## Data Dictionary - Human Activity Recognition Using Smartphones

- 1) Downloading dataset
- 2) Reading datasets
- 3) Assigning data to features
- 4) Merging them
- 5) Renaming columns
- 6) Grouping data by subject and activity

## Initial dataset content:

- 1) 'features\_info.txt': Shows information about the variables used on the feature vector.
  - 2) 'features.txt': List of all features.
- 3) 'activity\_labels.txt': Links the class labels with their activity name.
  - 4) 'train/X\_train.txt': Training set.
  - 5) 'train/y\_train.txt': Training labels.
  - 6) 'test/X\_test.txt': Test set.

- 7) 'test/y test.txt': Test labels.
- 8) 'train/subject\_train.txt': Each row identifies the subject who performed the activity for each window sample. Its range is from 1 to 30.
- 9) 'train/Inertial Signals/total\_acc\_x\_train.txt': The acceleration signal from the smartphone accelerometer X axis in standard gravity units 'g'. Every row shows a 128 element vector. The same description applies for the 'total\_acc\_x\_train.txt' and 'total\_acc\_z\_train.txt' files for the Y and Z axis.
- 10) 'train/Inertial Signals/body\_acc\_x\_train.txt': The body acceleration signal obtained by subtracting the gravity from the total acceleration.
- 11) 'train/Inertial Signals/body\_gyro\_x\_train.txt': The angular velocity vector measured by the gyroscope for each window sample. The units are radians/second.