

Code Book – Summarized Samsung Data

Dataset Name: summarised_data.txt

No. of Rows: 180

No. of Columns: 68

Serial	Variable Name	Variable Description
1	"Volunteer_ID"	ID of the volunteer performing the activity. ID is integral, ranging from 1 to 30
2	"Activity"	It lists the activity for which data is recorded in that row. Contains one of the following six values: <ul style="list-style-type: none">- WALKING- WALKING_UPSTAIRS- WALKING_DOWNSTAIRS- SITTING- STANDING- LAYING
3	"Mean_tBodyAcc_X"	Average time domain body linear acceleration signal along X-axis, captured by the accelerometer
4	"Mean_tBodyAcc_Y"	Average time domain body linear acceleration signal along Y-axis, captured by the accelerometer
5	"Mean_tBodyAcc_Z"	Average time domain body linear acceleration signal along Z-axis, captured by the accelerometer
6	"Mean_tGravityAcc_X"	Average time domain gravity linear acceleration signal along X-axis, captured by the accelerometer
7	"Mean_tGravityAcc_Y"	Average time domain gravity linear acceleration signal along Y-axis, captured by the accelerometer
8	"Mean_tGravityAcc_Z"	Average time domain gravity linear acceleration signal along Z-axis, captured by the accelerometer
9	"Mean_tBodyAccJerk_X"	Average time domain body accelerometer jerk signal along X-axis, calculated by deriving linear acceleration in time
10	"Mean_tBodyAccJerk_Y"	Average time domain body accelerometer jerk signal along Y-axis, calculated by deriving linear acceleration

		in time
11	"Mean_tBodyAccJerk_Z"	Average time domain body accelerometer jerk signal along Z-axis, calculated by deriving linear acceleration in time
12	"Mean_tBodyGyro_X"	Average time domain body angular velocity along X-axis, captured by gyroscope
13	"Mean_tBodyGyro_Y"	Average time domain body angular velocity along Y-axis, captured by gyroscope
14	"Mean_tBodyGyro_Z"	Average time domain body angular velocity along Z-axis, captured by gyroscope
15	"Mean_tBodyGyroJerk_X"	Average time domain body gyroscope jerk signal along X-axis, calculated by deriving angular velocity in time
16	"Mean_tBodyGyroJerk_Y"	Average time domain body gyroscope jerk signal along Y-axis, calculated by deriving angular velocity in time
17	"Mean_tBodyGyroJerk_Z"	Average time domain body gyroscope jerk signal along Z-axis, calculated by deriving angular velocity in time
18	"Mean_tBodyAccMag"	Average time domain body linear acceleration magnitude, calculated using the Euclidean norm
19	"Mean_tGravityAccMag"	Average time domain gravity linear acceleration magnitude, calculated using the Euclidean norm
20	"Mean_tBodyAccJerkMag"	Average time domain body accelerometer jerk magnitude, calculated using the Euclidean norm
21	"Mean_tBodyGyroMag"	Average time domain body angular velocity magnitude, calculated using the Euclidean norm
22	"Mean_tBodyGyroJerkMag"	Average time domain body gyroscope jerk magnitude, calculated using the Euclidean norm
23	"Mean_fBodyAcc_X"	Average frequency domain body linear acceleration signal along X-axis, calculated by applying Fast Fourier Transform (FFT)
24	"Mean_fBodyAcc_Y"	Average frequency domain body linear acceleration signal along Y-axis, calculated by applying Fast Fourier Transform (FFT)

25	"Mean_fBodyAcc_Z"	Average frequency domain body linear acceleration signal along Z-axis, calculated by applying Fast Fourier Transform (FFT)
26	"Mean_fBodyAccJerk_X"	Average frequency domain body accelerometer jerk signal along X-axis, calculated by applying Fast Fourier Transform (FFT)
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29	"Mean_fBodyGyro_X"	Average frequency domain body angular velocity along X-axis, calculated by applying Fast Fourier Transform (FFT)
30	"Mean_fBodyGyro_Y"	Average frequency domain body angular velocity along Y-axis, calculated by applying Fast Fourier Transform (FFT)
31	"Mean_fBodyGyro_Z"	Average frequency domain body angular velocity along Z-axis, calculated by applying Fast Fourier Transform (FFT)
32	"Mean_fBodyAccMag"	Average frequency domain body linear acceleration magnitude, calculated using the Euclidean norm
33	"Mean_fBodyBodyAccJerkMag"	Average frequency domain body accelerometer jerk magnitude, calculated using the Euclidean norm
34	"Mean_fBodyBodyGyroMag"	Average frequency domain body angular velocity magnitude, calculated using the Euclidean norm
35	"Mean_fBodyBodyGyroJerkMag"	Average frequency domain body gyroscope jerk magnitude, calculated using the Euclidean norm
36	"StdDev_tBodyAcc_X"	Standard deviation of time domain body linear acceleration signal along X-axis, captured by the accelerometer
37	"StdDev_tBodyAcc_Y"	Standard deviation of time domain body linear acceleration signal along Y-axis, captured by the

		accelerometer
38	"StdDev_tBodyAcc_Z"	Standard deviation of time domain body linear acceleration signal along Z-axis, captured by the accelerometer
39	"StdDev_tGravityAcc_X"	Standard deviation of time domain gravity linear acceleration signal along X-axis, captured by the accelerometer
40	"StdDev_tGravityAcc_Y"	Standard deviation of time domain gravity linear acceleration signal along Y-axis, captured by the accelerometer
41	"StdDev_tGravityAcc_Z"	Standard deviation of time domain gravity linear acceleration signal along Z-axis, captured by the accelerometer
42	"StdDev_tBodyAccJerk_X"	Standard deviation of time domain body accelerometer jerk signal along X-axis, calculated by deriving linear acceleration in time
43	"StdDev_tBodyAccJerk_Y"	Standard deviation of time domain body accelerometer jerk signal along Y-axis, calculated by deriving linear acceleration in time
44	"StdDev_tBodyAccJerk_Z"	Standard deviation of time domain body accelerometer jerk signal along Z-axis, calculated by deriving linear acceleration in time
45	"StdDev_tBodyGyro_X"	Standard deviation of time domain body angular velocity along X-axis, captured by gyroscope
46	"StdDev_tBodyGyro_Y"	Standard deviation of time domain body angular velocity along Y-axis, captured by gyroscope
47	"StdDev_tBodyGyro_Z"	Standard deviation of time domain body angular velocity along Z-axis, captured by gyroscope
48	"StdDev_tBodyGyroJerk_X"	Standard deviation of time domain body gyroscope jerk signal along X-axis, calculated by deriving angular velocity in time
49	"StdDev_tBodyGyroJerk_Y"	Standard deviation of time domain body gyroscope jerk signal along Y-axis, calculated by deriving angular velocity in time
50	"StdDev_tBodyGyroJerk_Z"	Standard deviation of time domain body gyroscope jerk

		signal along Z-axis, calculated by deriving angular velocity in time
51	"StdDev_tBodyAccMag"	Standard deviation of time domain body linear acceleration magnitude, calculated using the Euclidean norm
52	"StdDev_tGravityAccMag"	Standard deviation of time domain gravity linear acceleration magnitude, calculated using the Euclidean norm
53	"StdDev_tBodyAccJerkMag"	Standard deviation of time domain body accelerometer jerk magnitude, calculated using the Euclidean norm
54	"StdDev_tBodyGyroMag"	Standard deviation of time domain body angular velocity magnitude, calculated using the Euclidean norm
55	"StdDev_tBodyGyroJerkMag"	Standard deviation of time domain body gyroscope jerk magnitude, calculated using the Euclidean norm
56	"StdDev_fBodyAcc_X"	Standard deviation of frequency domain body linear acceleration signal along X-axis, calculated by applying Fast Fourier Transform (FFT)
57	"StdDev_fBodyAcc_Y"	Standard deviation of frequency domain body linear acceleration signal along Y-axis, calculated by applying Fast Fourier Transform (FFT)
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67	"StdDev_fBodyBodyGyroMag"	Standard deviation of frequency domain body angular velocity magnitude, calculated using the Euclidean norm
68	"StdDev_fBodyBodyGyroJerkMag"	Standard deviation of frequency domain body gyroscope jerk magnitude, calculated using the Euclidean norm
