Validation Procedure of QuantLets according to the Styleguide

The proposed procedure should be followed sequentially. All steps are illustrated by examples included in the styleguide.

Instructions

1. Check MetaInfo - Click to see example
   (a) Name of QuantLet
   (b) Published in Book/ Paper
   (c) Description - at least 10 words; should begin with the verb, e.g. "plots the time series..."
   (d) Keywords - at least 5 words (the more the merrier) List of keywords `http://quantnet.wiwi.hu-berlin.de/index.php?p=searchResults&w=allkeywords&sort=f`
   (e) *Input (optional)*
   (f) *Output (optional)*
   (g) Author
   (h) Submitted
   (i) Datafile
2. Check Code (Align QuantLet Code to Style Guide standards)
   (a) check whether it works properly
   (b) check whether datafile is appropriate
   (c) check whether the description is appropriate
   (d) check whether plots\pictures on the website are appropriate
   (e) to format with the package FormatR
      i. library(FormatR) –>tidy_source(file='output.R')
      ii. to check whether all the lines of the code are written properly
      iii. check that the code still works properly
   (f) delete unnecessary empty lines (1-2 mostly, max. 4)
   (g) change all "<-" with "="
   (h) Align all subsequent assignments by "="
   (i) Check indentation

Textbook example of perfect Q's

- `http://quantnet.wiwi.hu-berlin.de/index.php?p=show&id=3204`
- `http://quantnet.wiwi.hu-berlin.de/index.php?p=show&id=3164`

Styleguide

0.1 Complete and ordered MetaInfo-Header

```
# ------------------------------------
# Name of QuantLet:
# ------------------------------------
# Published in:
# ------------------------------------
# Description:
# ------------------------------------
# Keywords:
# ------------------------------------
# Input:
# ------------------------------------
# Output:
# ------------------------------------
# Author:
# ------------------------------------
# Submitted:
# ------------------------------------
# Datafile:
# ------------------------------------
```

0.2 How to use formatR

```
# Cleaning up the source in an R script file "input.R", Indentation is set
# to two space characters. Maximum line width is 80 characters.
# The formatted code is written into a new script file "output.R"

tidy_source(source = "input.R", indent = 2, width.cutoff =
80, file = "output.R")

# similar to the previous example, but using the clipboard
# instead of an input file

tidy_source(indent = 2, width.cutoff = 80, file = "output.R")

```

```
# when omitting function parameters the defaults indent = 4 and
# width.cutoff = 80 are being used. For simplicity, we recommend these for use on Quantnet.

tidy_source(file = "output.R")
```

0.3 Change all "<-" with "="

```
#BAD
foo <- 5.0
bar <- function(x) {
        return x^2
}

#GOOD
foo = 5.0
bar = function(x) {
        return x^2
}
```

0.4 Align assignments in subsequent lines by "="

```
foo    = 5.0
foobar = 7.0
bar    = 8.0
```

0.5 Set four space characters or a single tab per indentation level

```
while (i < n){
    i = i + 1
}
```