

Codebook

This document presents a brief description of the variables that are in the tidy dataset. The variable can be classified into two groups: a group with mixed names which constitute the most of dataset variables and two other variables as second group which are *activity* and *subject* variables. The description for each of these two groups is given as follows:

1. Main variables

This section briefly describes the main variables in the datasets. These variables are mixed of some segments. Table below provide description for each segment used in the variable names:

Segment in variable	Descriptions
f	Frequency domain signal
t	Refers to time
std	Standard deviation function applied
mean	Mean function applied
Acc	The data come from accelerometer
Gyro	The data comes from Gyroscope
Body	Signal relates to body
Gravity	Signals relates to gravity
X	Data represents signal across X dimension
Y	Data represents signal across Y dimension
Z	Data represents signal across Z dimension
Mag	Relates to magnitude of signal
Jerk	Relates to Jerk signal

2. Other variables

This section describes the two variable *activity* and *subject* as below table:

Variable	Descriptions
activity	Relates to a certain activity from these 6 activities: <ul style="list-style-type: none">• Walking• Walking Upstairs• Walking downstairs• Sitting• Standing• Laying
Subject	Refers to a person who performed the activity