

## Data Dictionary – TidyData.txt

### subjectlabels

Number of the person who was participating in the experiment, ranging from 1 to 30, within an age bracket of 19-48 years.

### activity

Each person performed six activities:

Walking  
Walking\_Upstairs  
Walking\_Downstairs  
Sitting  
Standing  
Laying

wearing a smartphone (Samsung Galaxy S II) on the waist.

**All variables below represent “mean of means” and “means of standard deviations”.**

### tBodyAcc-mean()-X

Prefix t denotes time.  
BodyAcc = Body Accelerometer signals.  
Mean() = mean value  
X= Accelerometer three axial row signals.

### tBodyAcc-mean()-Y

Prefix t denotes time.  
BodyAcc = Body Accelerometer signals.  
Mean() = mean value  
Y= Accelerometer three axial row signals.

### tBodyAcc-mean()-Z

Prefix t denotes time.  
BodyAcc = Body Accelerometer signals.  
Mean() = mean value  
Z = Accelerometer three axial row signals.

### tBodyAcc-std()-X

Prefix t denotes time.  
BodyAcc = Body Accelerometer signals.  
std() = standard deviation  
X = Accelerometer three axial row signals.

tBodyAcc-std()-Y

Prefix t denotes time.

BodyAcc = Body Accelerometer signals.

std() = standard deviation

Y = Accelerometer three axial row signals.

tBodyAcc-std()-Z

Prefix t denotes time.

BodyAcc = Body Accelerometer signals.

std() = standard deviation

Z = Accelerometer three axial row signals.

tGravityAcc-mean()-X

Prefix t denotes time.

GravityAcc = Gravity Accelerometer signals.

Mean() = mean value

X = Accelerometer three axial row signals.

tGravityAcc-mean()-Y

Prefix t denotes time.

GravityAcc = Gravity Accelerometer signals.

Mean() = mean value

Y = Accelerometer three axial row signals.

tGravityAcc-mean()-Z

Prefix t denotes time.

GravityAcc = Gravity Accelerometer signals.

Mean() = mean value

Z = Accelerometer three axial row signals.

tGravityAcc-std()-X

Prefix t denotes time.

GravityAcc = Gravity Accelerometer signals.

std() = standard deviation

X = Accelerometer three axial row signals.

tGravityAcc-std()-Y

Prefix t denotes time.

GravityAcc = Gravity Accelerometer signals.

std() = standard deviation

Y = Accelerometer three axial row signals.

tGravityAcc-std()-Z

Prefix t denotes time.

GravityAcc = Gravity Accelerometer signals.

std() = standard deviation

Z = Accelerometer three axial row signals.

tBodyAccJerk-mean()-X

Prefix t denotes time.

BodyAccJerk = Body Linear Accelerometer signals.

mean() = mean value

X = Accelerometer three axial row signals.

tBodyAccJerk-mean()-Y

Prefix t denotes time.

BodyAccJerk = Body Linear Accelerometer signals.

mean() = mean value

Y = Accelerometer three axial row signals.

tBodyAccJerk-mean()-Z

Prefix t denotes time.

BodyAccJerk = Body Linear Accelerometer signals.

mean() = mean value

Z = Accelerometer three axial row signals.

tBodyAccJerk-std()-X

Prefix t denotes time.

BodyAccJerk = Body Linear Accelerometer signals.

std() = standard deviation

X = Accelerometer three axial row signals.

tBodyAccJerk-std()-Y

Prefix t denotes time.

BodyAccJerk = Body Linear Accelerometer signals.

std() = standard deviation

Y = Accelerometer three axial row signals.

tBodyAccJerk-std()-Z

Prefix t denotes time.

BodyAccJerk = Body Linear Accelerometer signals.

std() = standard deviation

Z = Accelerometer three axial row signals.

tBodyGyro-mean()-X

Prefix t denotes time.

BodyGyro = angular velocity signals.

mean() = mean value

X = Accelerometer three axial row signals.

tBodyGyro-mean()-Y

Prefix t denotes time.

BodyGyro = angular velocity signals.

mean() = mean value

Y = Accelerometer three axial row signals.

tBodyGyro-mean()-Z

Prefix t denotes time.

BodyGyro = angular velocity signals.

mean() = mean value

Z = Accelerometer three axial row signals.

tBodyGyro-std()-Z

Prefix t denotes time.

BodyGyro = angular velocity signals.

std() = standard deviation

Z = Accelerometer three axial row signals.

tBodyGyro-std()-Y

Prefix t denotes time.

BodyGyro = angular velocity signals.

std() = standard deviation

Y = Accelerometer three axial row signals.

tBodyGyro-std()-Z

Prefix t denotes time.

BodyGyro = angular velocity signals.

std() = standard deviation

Z = Accelerometer three axial row signals.

tBodyGyroJerk-mean()-X

Prefix t denotes time.

GyroJerk = Jerk signals.

mean() = mean value

X = Accelerometer three axial row signals.

tBodyGyroJerk-mean()-Y

Prefix t denotes time.

GyroJerk = Jerk signals.

mean() = mean value

Y = Accelerometer three axial row signals.

tBodyGyroJerk-mean()-Z

Prefix t denotes time.

GyroJerk = Jerk signals.

mean() = mean value

Z = Accelerometer three axial row signals.

tBodyGyroJerk-std()-X

Prefix t denotes time.

GyroJerk = Jerk signals.

std() = standard deviation

X = Accelerometer three axial row signals.

tBodyGyroJerk-std()-Y

Prefix t denotes time.

GyroJerk = Jerk signals.

std() = standard deviation

Y = Accelerometer three axial row signals.

tBodyGyroJerk-std()-Z

Prefix t denotes time.

GyroJerk = Jerk signals.

std() = standard deviation

Z = Accelerometer three axial row signals.

tBodyAccMag-mean()

Prefix t denotes time.

AccMag = Magnitude calculated using the Euclidian Norm.

mean() = mean value

tBodyAccMag-std()

Prefix t denotes time.

AccMag = Magnitude calculated using the Euclidian Norm.

std() = standard deviation

tGravityAccMag-mean()

Prefix t denotes time.

GravityAccMag = Gravity Magnitude calculated using the Euclidian Norm.

mean() = mean value

tGravityAccMag-std()

Prefix t denotes time.

GravityAccMag = Gravity Magnitude calculated using the Euclidian Norm.

std() = standard deviation

tBodyAccJerkMag-mean()

Prefix t denotes time.

BodyAccJerkMag = Body Magnitude calculated using the Euclidian Norm.

mean() = mean value

tBodyAccJerkMag-std()

Prefix t denotes time.

BodyAccJerkMag = Body Magnitude calculated using the Euclidian Norm.

std() = standard deviation

tBodyGyroMag-mean()

Prefix t denotes time.

BodyGyroMag = Body Magnitude calculated using the Euclidian Norm.

mean() = mean value

tBodyGyroMag-std()

Prefix t denotes time.

BodyGyroMag = Body Magnitude calculated using the Euclidian Norm.

std() = standard deviation

tBodyGyroJerkMag-mean()

Prefix t denotes time.

BodyGyroJerkMag = Body Magnitude calculated using the Euclidian Norm.

mean() = mean value

tBodyGyroJerkMag-std()

Prefix t denotes time.

BodyGyroJerkMag = Body Magnitude calculated using the Euclidian Norm.

std() = standard deviation

fBodyAcc-mean()-X

Prefix f denotes frequency.

BodyAcc = Body Accelerometer Signals

mean() = mean value

X = Accelerometer three axial row signals.

fBodyAcc-mean()-Y

Prefix f denotes frequency.

BodyAcc = Body Accelerometer Signals

mean() = mean value

Y = Accelerometer three axial row signals.

fBodyAcc-mean()-Z

Prefix f denotes frequency.

BodyAcc = Body Accelerometer Signals

mean() = mean value

Z = Accelerometer three axial row signals.

fBodyAcc-std()-X

Prefix f denotes frequency.

BodyAcc = Body Accelerometer Signals

std() = standard deviation

X = Accelerometer three axial row signals.

fBodyAcc-std()-Y

Prefix f denotes frequency.

BodyAcc = Body Accelerometer Signals

std() = standard deviation

Y = Accelerometer three axial row signals.

fBodyAcc-std()-Z

Prefix f denotes frequency.

**BodyAcc = Body Accelerometer Signals**

std() = standard deviation

Z = Accelerometer three axial row signals.

fBodyAcc-meanFreq()-X

Prefix f denotes frequency.

**BodyAcc = Body Accelerometer Signals**

meanFreq() = Weighted average of the frequency components to obtain a mean frequency

X = Accelerometer three axial row signals.

fBodyAcc-meanFreq()-Z

Prefix f denotes frequency.

**BodyAcc = Body Accelerometer Signals**

meanFreq() = Weighted average of the frequency components to obtain a mean frequency

Z = Accelerometer three axial row signals.

fBodyAcc-meanFreq()-X

Prefix f denotes frequency.

**BodyAcc = Body Accelerometer Signals**

meanFreq() = Weighted average of the frequency components to obtain a mean frequency

X = Accelerometer three axial row signals.

fBodyAcc-meanFreq()-Y

Prefix f denotes frequency.

**BodyAcc = Body Accelerometer Signals**

meanFreq() = Weighted average of the frequency components to obtain a mean frequency

XYZ = Accelerometer three axial row signals.

fBodyAcc-meanFreq()-Z

Prefix f denotes frequency.

**BodyAcc = Body Accelerometer Signals**

meanFreq() = Weighted average of the frequency components to obtain a mean frequency

Z = Accelerometer three axial row signals.

fBodyAccJerk-mean()-X

Prefix f denotes frequency.

**BodyAcc = Body Accelerometer Signals**

mean() = mean value

X = Accelerometer three axial row signals.

fBodyAccJerk-mean()-Y

Prefix f denotes frequency.

**BodyAcc = Body Accelerometer Signals**

mean() = mean value

Y = Accelerometer three axial row signals.

fBodyAccJerk-mean()-Z

Prefix f denotes frequency.

**BodyAcc = Body Accelerometer Signals**

mean() = mean value

Z = Accelerometer three axial row signals.

fBodyGyro-std()-X

Prefix f denotes frequency.

**BodyGyro = Body Gyroscope Signals**

std() = standard deviation

X = Gyroscope three axial row signals.

fBodyGyro-std()-Y

Prefix f denotes frequency.

**BodyGyro = Body Gyroscope Signals**

std() = standard deviation

Y = Gyroscope three axial row signals.

fBodyGyro-std()-Z

Prefix f denotes frequency.

**BodyGyro = Body Gyroscope Signals**

std() = standard deviation

Z = Gyroscope three axial row signals.

fBodyGyro-mean()-X

Prefix f denotes frequency.

**BodyGyro = Body Gyroscope Signals**

mean() = mean value

X = Gyroscope three axial row signals.

fBodyGyro-mean()-Y

Prefix f denotes frequency.

**BodyGyro = Body Gyroscope Signals**

mean() = mean value

Y = Gyroscope three axial row signals.

fBodyGyro-mean()-Z

Prefix f denotes frequency.

**BodyGyro = Body Gyroscope Signals**

mean() = mean value

Z = Gyroscope three axial row signals.



fBodyAccMag-std()

Prefix f denotes frequency.

**BodyAccMag** = Body Magnitude calculated using the Euclidian Norm.

std() = standard deviation

fBodyAccMag-mean()

Prefix f denotes frequency.

**BodyAccMag** = Body Magnitude calculated using the Euclidian Norm.

mean() = mean value

fBodyAccJerk-meanFreq()-X

Prefix f denotes frequency.

**BodyAccJerk** = Body Accelerometer Signals

meanFreq() = Weighted average of the frequency components to obtain a mean frequency

X = Accelerometer three axial row signals.

fBodyAccJerk-meanFreq()-Y

Prefix f denotes frequency.

**BodyAccJerk** = Body Accelerometer Signals

meanFreq() = Weighted average of the frequency components to obtain a mean frequency

Y = Accelerometer three axial row signals.

fBodyAccJerk-meanFreq()-Z

Prefix f denotes frequency.

**BodyAccJerk** = Body Accelerometer Signals

meanFreq() = Weighted average of the frequency components to obtain a mean frequency

Z = Accelerometer three axial row signals.

fBodyBodyAccJerkMag-std()

Prefix f denotes frequency.

**BodyBodyAccJerkMag** = Body Accelerometer Signals

std() = standard deviation

fBodyBodyAccJerkMag-mean()

Prefix f denotes frequency.

**BodyBodyAccJerkMag** = Body Accelerometer Signals

mean() = mean value

fBodyBodyGyroMag-std()

Prefix f denotes frequency.

**BodyBodyGyroMag** = Body Magnitude calculated using the Euclidian Norm.

std() = standard deviation

fBodyBodyGyroMag-mean()

Prefix f denotes frequency.

BodyBodyGyroMag = Body Magnitude calculated using the Euclidian Norm.

mean() = mean value

fBodyBodyAccJerkMag-meanFreq()

Prefix f denotes frequency.

BodyBodyAccJerkMag = Body Magnitude calculated using the Euclidian Norm

meanFreq() = Weighted average of the frequency components to obtain a mean frequency

fBodyBodyGyroMag-mean()

Prefix f denotes frequency.

BodyBodyGyroMag = Body Gyroscope Signals

mean() = mean value

fBodyBodyGyroMag-meanFreq()

Prefix f denotes frequency.

BodyBodyGyroMag = Body Magnitude calculated using the Euclidian Norm

meanFreq() = Weighted average of the frequency components to obtain a mean frequency

fBodyBodyGyroJerkMag-mean()

Prefix f denotes frequency.

BodyBodyGyroJerkMag = Body Gyroscope Signals

mean() = mean value

fBodyBodyGyroJerkMag-meanFreq()

Prefix f denotes frequency.

BodyBodyGyroMag = Body Magnitude calculated using the Euclidian Norm

meanFreq() = Weighted average of the frequency components to obtain a mean frequency