACH VARIABLE CONTAINS SIX READINGS FOR EACH OF THE 30 SUBJECTS.

tBodyAcc-mean()-X, Mean body motion component - Acceleration in the X direction, time domain

tBodyAcc-mean()-Y, Mean body motion component - Acceleration in the Y direction, time domain

tBodyAcc-mean()-Z, Mean body motion component - Acceleration in the Z direction, time domain

tGravityAcc-mean()-X, Mean Gravity component - Acceleration in the X direction, time domain

tGravityAcc-mean()-Y, Mean Gravity component - Acceleration in the Y direction, time domain

tGravityAcc-mean()-Z, Mean Gravity component - Acceleration in the Z direction, time domain

tBodyAccJerk-mean()-X, Mean Body Acceleration Jerk - in the X direction, time domain

tBodyAccJerk-mean()-Y, Mean Body Acceleration Jerk - in the Y direction, time domain

tBodyAccJerk-mean()-Z, Mean Body Acceleration Jerk - in the Z direction, time domain

tBodyGyro-mean()-X, Mean Body Gyroscope Signal - in the X direction, time domain

tBodyGyro-mean()-Y, Mean Body Gyroscope Signal - in the Y direction, time domain

tBodyGyro-mean()-Z, Mean Body Gyroscope Signal - in the Z direction, time domain

tBodyGyroJerk-mean()-X, Mean Body Gyroscope Jerk Signal - in the X direction, time domain

tBodyGyroJerk-mean()-Y, Mean Body Gyroscope Jerk Signal - in the Y direction, time domain

tBodyGyroJerk-mean()-Z, Mean Body Gyroscope Jerk Signal - in the Z direction, time domain

tBodyAccMag-mean(), Mean Body Acceleration Magnitude, time domain

tGravityAccMag-mean(), Mean Gravity Acceleration Magnitude, time domain

tBodyAccJerkMag-mean(),	Mean Body Acceleration Jerk Magnitude, time domain
tBodyGyroMag-mean(),	Mean Body Gyroscope Magnitude, time domain
tBodyGyroJerkMag-mean()	, Mean Body Gyroscope Jerk Magnitude, time domain
fBodyAcc-mean()-X,	Mean Body Acceleration in the X direction, frequency domain
fBodyAcc-mean()-Y,	Mean Body Acceleration in the Y direction, frequency domain
fBodyAcc-mean()-Z,	Mean Body Acceleration in the Z direction, frequency domain
fBodyAccJerk-mean()-X,	Mean Body Acceleration Jerk in the X direction, frequency domain
fBodyAccJerk-mean()-Y,	Mean Body Acceleration Jerk in the Y direction, frequency domain
fBodyAccJerk-mean()-Z,	Mean Body Acceleration Jerk in the Z direction, frequency domain
fBodyGyro-mean()-X,	Mean Body Gyroscope Signal - in the X direction, Frequency domain
fBodyGyro-mean()-Y,	Mean Body Gyroscope Signal - in the Y direction, Frequency domain
fBodyGyro-mean()-Z,	Mean Body Gyroscope Signal - in the Z direction, Frequency domain
fBodyAccMag-mean(),	Mean Body Acceleration Magnitude, Frequency domain
<pre>fBodyAccMag-mean(), fBodyBodyAccJerkMag-mea</pre>	
	in(), Mean Body Acceleration Jerk Magnitude, Frequency domain
fBodyBodyAccJerkMag-mea	mn(), Mean Body Acceleration Jerk Magnitude, Frequency domain, Mean Body Gyroscope Magnitude, Frequency domain
fBodyBodyAccJerkMag-mean() fBodyBodyGyroMag-mean() fBodyBodyGyroJerkMag-me	m(), Mean Body Acceleration Jerk Magnitude, Frequency domain, Mean Body Gyroscope Magnitude, Frequency domain an(), Mean Body Gyroscope Jerk Magnitude, Frequency domain
fBodyBodyAccJerkMag-mea	mn(), Mean Body Acceleration Jerk Magnitude, Frequency domain, Mean Body Gyroscope Magnitude, Frequency domain
fBodyBodyAccJerkMag-mean() fBodyBodyGyroMag-mean() fBodyBodyGyroJerkMag-me	mn(), Mean Body Acceleration Jerk Magnitude, Frequency domain, Mean Body Gyroscope Magnitude, Frequency domain an(), Mean Body Gyroscope Jerk Magnitude, Frequency domain  Std Dev body motion component - Acceleration in
fBodyBodyAccJerkMag-mean() fBodyBodyGyroMag-mean() fBodyBodyGyroJerkMag-meant	m(), Mean Body Acceleration Jerk Magnitude, Frequency domain , Mean Body Gyroscope Magnitude, Frequency domain ean(), Mean Body Gyroscope Jerk Magnitude, Frequency domain  Std Dev body motion component - Acceleration in the X direction, time domain  Std Dev body motion component - Acceleration in the Y
fBodyBodyAccJerkMag-mean() fBodyBodyGyroMag-mean() fBodyBodyGyroJerkMag-me tBodyAcc-std()-X, tBodyAcc-std()-Y,	m(), Mean Body Acceleration Jerk Magnitude, Frequency domain , Mean Body Gyroscope Magnitude, Frequency domain ean(), Mean Body Gyroscope Jerk Magnitude, Frequency domain  Std Dev body motion component - Acceleration in the X direction, time domain  Std Dev body motion component - Acceleration in the Y direction, time domain  Std Dev body motion component - Acceleration in the Z
fBodyBodyAccJerkMag-mean() fBodyBodyGyroMag-mean() fBodyBodyGyroJerkMag-me tBodyAcc-std()-X, tBodyAcc-std()-Y, tBodyAcc-std()-Z,	m(), Mean Body Acceleration Jerk Magnitude, Frequency domain , Mean Body Gyroscope Magnitude, Frequency domain  an(), Mean Body Gyroscope Jerk Magnitude, Frequency domain  Std Dev body motion component - Acceleration in the X direction, time domain  Std Dev body motion component - Acceleration in the Y direction, time domain  Std Dev body motion component - Acceleration in the Z direction, time domain  Std Dev Gravity component - Acceleration in the X direction,
fBodyBodyAccJerkMag-mean() fBodyBodyGyroMag-mean() fBodyBodyGyroJerkMag-mean() tBodyAcc-std()-X, tBodyAcc-std()-Y, tBodyAcc-std()-Z, tGravityAcc-std()-X,	m(), Mean Body Acceleration Jerk Magnitude, Frequency domain, Mean Body Gyroscope Magnitude, Frequency domain an(), Mean Body Gyroscope Jerk Magnitude, Frequency domain  Std Dev body motion component - Acceleration in the X direction, time domain  Std Dev body motion component - Acceleration in the Y direction, time domain  Std Dev body motion component - Acceleration in the Z direction, time domain  Std Dev Gravity component - Acceleration in the X direction, time domain  Std Dev Gravity component - Acceleration in the X direction, time domain

domain

```
tBodyAccJerk-std()-Y,
                        Std Dev Body Acceleration Jerk - in the Y direction, time
                        domain
tBodyAccJerk-std()-Z,
                        Std Dev Body Acceleration Jerk - in the Z direction, time
                        domain
tBodyGyro-std()-X,
                        Std Dev Body Gyroscope Signal - in the X direction, time domain
tBodyGyro-std()-Y,
                        Std Dev Body Gyroscope Signal - in the Y direction, time domain
tBodyGyro-std()-Z,
                        Std Dev Body Gyroscope Signal - in the Z direction, time domain
tBodyGyroJerk-std()-X,
                        Std Dev Body Gyroscope Jerk Signal - in the X direction, time
                        domain
tBodyGyroJerk-std()-Y,
                        Std Dev Body Gyroscope Jerk Signal - in the Y direction, time
                        domain
tBodyGyroJerk-std()-Z,
                        Std Dev Body Gyroscope Jerk Signal - in the Z direction, time
                        domain
                        Std Dev Body Acceleration Magnitude, time domain
tBodyAccMag-std(),
tGravityAccMag-std(),
                        Std Dev Gravity Acceleration Magnitude, time domain
tBodyAccJerkMag-std(),
                        Std Dev Body Acceleration Jerk Magnitude, time domain
tBodyGyroMag-std(),
                        Std Dev Body Gyroscope Magnitude, time domain
tBodyGyroJerkMag-std(), Std Dev Body Gyroscope Jerk Magnitude, time domain
fBodyAcc-std()-X,
                        Std Dev Body Acceleration in the X direction, frequency domain
fBodyAcc-std()-Y,
                        td Dev Body Acceleration in the Y direction, frequency domain
fBodyAcc-std()-Z,
                        Std Dev Body Acceleration in the Z direction, frequency domain
fBodyAccJerk-std()-X,
                        Std Dev Body Acceleration Jerk in the X direction, frequency
                        domain
fBodyAccJerk-std()-Y,
                        Std Dev Body Acceleration Jerk in the Y direction, frequency
                        domain
fBodyAccJerk-std()-Z,
                        Std Dev Body Acceleration Jerk in the Z direction, frequency
                        domain
fBodyGyro-std()-X,
                        Std Dev Body Gyroscope Signal - in the X direction, Frequency
                        domain
                        Std Dev Body Gyroscope Signal - in the Y direction, Frequency
fBodyGyro-std()-Y,
                        domain
                        Std Dev Body Gyroscope Signal - in the Z direction, Frequency
fBodyGyro-std()-Z,
                        domain
fBodyAccMag-std(),
                        Std Dev Body Acceleration Magnitude, Frequency domain
fBodyBodyAccJerkMag-std(),
                              Std Dev Body Acceleration Jerk Magnitude, Frequency
                              domain
```

fBodyBodyGyroMag-std(), Std Dev Body Gyroscope Magnitude, Frequency domain fBodyBodyGyroJerkMag-std(), Std Dev Body Gyroscope Jerk Magnitude, Frequency domain