**Peer assessment for Getting and Cleaning Data**

Human Activity Recognition Using Smartphones Dataset Author: Siva Sadhu

**Version: 1.0**

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. This project has the deliverables include 1) a tidy data set as described below, 2) 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.

**The project includes the following files:**

* 'run\_analysis.R': R script manipulating UCI HAR Dataset to answer the questions of the assignment and to generate the tidy dataset.
* 'CodeBook.md': The Code Book for the assignment.
* 'my\_tidy\_data\_set.txt': Output of this assignment and the tidy data set resulting of the 5th step of the assignment.

**How the script 'run\_analysis.R' works:**

1. Merges the training and the test sets to create one data set.

2. Extracts only the measurements on the mean and standard deviation for each measurement.

3. Uses descriptive activity names to name the activities in the data set

4. Appropriately labels the data set with descriptive variable names.

5. From the data set in step 4, creates a second, independent tidy data set with the average of each variable for each activity and each subject.

**Tidy data set**

The Tidy data set is available and has 180 observation of 81 variables.