

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

```
1 # _____
2 # Name of QuantLet:
3 # _____
4 # Published in:
5 # _____
6 # Description:
7 # _____
8 # Keywords:
9 # _____
10 # Input:
11 # _____
12 # Output:
13 # _____
14 # Author:
15 # _____
16 # Submitted:
17 # _____
18 # Datafile:
19 # _____
```

0.2 How to use formatR

```
1 # Cleaning up the source in an R script file "input.R",
  # Indentation is set
2 # to two space characters. Maximum line width is 80
  # characters.
3 # The formatted code is written into a new script file "
  # output.R"
4
5 tidy_source(source = "input.R", indent = 2, width.cutoff
  =
6 80, file = "output.R")
7
8 # similar to the previous example, but using the
  # clipboard
9 # instead of an input file
10
11 tidy_source(indent = 2, width.cutoff = 80, file = "output
  .R")
12
```

```

13 # when omitting function parameters the defaults indent =
    4 and
14 # width.cutoff = 80 are being used. For simplicity, we
    recommend these for use on Quantnet.
15
16 tidy_source(file = "output.R")

```

0.3 Change all "<-" with "="

```

1 #BAD
2 foo <- 5.0
3 bar <- function(x) {
4     return x^2
5 }
6
7 #GOOD
8 foo = 5.0
9 bar = function(x) {
10     return x^2
11 }

```

0.4 Align assignments in subsequent lines by "="

```

1 foo      = 5.0
2 foobar   = 7.0
3 bar      = 8.0

```

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

```

1 while (i < n){
2     i = i + 1
3 }

```