# Code book for data set in tidydata.txt

### Data File

The tidy\_data.txt is a space delimited data file. The first row contains the names of the variables, which are listed and described in the Variable section, and the rest 180 rows contain the values of these variables.

### Variables

Each row contains 81 averaged signal measurements for a given subject and activity

#### Subject

Subject number, integer, values are 1 to 30.

#### Activity

Activity type, string, there are 6 possible values:

1. WALKING: subject was walking
2. WALKING\_UPSTAIRS: subject was walking upstairs
3. WALKING\_DOWNSTAIRS: subject was walking downstairs
4. SITTING: subject was sitting
5. STANDING: subject was standing
6. LAYING: subject was laying

#### timeBodyAccelerometerMeanX timeBodyAccelerometerMeanY timeBodyAccelerometerMeanZ

#### Average time domain body acceleration in the X, Y and Z directions

#### timeBodyAccelerometerStdX timeBodyAccelerometerStdY timeBodyAccelerometerStdZ

Standard deviation of the time domain body acceleration in the X, Y and Z directions

#### timeGravityAccelerometerMeanX timeGravityAccelerometerMeanY

#### timeGravityAccelerometerMeanZ

Average time domain gravity acceleration in the X, Y and Z directions

#### timeGravityAccelerometerStdX timeGravityAccelerometerStdY timeGravityAccelerometerStdZ

Standard deviation of the time domain gravity acceleration in the X, Y and Z directions

#### timeBodyAccelerometerJerkMeanX timeBodyAccelerometerJerkMeanY timeBodyAccelerometerJerkMeanZ

Average time domain body acceleration jerk in the X, Y and Z directions

#### timeBodyAccelerometerJerkStdX timeBodyAccelerometerJerkStdY timeBodyAccelerometerJerkStdZ

Standard deviation of the time domain body acceleration jerk in the X, Y and Z directions

#### timeBodyGyroscopeMeanX timeBodyGyroscopeMeanY timeBodyGyroscopeMeanZ

Average time domain body angular velocity in the X, Y and Z directions

#### timeBodyGyroscopeStdX timeBodyGyroscopeStdY timeBodyGyroscopeStdZ

Standard deviation of the time domain body angular velocity in the X, Y and Z directions

#### timeBodyGyroscopeJerkMeanX timeBodyGyroscopeJerkMeanY timeBodyGyroscopeJerkMeanZ

Average time domain body angular velocity jerk in the X, Y and Z directions

#### timeBodyGyroscopeJerkStdX timeBodyGyroscopeJerkStdY timeBodyGyroscopeJerkStdZ

Standard deviation of the time domain body angular velocity jerk in the X, Y and Z directions

#### timeBodyAccelerometerMagnitudeMean timeBodyAccelerometerMagnitudeStd

Average and standard deviation of the time domain magnitude of acceleration

#### timeGravityAccelerometerMagnitudeMean timeGravityAccelerometerMagnitudeStd

Average and standard deviation of the time domain magnitude of gravity acceleration

#### timeBodyAccelerometerJerkMagnitudeMean timeBodyAccelerometerJerkMagnitudeStd

Average and standard deviation of the time domain magnitude of body acceleration jerk

#### timeBodyGyroscopeMagnitudeMean timeBodyGyroscopeMagnitudeStd

Average and standard deviation of the time domain magnitude of body angular velocity

#### timeBodyGyroscopeJerkMagnitudeMean timeBodyGyroscopeJerkMagnitudeStd

Average and standard deviation of the time domain magnitude of body angular velocity jerk

#### frequencyBodyAccelerometerMeanX frequencyBodyAccelerometerMeanY frequencyBodyAccelerometerMeanZ

Average frequency domain body acceleration in the X, Y and Z directions

#### frequencyBodyAccelerometerStdX frequencyBodyAccelerometerStdY frequencyBodyAccelerometerStdZ

Standard deviation of the frequency domain body acceleration in the X, Y and Z directions

#### frequencyBodyAccelerometerJerkMeanX frequencyBodyAccelerometerJerkMeanY frequencyBodyAccelerometerJerkMeanZ

Average frequency domain body acceleration jerk in the X, Y and Z directions

#### frequencyBodyAccelerometerJerkStdX frequencyBodyAccelerometerJerkStdY frequencyBodyAccelerometerJerkStdZ

Standard deviation of the frequency domain body acceleration jerk in the X, Y and Z directions

#### frequencyBodyGyroscopeMeanX frequencyBodyGyroscopeMeanY frequencyBodyGyroscopeMeanZ

Average frequency domain body angular velocity in the X, Y and Z directions

#### frequencyBodyGyroscopeStdX frequencyBodyGyroscopeStdY frequencyBodyGyroscopeStdZ

Standard deviation of the frequency domain body angular velocity in the X, Y and Z directions

#### frequencyBodyAccelerometerMagnitudeMean frequencyBodyAccelerometerMagnitudeStd

Average and standard deviation of the frequency domain magnitude of body acceleration

#### frequencyBodyAccelerometerJerkMagnitudeMean frequencyBodyAccelerometerJerkMagnitudeStd

Average and standard deviation of the frequency domain magnitude of body acceleration jerk

#### frequencyBodyGyroscopeMagnitudeMean frequencyBodyGyroscopeMagnitudeStd

Average and standard deviation of the frequency domain magnitude of body angular velocity

#### frequencyBodyGyroscopeJerkMagnitudeMean frequencyBodyGyroscopeJerkMagnitudeStd

Average and standard deviation of the frequency domain magnitude of body angular velocity jerk