Getting and Cleaning Data - Week 4 – Assignment

Code Book for tidydataset.txt and secondtidydataset.txt

This code book provides descriptive explanation of variables (columns) within the 2 following data sets which are generated using **"run_analysis.R"**.

Column 1: Subject

This variable denotes the volunteers participated in train and test phases.

Column 2: Activity

This variable represents the activity performed by/on subjects during test and train phases.

Column 3 to 68:

The rest of the variables represent the combination of following attributes observed and noted during the train and test phases:

Attribute Name	Description
Accelerometer	Represents the acceleration reading from accelerometer
Frequency	Fast Fourier Transform (FFT) was applied and noted as "frequency" domain signals
Gravity	The acceleration signal was then separated into body and gravity a
Gyroscope	Represents the acceleration reading from gyroscope
Jerk	The body linear acceleration and angular velocity were derived in time to obtain Jerk signals
Magnitude	The magnitude of these three-dimensional signals were calculated using the Euclidean norm
Time	These time domain signals were captured at a constant rate of 50 Hz.
X,Y Or Z Axis	This attribute denotes 3-axial signals in the X, Y and Z directions

The following combination of above stated attributes are used as Variable 3:68 in the tidydataset.txt and secondtidydataset.txt:

3 timebodyaccelerometermeanx_axis
4 timebodyaccelerometermeany_axis
5 timebodyaccelerometermeanz_axis
6 timebodyaccelerometerstdx_axis
7 timebodyaccelerometerstdy_axis
8 timebodyaccelerometerstdz_axis
9 timegravityaccelerometermeanx_axis
10 timegravityaccelerometermeany_axis
11 timegravityaccelerometermeanz_axis
12 timegravityaccelerometerstdx_axis
13 timegravityaccelerometerstdy_axis
14 timegravityaccelerometerstdz_axis
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36 timegravityaccelerometermagnitudestd
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38 timebodyaccelerometerjerkmagnitudestd
39 timebodygyroscopemagnitudemean
40 timebodygyroscopemagnitudestd
41 timebodygyroscopejerkmagnitudemean
42 timebodygyroscopejerkmagnitudestd
43 frequencybodyaccelerometermeanx_axis
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45 frequencybodyaccelerometermeanz_axis
46 frequencybodyaccelerometerstdx_axis
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