CookBook

Variables used:

test\_set -> initial data frame to hold test set data

train\_set -> initial data frame to hold train set data

test\_set\_tbl -> converted to data frame table for test data

train\_set\_tbl -> converted to data frame table for train data

combined\_set -> merged above data together

features -> initial data frame to hold features data

features\_tbl -> converted to data frame table for features data

mean.std.idx -> used to retrieve row index of columns with mean and standard deviation from features table

test\_actv -> initial data frame to hold test activity data

train\_actv -> initial data frame to hold train activity data

test\_actv\_tbl -> converted to data frame table for test activity data

train\_actv\_tbl -> converted to data frame table for train activity data

combined\_actv -> merged above data together

actv\_labels -> initial data frame to hold activity class labels data

actv\_labels\_tbl -> converted to data frame table for activity class labels data

new\_actv\_tbl -> new data frame table joined with activity label to retrieve activity description (labels)

tidy\_set -> cleansed combined\_set from above to display average of measurements taken per activity and subject (person)

Summarization:

The mean() function was used to derived the average requested for this study. This was done after leveraging the group\_by function from the dplyr package.

How to Load Data and Run Script

Data must be loaded using the file mentioned below in “Source of Data” section.

If using R, then data must be loaded in current working directory and user can also load and execute run\_analysis.R script found on this github link or step through the code to understand what is taking place.

Source of Data:

Data was retrieved from the below link

https://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCI%20HAR%20Dataset.zip

The basis of this study was to analyze the impact of certain smart devices human beings now wear in an effort to get fit. More details on the study can be found at the below link and credit for initial dataset and publications are also noted below [1].

http://archive.ics.uci.edu/ml/datasets/Human+Activity+Recognition+Using+Smartphones

[1] Davide Anguita, Alessandro Ghio, Luca Oneto, Xavier Parra and Jorge L. Reyes-Ortiz. Human Activity Recognition on Smartphones using a Multiclass Hardware-Friendly Support Vector Machine. International Workshop of Ambient Assisted Living (IWAAL 2012). Vitoria-Gasteiz, Spain. Dec 2012

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Jorge L. Reyes-Ortiz, Alessandro Ghio, Luca Oneto, Davide Anguita. November 2012.