Data Folkz

This assignment is part of your coursework at Data Folkz

Description
You are supposed to detect whether the person is running or walking based on the sensor data collected from an iOS device. The dataset contains a single file which represents sensor data samples collected from the accelerometer and gyroscope from iPhone 5c in 10 seconds interval and -5.4/second frequency.

There is an activity type represented by "activity" column which acts as label and reflects following activities:

- "0": walking
- "1": running

Apart of that, the dataset contains "wrist" column which represents the wrist where the device was placed to collect a sample on:

- "0": left wrist
- "1": right wrist

Objective:
Practice classification based on Naive Bayes algorithm. Identify the predictors that can be influential.

Actions to Perform:

1. Load the kinematics dataset as measured on mobile sensors from the file "run or walk.csv."
2. List the columns in the dataset.
3. Perform EDA
4. Let the target variable "y" be the activity, and assign all the other columns to "x."
5. Apply all the classification models studied till now and compare the accuracy.
6. Generate a classification report of each algorithm.
7. Repeat the model once using only the acceleration values as predictors and then using only the gyro values as predictors.
8. Comment on the difference in accuracy between both models.