CodeBook for Coursera Course “Getting and Cleaning Data” that analyzes the Human Activity Recognition Using Smartphones Data Set representing data collected from the accelerometers from the Samsung Galaxy S smartphones.

This codebook describes the 2 dataframes created from the raw data.

1. fulldata – Contains the merged data from the “test” and “training” subjects. It contains smartphone data variables gathered from 30 subjects doing 6 different types of activities as described in activity\_labels.txt.

[1] datatype data sample type

- TEST

- TRAIN

[2] activity type of activity measure

- WALKING

- WALKING\_UPSTAIRS

- WALKING\_DOWNSTAIRS

- SITTING

- STANDING

- LAYING

[3] subject label for which of the 30 subjects tested

[4] tBodyAcc-mean()-X

[5] tBodyAcc-mean()-Y

[6] tBodyAcc-mean()-Z

[7] tBodyAcc-std()-X

[8] tBodyAcc-std()-Y

[9] tBodyAcc-std()-Z

[10] tGravityAcc-mean()-X

[11] tGravityAcc-mean()-Y

[12] tGravityAcc-mean()-Z

[13] tGravityAcc-std()-X

[14] tGravityAcc-std()-Y

[15] tGravityAcc-std()-Z

[16] tBodyAccJerk-mean()-X

[17] tBodyAccJerk-mean()-Y

[18] tBodyAccJerk-mean()-Z

[19] tBodyAccJerk-std()-X

[20] tBodyAccJerk-std()-Y

[21] tBodyAccJerk-std()-Z

[22] tBodyGyro-mean()-X

[23] tBodyGyro-mean()-Y

[24] tBodyGyro-mean()-Z

[25] tBodyGyro-std()-X

[26] tBodyGyro-std()-Y

[27] tBodyGyro-std()-Z

[28] tBodyGyroJerk-mean()-X

[29] tBodyGyroJerk-mean()-Y

[30] tBodyGyroJerk-mean()-Z

[31] tBodyGyroJerk-std()-X

[32] tBodyGyroJerk-std()-Y

[33] tBodyGyroJerk-std()-Z

[34] tBodyAccMag-mean()

[35] tBodyAccMag-std()

[36] tGravityAccMag-mean()

[37] tGravityAccMag-std()

[38] tBodyAccJerkMag-mean()

[39] tBodyAccJerkMag-std()

[40] tBodyGyroMag-mean()

[41] tBodyGyroMag-std()

[42] tBodyGyroJerkMag-mean()

[43] tBodyGyroJerkMag-std()

[44] fBodyAcc-mean()-X

[45] fBodyAcc-mean()-Y

[46] fBodyAcc-mean()-Z

[47] fBodyAcc-std()-X

[48] fBodyAcc-std()-Y

[49] fBodyAcc-std()-Z

[50] fBodyAccJerk-mean()-X

[51] fBodyAccJerk-mean()-Y

[52] fBodyAccJerk-mean()-Z

[53] fBodyAccJerk-std()-X

[54] fBodyAccJerk-std()-Y

[55] fBodyAccJerk-std()-Z

[56] fBodyGyro-mean()-X

[57] fBodyGyro-mean()-Y

[58] fBodyGyro-mean()-Z

[59] fBodyGyro-std()-X

[60] fBodyGyro-std()-Y

[61] fBodyGyro-std()-Z

[62] fBodyAccMag-mean()

[63] fBodyAccMag-std()

[64] fBodyBodyAccJerkMag-mean()

[65] fBodyBodyAccJerkMag-std()

[66] fBodyBodyGyroMag-mean()

[67] fBodyBodyGyroMag-std()

[68] fBodyBodyGyroJerkMag-mean()

[69] fBodyBodyGyroJerkMag-std()

1. tidy\_data – Contains means for the measurement data from the “fulldata” dataframe grouped by activity/subject. There are 180 rows of observations, representing the 6 different activities x 30 different subjects of the study.

[1] activity type of activity measure

- WALKING

- WALKING\_UPSTAIRS

- WALKING\_DOWNSTAIRS

- SITTING

- STANDING

- LAYING

[2] subject label for which of the 30 subjects tested

[3] tBodyAcc-mean()-X

[4] tBodyAcc-mean()-Y

[5] tBodyAcc-mean()-Z

[6] tBodyAcc-std()-X

[7] tBodyAcc-std()-Y

[8] tBodyAcc-std()-Z

[9] tGravityAcc-mean()-X

[10] tGravityAcc-mean()-Y

[11] tGravityAcc-mean()-Z

[12] tGravityAcc-std()-X

[13] tGravityAcc-std()-Y

[14] tGravityAcc-std()-Z

[15] tBodyAccJerk-mean()-X

[16] tBodyAccJerk-mean()-Y

[17] tBodyAccJerk-mean()-Z

[18] tBodyAccJerk-std()-X

[19] tBodyAccJerk-std()-Y

[20] tBodyAccJerk-std()-Z

[21] tBodyGyro-mean()-X

[22] tBodyGyro-mean()-Y

[23] tBodyGyro-mean()-Z

[24] tBodyGyro-std()-X

[25] tBodyGyro-std()-Y

[26] tBodyGyro-std()-Z

[27] tBodyGyroJerk-mean()-X

[28] tBodyGyroJerk-mean()-Y

[29] tBodyGyroJerk-mean()-Z

[30] tBodyGyroJerk-std()-X

[31] tBodyGyroJerk-std()-Y

[32] tBodyGyroJerk-std()-Z

[33] tBodyAccMag-mean()

[34] tBodyAccMag-std()

[35] tGravityAccMag-mean()

[36] tGravityAccMag-std()

[37] tBodyAccJerkMag-mean()

[38] tBodyAccJerkMag-std()

[39] tBodyGyroMag-mean()

[40] tBodyGyroMag-std()

[41] tBodyGyroJerkMag-mean()

[42] tBodyGyroJerkMag-std()

[43] fBodyAcc-mean()-X

[44] fBodyAcc-mean()-Y

[45] fBodyAcc-mean()-Z

[46] fBodyAcc-std()-X

[47] fBodyAcc-std()-Y

[48] fBodyAcc-std()-Z

[49] fBodyAccJerk-mean()-X

[50] fBodyAccJerk-mean()-Y

[51] fBodyAccJerk-mean()-Z

[52] fBodyAccJerk-std()-X

[53] fBodyAccJerk-std()-Y

[54] fBodyAccJerk-std()-Z

[55] fBodyGyro-mean()-X

[56] fBodyGyro-mean()-Y

[57] fBodyGyro-mean()-Z

[58] fBodyGyro-std()-X

[59] fBodyGyro-std()-Y

[60] fBodyGyro-std()-Z

[61] fBodyAccMag-mean()

[62] fBodyAccMag-std()

[63] fBodyBodyAccJerkMag-mean()

[64] fBodyBodyAccJerkMag-std()

[65] fBodyBodyGyroMag-mean()

[66] fBodyBodyGyroMag-std()

[67] fBodyBodyGyroJerkMag-mean()

[68] fBodyBodyGyroJerkMag-std()