

## Data Dictionary

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All values between -1 and 1 unless otherwise noted.

### Subject

Identification of subject performing the activities

Values: 1-30

### ActivityName

Descriptive name of the activity being performed

Values: WALKING, WALKING\_UPSTAIRS, WALKING\_DOWNSTAIRS, SITTING, STANDING, LAYING

### tBodyAcc\_Mean\_X

### tBodyAcc\_Mean\_Y

### tBodyAcc\_Mean\_Z

Average mean body acceleration in X, Y and Z directions in the time domain

### tBodyAcc\_Std\_X

### tBodyAcc\_Std\_Y

### tBodyAcc\_Std\_Z

Average standard deviation of body acceleration in X, Y and Z directions in the time domain

### tGravityAcc\_Mean\_X

### tGravityAcc\_Mean\_Y

### tGravityAcc\_Mean\_Z

Average mean acceleration in X, Y and Z directions due to gravity in the time domain

### tGravityAcc\_Std\_X

### tGravityAcc\_Std\_Y

### tGravityAcc\_Std\_Z

Average standard deviation of acceleration in X, Y and Z directions due to gravity in the time domain

### tBodyAccJerk\_Mean\_X

### tBodyAccJerk\_Mean\_Y

### tBodyAccJerk\_Mean\_Z

Average mean of change of body acceleration in X, Y and Z directions in the time domain

### tBodyAccJerk\_Std\_X

### tBodyAccJerk\_Std\_Y

### tBodyAccJerk\_Std\_Z

Average mean of standard deviation of change of body acceleration in X, Y and Z directions in the time domain

### tBodyGyro\_Mean\_X

### tBodyGyro\_Mean\_Y

### tBodyGyro\_Mean\_Z

Average mean body gyroscopic signal in X, Y and Z directions in the time domain

### tBodyGyro\_Std\_X

### tBodyGyro\_Std\_Y

### tBodyGyro\_Std\_Z

Average standard deviation of body gyroscopic signal in X, Y and Z directions in the time domain

tBodyGyroJerk\_Mean\_X  
tBodyGyroJerk\_Mean\_Y  
tBodyGyroJerk\_Mean\_Z  
Average mean change of body gyroscopic signal in X, Y and Z  
directions in the time domain  
tBodyGyroJerk\_Std\_X  
tBodyGyroJerk\_Std\_Y  
tBodyGyroJerk\_Std\_Z  
Average standard deviation of standard of body gyroscopic signal in  
X, Y and Z directions in the time domain  
tBodyAccMag\_Mean  
Average mean magnitude of body acceleration in the time domain  
tBodyAccMag\_Std  
Average mean of standard deviation of magnitude of body  
acceleration in the time domain  
tGravityAccMag\_Mean  
Average mean magnitude of gravity acceleration in the time domain  
tGravityAccMag\_Std  
Average mean of standard deviation of magnitude of gravity  
acceleration in the time domain  
tBodyAccJerkMag\_Mean  
Average mean magnitude of change of body acceleration in the time  
domain  
tBodyAccJerkMag\_Std  
Average mean of change of standard deviation of magnitude of body  
acceleration in the time domain  
tBodyGyroMag\_Mean  
Average mean magnitude of gyroscopic signal in the time domain  
tBodyGyroMag\_Std  
Average mean of standard deviation of magnitude of gyroscopic  
signal in the time domain  
tBodyGyroJerkMag\_Mean  
Average mean magnitude of change of gyroscopic signal in the time  
domain  
tBodyGyroJerkMag\_Std  
Average mean of change of standard deviation of magnitude of  
gyroscopic signal in the time domain  
fBodyAcc\_Mean\_X  
fBodyAcc\_Mean\_Y  
fBodyAcc\_Mean\_Z  
Average mean body acceleration in X, Y and Z directions in the  
frequency domain  
fBodyAcc\_Std\_X  
fBodyAcc\_Std\_Y  
fBodyAcc\_Std\_Z  
Average standard deviation of body acceleration in X, Y and Z  
directions in the frequency domain  
fBodyAcc\_MeanFreq\_X  
fBodyAcc\_MeanFreq\_Y  
fBodyAcc\_MeanFreq\_Z  
Average mean of index of frequency of body acceleration in  
directions X, Y and Z  
fBodyAccJerk\_Mean\_X  
fBodyAccJerk\_Mean\_Y

fBodyAccJerk\_Mean\_Z  
Average mean of change of body acceleration in X, Y and Z  
directions in the frequency domain

fBodyAccJerk\_Std\_X  
fBodyAccJerk\_Std\_Y  
fBodyAccJerk\_Std\_Z  
Average mean of standard deviation of change of body acceleration  
in X, Y and Z directions in the frequency domain

fBodyAccJerk\_MeanFreq\_X  
fBodyAccJerk\_MeanFreq\_Y  
fBodyAccJerk\_MeanFreq\_Z  
Average mean of index of frequency of change of body acceleration  
in directions X, Y and Z

fBodyGyro\_Mean\_X  
fBodyGyro\_Mean\_Y  
fBodyGyro\_Mean\_Z  
Average mean body gyroscopic signal in X, Y and Z directions in the  
frequency domain

fBodyGyro\_Std\_X  
fBodyGyro\_Std\_Y  
fBodyGyro\_Std\_Z  
Average standard deviation of body gyroscopic signal in X, Y and Z  
directions in the frequency domain

fBodyGyro\_MeanFreq\_X  
fBodyGyro\_MeanFreq\_Y  
fBodyGyro\_MeanFreq\_Z  
Average mean of index of frequency of change of body gyroscopic  
signal in directions X, Y and Z

fBodyAccMag\_Mean  
Average mean of magnitude of body acceleration in the frequency  
domain

fBodyAccMag\_Std  
Average mean of standard deviation of magnitude of body  
acceleration in the frequency domain

fBodyAccMag\_MeanFreq  
Average mean of magnitude of frequency of body acceleration

fBodyBodyAccJerkMag\_Mean  
Average mean of magnitude of frequency of change of body  
acceleration in the frequency domain

fBodyBodyAccJerkMag\_Std  
Average mean of standard deviation of magnitude of frequency of  
change of body acceleration in the frequency domain

fBodyBodyAccJerkMag\_MeanFreq  
Average mean of magnitude of frequency of change of body  
acceleration

fBodyBodyGyroMag\_Mean  
Average mean of magnitude of body mean gyroscopic signal in the  
frequency domain

fBodyBodyGyroMag\_Std  
Average mean of standard deviation of magnitude of body mean  
gyroscopic signal in the frequency domain

fBodyBodyGyroMag\_MeanFreq  
Average mean frequency of magnitude of body mean gyroscopic signal

fBodyBodyGyroJerkMag\_Mean  
Average mean of magnitude of change of body mean gyroscopic signal  
in the frequency domain

fBodyBodyGyroJerkMag\_Std  
Average mean of standard deviation of magnitude of change of body  
mean gyroscopic signal in the frequency domain

fBodyBodyGyroJerkMag\_MeanFreq  
Average mean frequency of magnitude of change of body mean  
gyroscopic signal

angle\_tBodyAccMean,gravity  
Average mean angle between body acceleration vector and gravity

angle\_tBodyAccJerkMean,gravityMean  
Average mean angle between body acceleration change vector and  
gravity

angle\_tBodyGyroMean,gravityMean  
Average mean angle between mean gyroscopic signal vector and mean  
gravity

angle\_tBodyGyroJerkMean,gravityMean  
Average mean angle between mean gyroscopic signal change vector and  
mean gravity

angle\_X,gravityMean

angle\_Y,gravityMean

angle\_Z,gravityMean  
Average mean angles between directions X, Y and Z and mean gravity