Excercise Features (TBD until 28.05.2018)

(You may work in groups or help each other as long as you understand the code and are able to modify/explain each relevant code line (same goes for pasted code from the web).

Go to previous excercise

Excercise 3 Calculating features

a. Download RStudio

b. Use your code from the last excercise to collect data for 3 activities with 10 subjects each for 30 seconds (Note: note down each subject as an extra tag in influxdb. You can join forces to collect bigger datasets or change eg. the position of your phone and repeat yourself)

c. Use InfluxDBr2 to load the data that you collected in excercise 2 into an xts object (use one xts per label and experiment)

d. xts to apply windowing (try non-oververlapping windows first), by using eg.

```
do.call(rbind, lapply(split(data,"seconds", k=2), calc_features))
```

(Note that the windows version of xts does not support subsecond intervals, you can use the web version e.g. via docker)

e. Join all timeseries into a single dataframe. Add your label and experiment/subject to each observation.

f. Use caret to visualize your feature space.

g. Extend your code to easily try out and visualize different features

Solution

here