

This repository contains the R script and documentation for the Coursera Getting & Cleaning Data week 4 assignment, these were needed to complete the assignment.

Purpose

The purpose of this project is to demonstrate the ability to collect, work with, and clean a data set. The goal is to prepare tidy data that can be used for later analysis. A full description of the data used in this project can be found at 'The UCI Machine Learning Repository'(<http://archive.ics.uci.edu/ml/datasets/Human+Activity+Recognition+Using+Smartphones>)

The source data for this project can be found here.(<https://d396qusza40orc.cloudfront.net/getdata%2Fprojectfiles%2FUCI%20HAR%20Dataset.zip>)

###Project Goals The goal of the project is to create one R script called run_analysis.R that does the following.

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 activity names.
5. Creates a second, independent tidy data set with the average of each variable for each activity and each subject.

###Files 'CodeBook.md' contains information on the variables, data set, transformations and work that was done to tidy up the data

'run_analysis.R' is the code for the R script used to complete the project goals

'FinalTidyData.txt' is the output from the 'runAnalysis.R' R script