features

This data frame contains descriptive names of measurements taken during the experiment. These names will be used later to name corresponding variables.

Source file   :Features.txt
Class   :data frame, 561 observations, 2 variables
Var V1   :integer 1:561
Var V2   :character (Description of measurements)

testSubject

This data frame contains the ids of test subjects. It will be merged with other available info to form the data set of "test" observations

Source file   :subject_test.txt
Class   :data frame, 2.947 observations, 1variable
Var V1   :integer (subject ids)

trainSubject

This data frame contains the ids of train subjects. It will be merged with other available info to form the data set of "test" observations

Source file   :subject_train.txt
Class   :data frame, 7.352 observations, 1 variable
Var V1   :integer (subject ids)

testX

This data frame contains the measurements taken for test subjects. It will be merged with other available info to form the data set of "test" observations

Source file   :X_test.txt
Class   :dataframe, 2.947 observations, 561 variables
Var V1:V561   :numeric (measurements)

testY

This data frame contains the activities of test subjects. It will be merged with other available info to form the data set of "test" observations

Source file   :Y_test.txt
Class   :data frame, 2.947 observations , 1 Column
Var V1   :int (activity code)

trainX

This data frame contains the measurements taken for train subjects. It will be merged with other available info to form the data set of "train" observations

Source file   :Y_test.txt
Class   :dataframe, 7.352 observations, 561 variables
Var V1:V561   :numeric (measurements)

trainY

This data frame contains the activities of train subjects. It will be merged with other available info to form the data set of "train" observations

Source file   :Y_train.txt
Class   :data frame, 7.352 observations , 1 Column
Var V1   :int (activity code)

activityLabels

This data frame contains the labels of activities of both test and train subjects. It will be used later to give descriptive names to activities.

Source file   :activity_labels.txt
Class   :data frame, 6 observations , 2 Variables
Var V1   :int, (activity code)
Var V2   :char, (activity description)

test

This is the data frame of test observations which is constructed by binding together:

GroupTest,
testSubject,
testY,
testX

result of this binding is a data set with the test observations and all related information

Class   :data frame, 2.947 observations, 564 variables
Var Subject   :integer (subject ids)
Var Activity   :integer (activity code)
Var V1:V561   :numeric (measurements)

train

This is the data frame of train observations which is constructed by binding together:

GroupTrain,
testSubject,
testY,
testX

result of this binding is a data set with the train observations and all related information

Class   :data frame, 7.352 observations, 564 variables
Var Subject   :integer (subject ids)
Var Activity   :integer (activity code)
Var V1:V561   :numeric (measurements)

dataset

This is the data frame that results after appending the "train" to the "test" data frame (both data frames have the same number of variables and same names). This is a data set that includes all observations (test and train groups) and related info.
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Once the dataset has been created, variables V1:V561 are given appropriate descriptive names using data frame "features".

Furthermore values Variable Activity are replaced by Activity Descriptions included in data frame "activityLabels"

Class   :data frame, 10.299 observations, 563 variables
Var Subject   :integer (subject ids)
Var Activity   :integer (activity code)
Rest 561 Vars   :numeric (measurements)

m_ind

This is a integer vector, including indices of variable names that contain string «mean» in their name

Class   :Vector of int (53 elements)

means

This is a data frame that includes all variables of «dataSet» whose index is equal to indices of «m_ind» vector + 2. It also contains variables Subject and Activity

Class   :data frame, 10.299 observations, 55 variables
Var Subject   :int, ids of subjects
Var Activity   :chr, description of activity
Rest Vars (53)   :numeric, measurements

s_ind

This is a character vector, including indices of variable names that contain string «std» in their name

Class   :Vector of int (33 elements)

Stds

This is a data frame that includes all variables of «dataSet» whose index is equal to indices of «s_ind» vector + 2. It also contains variables Subject and Activity

Class   :data frame, 10.299 observations, 35 variables
Var Subject   :int, ids of subjects
Var Activity   :chr, description of activity
Rest Vars (33)   :numeric, measurements

dataSet2

This is a data frame derived from "dataSet" by aggregating "dataset" per Subject and activity (columns 1:2 of "dataset" and calculating the means of all variables containing measurements (columns 3:563 of "dataSet")

Class   :data frame, 180 observations, 563 variables
Var Subject   :integer (subject ids)
Var Activity   :integer (activity code)
Rest 561 Vars   :numeric (measurements)