

# Programming (ERIM)

## 7. Exercise

Deadline for submission: 2013-12-16 23:59 CET

### Instructions

In this exercise you should make a full package including documentation, add it to a local git repository, and push the local changes to github. 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 remote repository, you can also submit the zipped local repository via BB.

For writing packages in R, see <http://cran.r-project.org/doc/manuals/R-exts.html>.

### Exercise

1. Make package directory structure according to your programming language (R or Matlab). This whole structure should be within a directory (yourpkg)
2. Add implementation of 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 documentation with .Rd files (in a man/ directory). Remember to include examples about 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 changes, and push the commits to github.