Programming (ERIM)

7. Exercise

Deadline for submission: 2014-12-28 23:59 CET

Instructions

In this exercise you should make a full distribution package including function documentation, add the files to a local git repository, and push the local changes to a remote github repository. What you should submit in BB as the exercise answer is a text file containing the public repository URL (e.g. `https://github.com/tommite/pubs-code`). If you do not want to create a github account and push your changes to a public remote repository, you can also submit the local repository in a zip via BB.

For writing packages in R, see `http://cran.r-project.org/doc/manuals/R-exts.html`. You can perform package checks (including running unit tests) with R CMD check and install a package with R CMD install (from the command line).

Exercise

1. Make a package directory structure according to your programming language (R or Matlab). If you're using Matlab, this whole structure should be within another directory (called, for example, 'pkg').
2. Add implementations of the functions. If you have some functions that you need to implement for work, you can make this package for those. Otherwise, make just a few functions e.g. `addTwo(x)` and `addFour(x)`, that return the input argument plus 2 and 4, respectively.
3. If using R, add also DESCRIPTION and NAMESPACE (to the package root), and function documentations with .Rd files (into the man/ directory). Remember to include examples on how to use the functions.
4. Add unit tests for the functions. In Matlab, include another directory outside the package, that contains the unit tests. In R, the test scripts can be put in the package directory tests/.
5. Init a local git repository. Add a README.md file in markdown syntax (see `http://daringfireball.net/projects/markdown/`), and stage it to the repository. Stage all the files of the package. Commit the changes, and push the commit to your remote repository in github.