**README.MD**

**Getting and Cleaning Data Course Projectmenos**

The purpose of this project is to demonstrate your ability to collect, work with, and clean a data set. The goal is to prepare tidy data that can be used for later analysis. You will be required to submit:

1) a tidy data set as described below,

2) a link to a Github repository with your script for performing the analysis,

3) a code book that describes the variables, the data, and any transformations or work that you performed to clean up the data called CodeBook.md.

You should also include a README.md in the repo with your scripts. This repo explains how all of the scripts work and how they are connected.

One of the most exciting areas in all of data science right now is wearable computing - see for example [this article](http://www.insideactivitytracking.com/data-science-activity-tracking-and-the-battle-for-the-worlds-top-sports-brand/). Companies like Fitbit, Nike, and Jawbone Up are racing to develop the most advanced algorithms to attract new users. The data linked to from the course website represent data collected from the accelerometers from the Samsung Galaxy S smartphone. A full description is available at the site where the data was obtained:

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

Here are the data for the project:

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

**R script created is called RunAnalysis.R that does the following.**

**I. GET AND MERGE DATA**

**I.1. Download and unzip the dataset**

You have to Install.packages for the next packages: reshape2, data.table

**Download and unzip the dataset:** https://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCI%20HAR%20Dataset.zip

**I.2. Loading train data sets: subject\_train.txt, X\_train.txt, y\_train.txt**

Loading test data sets: subject\_test.txt, X\_test.txt, y\_test.txt

**I.3. Now we combine and organize raw data sets into one**

**II. EXTRACTION ONLY THE MEASUREMENTS ON THE MEAN AND STANDARD DESVIATION FOR EACH MEASUREMENT**

**III. USE DESCRIPTIVE ACTIVITY NAMES TO NAME THE ACTIVITIES IN THE DATA SET**

**IV. PUT APPROPRIATE LABEL TO DATA SET WITH DESCRIPTIVE ACTIVITY NAMES**

**IV.1 Organazing and combining all data sets into single one**

**IV.2 Defining descriptive names for all variables.**

**V. CREATEING A SECOND, INDEPENDENT TIDY DATA SET WITH THE AVERAGE OF EACH VARIABLE FOR EACH ACTIVITY AND EACH SUBJECT**