Codebook

1 Description

The "tidy.txt" dataset is a summarized dataset that is created as part of a class project for the Data Cleaning course held on Coursera.org. The data was processed using R.

The source data that will be used is the Human Activity Recognition Using Smartphones Dataset that comes from the UCI Machine Learning Repository. It represents data built from the recordings of 30 subjects performing activities of daily living (ADL) while carrying a waist-mounted smartphone with embedded inertial sensors. Each subject performed six activities (WALKING, WALKING_UPSTAIRS, WALKING_DOWNSTAIRS, SITTING, STANDING, LAYING) wearing a smartphone (Samsung Galaxy S II) on the waist. Using its embedded accelerometer and gyroscope, measurements of 3-axial linear acceleration and 3-axial angular velocity at a constant rate of 50Hz. The experiments have been video-recorded to label the data manually. The obtained dataset has been randomly partitioned into two sets, where 70% of the volunteers was selected for generating the training data and 30% the test data.

A limited set of measurements were retained from the original data and a mean was calculated for each subject/activity combination in the data. The file is tab delimited and all columns except for activity is numeric.

2 Data Description

1. Subject — Numeric value unique to every person(subject) in the study
2. Activity — Label designating activity for each observation
    i. WALKING
    ii. WALKING_UPSTAIRS
    iii. WALKING_DOWNSTAIRS
    iv. SITTING
    v. STANDING
    vi. LAYING
3. tBodyAcc_mean_X" — Obs average sensor measurement for subject/activity
4. tBodyAcc_mean_Y" — Obs average sensor measurement for subject/activity
5. tBodyAcc_mean_Z" — Obs average sensor measurement for subject/activity
6. tBodyAcc_std_X" — Obs average sensor measurement for subject/activity
7. tBodyAcc_std_Y" — Obs average sensor measurement for subject/activity
8. tBodyAcc_std_Z" — Obs average sensor measurement for subject/activity
9. tGravityAcc_mean_X" — Obs average sensor measurement for subject/activity
10. tGravityAcc_mean_Y" — Obs average sensor measurement for subject/activity
11. tGravityAcc_mean_Z" — Obs average sensor measurement for subject/activity
12. tGravityAcc_std_X" — Obs average sensor measurement for subject/activity

13. tGravityAcc_std_Y" Obs average sensor measurement for subject/activity
14. tGravityAcc_std_Z Obs average sensor measurement for subject/activity
15. tBodyAccJerk_mean_X Obs average sensor measurement for subject/activity
16. tBodyAccJerk_mean_Y Obs average sensor measurement for subject/activity
17. tBodyAccJerk_mean_Z Obs average sensor measurement for subject/activity
18. tBodyAccJerk_std_X Obs average sensor measurement for subject/activity
19. tBodyAccJerk_std_Y Obs average sensor measurement for subject/activity
20. tBodyAccJerk_std_Z Obs average sensor measurement for subject/activity
21. tBodyGyro_mean_X Obs average sensor measurement for subject/activity
22. tBodyGyro_mean_Y Obs average sensor measurement for subject/activity
23. tBodyGyro_mean_Z Obs average sensor measurement for subject/activity
24. tBodyGyro_std_X Obs average sensor measurement for subject/activity
25. tBodyGyro_std_Y Obs average sensor measurement for subject/activity
26. tBodyGyro_std_Z Obs average sensor measurement for subject/activity
27. tBodyGyroJerk_mean_X Obs average sensor measurement for subject/activity
28. tBodyGyroJerk_mean_Y Obs average sensor measurement for subject/activity
29. tBodyGyroJerk_mean_Z Obs average sensor measurement for subject/activity
30. tBodyGyroJerk_std_X Obs average sensor measurement for subject/activity
31. tBodyGyroJerk_std_Y Obs average sensor measurement for subject/activity
32. tBodyGyroJerk_std_Z Obs average sensor measurement for subject/activity
33. fBodyAcc_mean_X Obs average sensor measurement for subject/activity
34. fBodyAcc_mean_Y Obs average sensor measurement for subject/activity
35. fBodyAcc_mean_Z Obs average sensor measurement for subject/activity
36. fBodyAcc_std_X Obs average sensor measurement for subject/activity
37. fBodyAcc_std_Y Obs average sensor measurement for subject/activity
38. fBodyAcc_std_Z Obs average sensor measurement for subject/activity
39. fBodyAccJerk_mean_X Obs average sensor measurement for subject/activity
40. fBodyAccJerk_mean_Y Obs average sensor measurement for subject/activity
41. fBodyAccJerk_mean_Z Obs average sensor measurement for subject/activity
42. fBodyAccJerk_std_X Obs average sensor measurement for subject/activity
43. fBodyAccJerk_std_Y Obs average sensor measurement for subject/activity
44. fBodyAccJerk_std_Z Obs average sensor measurement for subject/activity
45. fBodyGyro_mean_X Obs average sensor measurement for subject/activity
46. fBodyGyro_mean_Y Obs average sensor measurement for subject/activity
47. fBodyGyro_mean_Z Obs average sensor measurement for subject/activity
48. fBodyGyro_std_X Obs average sensor measurement for subject/activity
49. fBodyGyro_std_Y Obs average sensor measurement for subject/activity
50. fBodyGyro_std_Z Obs average sensor measurement for subject/activity