Code Book

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VARIABLES

Following are the variables used in the script run_analysis.R for the purpose of creating tidy data set for the Samsung Phone sensor data.

- 1. vardata: reads variable names from feature.txt
- 2. variables: contains separated variable names from vardata
- 3. act label: reads activity labels from activity labels.txt
- 4. actlabels: contains separated variable names from act label
- 5. xtest1: reads test data from X test.txt file
- 6. subjecttest: subject data for test entries
- 7. ytest: activity data for test entries
- 8. xtraining : reads training data from X_training.txt file
- 9. subject training: subject data for training entries
- 10. ytrain :activity data for training entires
- 11. testdata: collated test data with activity, subject and observations
- 12. traindata: collated training data with activity, subject and observations
- 13. fulldata: combined test and training data
- 14. mean_index: the indices of columns where mean variables exist
- 15. mean data: the mean values for measurements
- 16. std_index: the indices of columns where standard deviation variables exist
- 17. std index: the standard deviation values for measurements
- 18. fulldata2: contains combined data of mean and standard deviation
- 19. ans: final tidy data set

Variable in the tidy.txt are -

```
## activity name
## participant number
## tBodyAcc.mean...X
## tBodyGyro.mean...X
## tBodyGyro.mean...Y
## tBodyGyro.mean...Z
## tBodyGyroJerk.mean...X
## tBodyGyroJerk.mean...Y
## tBodyGyroJerk.mean...Z
## tBodyAcc.mean...Y
## tBodyAccMag.mean..
## tGravityAccMag.mean..
## tBodyAccJerkMag.mean..
## tBodyGyroMag.mean..
## tBodyGyroJerkMag.mean..
## fBodyAcc.mean...X
## fBodyAcc.mean...Y
## fBodyAcc.mean...Z
## fBodyAcc.meanFreq...X
```

```
## fBodyAcc.meanFreq...Y
## fBodyAcc.meanFreq...Z
## tBodyAcc.mean...Z
## fBodyAccJerk.mean...X
  fBodyAccJerk.mean...Y
## fBodyAccJerk.mean...Z
## fBodyAccJerk.meanFreq...X
## fBodyAccJerk.meanFreq...Y
## fBodyAccJerk.meanFreq...Z
## tGravityAcc.mean...X
## tGravityAcc.mean...Y
## fBodyGyro.mean...X
## fBodyGyro.mean...Y
## fBodyGyro.mean...Z
## tGravityAcc.mean...Z
## fBodyGyro.meanFreq...X
## fBodyGyro.meanFreq...Y
## fBodyGyro.meanFreg...Z
## fBodyAccMag.mean..
## fBodyAccMag.meanFreq..
## fBodyBodyAccJerkMag.mean..
## fBodyBodyAccJerkMag.meanFreq..
## fBodyBodyGyroMag.mean..
## fBodyBodyGyroMag.meanFreq..
## fBodyBodyGyroJerkMag.mean..
## fBodyBodyGyroJerkMag.meanFreq..
## tBodyAccJerk.mean...X
## tBodyAccJerk.mean...Y
## tBodyAccJerk.mean...Z
## tBodyGyro.std...X
## tBodyGyro.std...Y
## tBodyGyro.std...Z
## tBodyGyroJerk.std...X
## tBodyGyroJerk.std...Y
## tBodyGyroJerk.std...Z
## tBodyAccMag.std..
## tGravityAccMag.std..
## tBodyAccJerkMag.std..
## tBodyGyroMag.std..
## tBodyGyroJerkMag.std..
## fBodyAcc.std...X
## fBodyAcc.std...Y
## fBodyAcc.std...Z
## fBodyAccJerk.std...X
## fBodyAccJerk.std...Y
## fBodyAccJerk.std...Z
## tBodyAcc.std...X
## fBodyGyro.std...X
## fBodyGyro.std...Y
## fBodyGyro.std...Z
## tGravityAcc.std...X
```

tGravityAcc.std...Y
tGravityAcc.std...Z
tBodyAcc.std...Y

- ## fBodyAccMag.std..
- ## fBodyBodyAccJerkMag.std..
- ## fBodyBodyGyroMag.std..
- ## fBodyBodyGyroJerkMag.std..
- ## tBodyAcc.std...Z
- ## tBodyAccJerk.std...X
- ## tBodyAccJerk.std...Y
- ## tBodyAccJerk.std...Z