

## Coursera Getting and Cleaning Data Course Project Code Book

**Description:** This is a code book that describes the tidy data set that is required for the Getting and Cleaning Data course project. The data set provides aggregate mean values for various measurements from the wearables study conducted by University of California, Irvine based on subject and activity groups. There are a total of 180 groups (30 subjects x 6 possible activities).

Dataset Name: subject\_activity\_mean\_tidy\_data.txt

Delimiter: tab

Header Included: true

Column Name	Description	Units
subjectid	Identifies the test subject	Integer: 1 to 30
activityid	Identifies the activity the subject participated in	Integer: 1 to 6
activitydesc	Description of activity based on activity ID	Mapping to activityid: 1 WALKING 2 WALKING_UPSTAIRS 3 WALKING_DOWNSTAIRS 4 SITTING 5 STANDING 6 LAYING
tbodyaccmeanx	Mean of body acceleration signal mean - X axis	Numeric
tbodyaccmeany	Mean of body acceleration signal mean - Y axis	Numeric
tbodyaccmeanz	Mean of body acceleration signal mean - Z axis	Numeric
tgravityaccmeanx	Mean of gravity acceleration signal mean - X axis	Numeric
tgravityaccmeany	Mean of gravity acceleration signal mean - Y axis	Numeric
tgravityaccmeanz	Mean of gravity acceleration signal mean - Z axis	Numeric
tbodyaccjerkmeanx	Mean of body linear acceleration Jerk signal mean - X axis	Numeric
tbodyaccjerkmeany	Mean of body linear acceleration Jerk signal mean - Y axis	Numeric
tbodyaccjerkmeanz	Mean of body linear acceleration Jerk signal mean - Z axis	Numeric
tbodygyromeanx	Mean of body angular velocity mean - X axis	Numeric
tbodygyromeany	Mean of body angular velocity mean - Y axis	Numeric
tbodygyromeanz	Mean of body angular velocity mean - Z axis	Numeric
tbodygyrojerkmeanx	Mean of body angular velocity Jerk signal mean - X axis	Numeric
tbodygyrojerkmeany	Mean of body angular velocity Jerk signal mean - Y axis	Numeric
tbodygyrojerkmeanz	Mean of body angular velocity Jerk signal mean - Z axis	Numeric

tbodyaccmagmean	Mean of magnitude of body acceleration signal using Euclidean norm mean	Numeric
tgravityaccmagmean	Mean of magnitude of gravity acceleration signal using Euclidean norm mean	Numeric
tbodyaccjerkmagmean	Mean of magnitude of body linear acceleration Jerk signal using Euclidean norm mean	Numeric
tbodygyromagmean	Mean of magnitude of angular velocity using Euclidean norm mean	Numeric
tbodygyrojerkmagmean	Mean of magnitude of angular velocity Jerk signal using Euclidean norm mean	Numeric
fbodyaccmeanx	Mean of Fast Fourier Transform (FFT) body acceleration signal mean - X axis	Numeric
fbodyaccmeany	Mean of Fast Fourier Transform (FFT) body acceleration signal mean - Y axis	Numeric
fbodyaccmeanz	Mean of Fast Fourier Transform (FFT) body acceleration signal mean - Z axis	Numeric
fbodyaccjerkmeanx	Mean of Fast Fourier Transform (FFT) body linear acceleration Jerk signal mean - X axis	Numeric
fbodyaccjerkmeany	Mean of Fast Fourier Transform (FFT) body linear acceleration Jerk signal mean - Y axis	Numeric
fbodyaccjerkmeanz	Mean of Fast Fourier Transform (FFT) body linear acceleration Jerk signal mean - Z axis	Numeric
fbodygyromeanx	Mean of Fast Fourier Transform (FFT) body angular velocity mean - X axis	Numeric
fbodygyromeany	Mean of Fast Fourier Transform (FFT) body angular velocity mean - Y axis	Numeric
fbodygyromeanz	Mean of Fast Fourier Transform (FFT) body angular velocity mean - Z axis	Numeric
fbodyaccmagmean	Mean of Fast Fourier Transform (FFT) magnitude of body acceleration signal using Euclidean norm mean	Numeric
fbodybodyaccjerkmagmean	Mean of Fast Fourier Transform (FFT) magnitude of body linear acceleration Jerk signal using Euclidean norm mean	Numeric
fbodybodygyromagmean	Mean of Fast Fourier Transform (FFT) magnitude of angular velocity using Euclidean norm mean	Numeric
fbodybodygyrojerkmagmean	Mean of Fast Fourier Transform (FFT) magnitude of angular velocity Jerk signal using Euclidean norm mean	Numeric
tbodyaccstdx	Mean of acceleration signal from accelerometer standard deviation - X axis	Numeric
tbodyaccstdy	Mean of acceleration signal from accelerometer standard deviation - Y axis	Numeric

tbodyaccstdz	Mean of acceleration signal from accelerometer standard deviation - Z axis	Numeric
tgravityaccstdx	Mean of gravity acceleration signal standard deviation - X axis	Numeric
tgravityaccstdy	Mean of gravity acceleration signal standard deviation - Y axis	Numeric
tgravityaccstdz	Mean of gravity acceleration signal standard deviation - Z axis	Numeric
tbodyaccjerkstdx	Mean of body linear acceleration Jerk signal standard deviation - X axis	Numeric
tbodyaccjerkstdy	Mean of body linear acceleration Jerk signal standard deviation - Y axis	Numeric
tbodyaccjerkstdz	Mean of body linear acceleration Jerk signal standard deviation - Z axis	Numeric
tbodygyrostdx	Mean of body angular velocity standard deviation - X axis	Numeric
tbodygyrostdy	Mean of body angular velocity standard deviation - Y axis	Numeric
tbodygyrostdz	Mean of body angular velocity standard deviation - Z axis	Numeric
tbodygyrojerkstdx	Mean of body angular velocity Jerk signal standard deviation - X axis	Numeric
tbodygyrojerkstdy	Mean of body angular velocity Jerk signal standard deviation - Y axis	Numeric
tbodygyrojerkstdz	Mean of body angular velocity Jerk signal standard deviation - Z axis	Numeric
tbodyaccmagstd	Mean of magnitude of body acceleration signal using Euclidean norm standard deviation	Numeric
tgravityaccmagstd	Mean of magnitude of gravity acceleration signal using Euclidean norm standard deviation	Numeric
tbodyaccjerkmagstd	Mean of magnitude of body linear acceleration Jerk signal using Euclidean norm standard deviation	Numeric
tbodygyromagstd	Mean of magnitude of angular velocity using Euclidean norm standard deviation	Numeric
tbodygyrojerkmagstd	Mean of magnitude of angular velocity Jerk signal using Euclidean norm standard deviation	Numeric
fbodyaccstdx	Mean of Fast Fourier Transform (FFT) body acceleration signal standard deviation - X axis	Numeric
fbodyaccstdy	Mean of Fast Fourier Transform (FFT) body acceleration signal standard deviation - Y axis	Numeric
fbodyaccstdz	Mean of Fast Fourier Transform (FFT) body acceleration signal standard deviation - Z axis	Numeric

fbodyaccjerkstdx	Mean of Fast Fourier Transform (FFT) body linear acceleration Jerk signal standard deviation - X axis	Numeric
fbodyaccjerkstdy	Mean of Fast Fourier Transform (FFT) body linear acceleration Jerk signal standard deviation - Y axis	Numeric
fbodyaccjerkstdz	Mean of Fast Fourier Transform (FFT) body linear acceleration Jerk signal standard deviation - Z axis	Numeric
fbodygyrostdx	Mean of Fast Fourier Transform (FFT) body angular velocity standard deviation - X axis	Numeric
fbodygyrostdy	Mean of Fast Fourier Transform (FFT) body angular velocity standard deviation - Y axis	Numeric
fbodygyrostdz	Mean of Fast Fourier Transform (FFT) body angular velocity standard deviation - Z axis	Numeric
fbodyaccmagstd	Mean of Fast Fourier Transform (FFT) magnitude of body acceleration signal using Euclidean norm standard deviation	Numeric
fbodybodyaccjerkmagstd	Mean of Fast Fourier Transform (FFT) magnitude of body linear acceleration Jerk signal using Euclidean norm standard deviation	Numeric
fbodybodygyromagstd	Mean of Fast Fourier Transform (FFT) magnitude of angular velocity using Euclidean norm standard deviation	Numeric
fbodybodygyrojerkmagstd	Mean of Fast Fourier Transform (FFT) magnitude of angular velocity Jerk signal using Euclidean norm standard deviation	Numeric