**DATA CODE BOOK**

Subject 1

Identifier of the subject

1 ...30 Unique identifier assigned to each subject

Activity 1

Description of the type of activity recorded; one of 6

LAYING

SITTING

STANDING

WALKING

WALKING\_DOWNSTAIRS

WALKING\_UPSTAIRS

tBodyAcc.mean-X 1

Normalized Mean of the X-axis body linear acceleration signal

-1 ....1 : value in the range

tBodyAcc.mean-Y 1

Normalized Mean of the Y-axis body linear acceleration signal

-1 ....1 : value in the range

tBodyAcc.mean-Z 1

Normalized Mean of the Z-axis body linear acceleration signal

-1 ....1 : value in the range

tBodyAcc.std-X 1

Normalized Standard deviation of the X-axis body linear acceleration signals

-1 ....1 : value in the range

tBodyAcc.std-Y 1

Normalized Standard deviation of the Y-axis body linear acceleration signals

-1 ....1 : value in the range

tBodyAcc.std-Z 1

Normalized Standard deviation of the Z-axis body linear acceleration signals

-1 ....1 : value in the range

tGravityAcc.mean-X 1

Normalized Mean of the X-axis gravity linear acceleration signal

-1 ....1 : value in the range

tGravityAcc.mean-Y 1

Normalized Mean of the Y-axis gravity linear acceleration signal

-1 ....1 : value in the range

tGravityAcc.mean-Z 1

Normalized Mean of the Z-axis gravity linear acceleration signal

-1 ....1 : value in the range

tGravityAcc.std-X 1

Normalized Standard Deviation of the X-axis gravity linear acceleration signal

-1 ....1 : value in the range

tGravityAcc.std-Y 1

Normalized Standard Deviation of the Y-axis gravity linear acceleration signal

-1 ....1 : value in the range

tGravityAcc.std-Z 1

Normalized Standard Deviation of the Z-axis gravity linear acceleration signal

-1 ....1 : value in the range

tBodyAccJerk.mean-X 1

Normalized Mean of the X-axis Jerk body linear acceleration signal

-1 ....1 : value in the range

tBodyAccJerk.mean-Y 1

Normalized Mean of the Y-axis Jerk body linear acceleration signal

-1 ....1 : value in the range

tBodyAccJerk.mean-Z 1

Normalized Mean of the Z-axis Jerk body linear acceleration signal

-1 ....1 : value in the range

tBodyAccJerk.std-X 1

Normalized Standard Deviation of the X-axis Jerk body linear acceleration signal

-1 ....1 : value in the range

tBodyAccJerk.std-Y 1

Normalized Standard Deviation of the Y-axis Jerk body linear acceleration signal

-1 ....1 : value in the range

tBodyAccJerk.std-Z 1

Normalized Standard Deviation of the Z-axis Jerk body linear acceleration signal

-1 ....1 : value in the range

tBodyGyro.mean-X 1

Normalized Mean of the X-axis body gyroscope angular velocity signal

-1 ....1 : value in the range

tBodyGyro.mean-Y 1

Normalized Mean of the Y-axis body gyroscope angular velocity signal

-1 ....1 : value in the range

tBodyGyro.mean-Z 1

Normalized Mean of the Z-axis body gyroscope angular velocity signal

-1 ....1 : value in the range

tBodyGyro.std-X 1

Normalized Standard Deviation of the X-axis body gyroscope angular velocity signal

-1 ....1 : value in the range

tBodyGyro.std-Y 1

Normalized Standard Deviation of the Y-axis body gyroscope angular velocity signal

-1 ....1 : value in the range

tBodyGyro.std-Z 1

Normalized Standard Deviation of the Z-axis body gyroscope angular velocity signal

-1 ....1 : value in the range

tBodyGyroJerk.mean-X 1

Normalized Mean of the X-axis Jerk body gyroscope angular velocity signal

-1 ....1 : value in the range

tBodyGyroJerk.mean-Y 1

Normalized Mean of the Y-axis Jerk body gyroscope angular velocity signal

-1 ....1 : value in the range

tBodyGyroJerk.mean-Z 1

Normalized Mean of the Z-axis Jerk body gyroscope angular velocity signal

-1 ....1 : value in the range

tBodyGyroJerk.std-X 1

Normalized Standard deviation of the X-axis Jerk body gyroscope signal

-1 ....1 : value in the range

tBodyGyroJerk.std-Y 1

Normalized Standard deviation of the Y-axis Jerk body gyroscope signal

-1 ....1 : value in the range

tBodyGyroJerk.std-Z 1

Normalized Standard deviation of the Z-axis Jerk body gyroscope signal

-1 ....1 : value in the range

tBodyAccMag.mean 1

Normalized Mean of the body linear acceleration magnitude

-1 ....1 : value in the range

tBodyAccMag.std 1

Normalized Standard Deviation of the body linear acceleration magnitude

-1 ....1 : value in the range

tGravityAccMag.mean 1

Normalized Mean of the gravity linear acceleration magnitude

-1 ....1 : value in the range

tGravityAccMag.std 1

Normalized Standard Deviation of the gravity linear acceleration magnitude

-1 ....1 : value in the range

tBodyAccJerkMag.mean 1

Normalized Mean of the Jerk body linear acceleration magnitude

-1 ....1 : value in the range

tBodyAccJerkMag.std 1

Normalized Standard Deviation of the Jerk body linear acceleration magnitude

-1 ....1 : value in the range

tBodyGyroMag.mean 1

Normalized Mean of the body gyroscope angular velocity magnitude

-1 ....1 : value in the range

tBodyGyroMag.std 1

Normalized Standard Deviation of the body gyroscope angular velocity magnitude

-1 ....1 : value in the range

tBodyGyroJerkMag.mean 1

Normalized Mean of the Jerk body gyroscope signal magnitude

-1 ....1 : value in the range

tBodyGyroJerkMag.std 1

Normalized Standard Deviation of the Jerk body gyroscope signal magnitude

-1 ....1 : value in the range

fBodyAcc.mean-X 1

Normalized Mean of the X-axis body linear acceleration FFT signal

-1 ....1 : value in the range

fBodyAcc.mean-Y 1

Normalized Mean of the Y-axis body linear acceleration FFT signal

-1 ....1 : value in the range

fBodyAcc.mean-Z 1

Normalized Mean of the Z-axis body linear acceleration FFT signal

-1 ....1 : value in the range

fBodyAcc.std-X 1

Normalized Standard deviation of the X-axis body linear acceleration FFT signal

-1 ....1 : value in the range

fBodyAcc.std-Y 1

Normalized Standard deviation of the Y-axis body linear acceleration FFT signal

-1 ....1 : value in the range

fBodyAcc.std-Z 1

Normalized Standard deviation of the Z-axis body linear acceleration FFT signal

-1 ....1 : value in the range

fGravityAcc.mean-X 1

Normalized Mean of the X-axis gravity linear acceleration FFT signal

-1 ....1 : value in the range

fGravityAcc.mean-Y 1

Normalized Mean of the Y-axis gravity linear acceleration FFT signal

-1 ....1 : value in the range

fGravityAcc.mean-Z 1

Normalized Mean of the Z-axis gravity linear acceleration FFT signal

-1 ....1 : value in the range

fGravityAcc.std-X 1

Normalized Standard Deviation of the X-axis gravity linear acceleration FFT signal

-1 ....1 : value in the range

fGravityAcc.std-Y 1

Normalized Standard Deviation of the Y-axis gravity linear acceleration FFT signal

-1 ....1 : value in the range

fGravityAcc.std-Z 1

Normalized Standard Deviation of the Z-axis gravity linear acceleration FFT signal

-1 ....1 : value in the range

fBodyAccJerk.mean-X 1

Normalized Mean of the X-axis Jerk body linear acceleration FFT signal

-1 ....1 : value in the range

fBodyAccJerk.mean-Y 1

Normalized Mean of the Y-axis Jerk body linear acceleration FFT signal

-1 ....1 : value in the range

fBodyAccJerk.mean-Z 1

Normalized Mean of the Z-axis Jerk body linear acceleration FFT signal

-1 ....1 : value in the range

fBodyAccJerk.std-X 1

Normalized Standard Deviation of the X-axis Jerk body linear acceleration FFT signal

-1 ....1 : value in the range

fBodyAccJerk.std-Y 1

Normalized Standard Deviation of the Y-axis Jerk body linear acceleration FFT signal

-1 ....1 : value in the range

fBodyAccJerk.std-Z 1

Normalized Standard Deviation of the Z-axis Jerk body linear acceleration FFT signal

-1 ....1 : value in the range

fBodyGyro.mean-X 1

Normalized Mean of the X-axis body gyroscope angular velocity FFT signal

-1 ....1 : value in the range

fBodyGyro.mean-Y 1

Normalized Mean of the Y-axis body gyroscope angular velocity FFT signal

-1 ....1 : value in the range

fBodyGyro.mean-Z 1

Normalized Mean of the Z-axis body gyroscope angular velocity FFT signal

-1 ....1 : value in the range

fBodyGyro.std-X 1

Normalized Standard Deviation of the X-axis body gyroscope FFT signal

-1 ....1 : value in the range

fBodyGyro.std-Y 1

Normalized Standard Deviation of the Y-axis body gyroscope FFT signal

-1 ....1 : value in the range

fBodyGyro.std-Z 1

Normalized Standard Deviation of the Z-axis body gyroscope FFT signal

-1 ....1 : value in the range

fBodyGyroJerk.mean-X 1

Normalized Mean of the X-axis Jerk body gyroscope FFT signal

-1 ....1 : value in the range

fBodyGyroJerk.mean-Y 1

Normalized Mean of the Y-axis Jerk body gyroscope angular velocity FFT signal

-1 ....1 : value in the range

fBodyGyroJerk.mean-Z 1

Normalized Mean of the Z-axis Jerk body gyroscope angular velocity FFT signal

-1 ....1 : value in the range

fBodyGyroJerk.std-X 1

Normalized Standard deviation of the X-axis Jerk body gyroscope FFT signal

-1 ....1 : value in the range

fBodyGyroJerk.std-Y 1

Normalized Standard deviation of the Y-axis Jerk body gyroscope FFT signal

-1 ....1 : value in the range

fBodyGyroJerk.std-Z 1

Normalized Standard deviation of the Z-axis Jerk body gyroscope FFT signal

-1 ....1 : value in the range

fBodyAccMag.mean 1

Normalized Mean of the FFT body linear acceleration magnitude

-1 ....1 : value in the range

fBodyAccMag.std 1

Normalized Standard Deviation of the FFT body linear acceleration magnitude

-1 ....1 : value in the range

fGravityAccMag.mean 1

Normalized Mean of the FFT gravity linear acceleration magnitude

-1 ....1 : value in the range

fGravityAccMag.std 1

Normalized Standard Deviation of the FFT gravity linear acceleration magnitude

-1 ....1 : value in the range

fBodyAccJerkMag.mean 1

Normalized Mean of the FFT Jerk body linear acceleration magnitude

-1 ....1 : value in the range

fBodyAccJerkMag.std 1

Normalized Standard Deviation of the FFT Jerk body linear acceleration magnitude

-1 ....1 : value in the range

fBodyGyroMag.mean 1

Normalized Mean of the FFT body gyroscope angular velocity magnitude

-1 ....1 : value in the range

fBodyGyroMag.std 1

Normalized Standard Deviation of the FFT body gyroscope magnitude

-1 ....1 : value in the range

fBodyGyroJerkMag.mean 1

Normalized Mean of the FFT Jerk body gyroscope angular velocity magnitude

-1 ....1 : value in the range

fBodyGyroJerkMag.std 1

Normalized Standard Deviation of the FFT Jerk body gyroscope signal magnitude

-1 ....1 : value in the range