Quick R Package

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Overview
We will create the QuickPackage R package:

1. Create a dummy function to come into the package
2. Create the package structure
3. Update the package content
4. Build/check/install
5. Enjoy!
## This is the dummy function that will return
## information about our 'QuickPackage'

```r
qpf <- function()
+
+ packageDescription("QuickPackage")
```

> ## This is the dummy function that will return
> ## information about our 'QuickPackage'
> qpf <- function()
+ packageDescription("QuickPackage")
> ## This creates the package template
> package.skeleton("QuickPackage", list = c("qpf"))
QuickPackage structure:

QuickPackage/
|-- DESCRIPTION
|-- man
|   |-- qpf.Rd
|   `-- QuickPackage-package.Rd
|-- NAMESPACE
|-- R
|   `-- qfd.R
`-- Read-and-delete-me
Read and delete Read-and-delete-me
Update DESCRIPTION
Write a proper package documentation file or delete it (this is the only optional documentation) and update the man page for qpf (see next slide)
\name{qpf}
\alias{qpf}
\title{ A test function }
\description{
  Returns package information.
}
\usage{
  qpf()
}
\value{
  An object of class \code{packageDescription}.
}
\examples{
  qpf()
}
In a terminal:

1. Build the package with
   R CMD build QuickPackage

2. Check the package with
   R CMD check QuickPackage_1.0.tar.gz

3. If any, fix errors and warnings and repeat steps 1 and 2.

4. Install the package with
   R CMD INSTALL QuickPackage_1.0.tar.gz
> library("QuickPackage")
> qpf()

Package: QuickPackage
Type: Package
Title: A quick and mini R package
Version: 1.0
Author: Laurent Gatto <lg390@cam.ac.uk>
Maintainer: Laurent Gatto <lg390@cam.ac.uk>
Description: Mini intro on building R packages.
License: GPL-2
Packaged: 2012-07-07 11:10:40 UTC; lgatto
Built: R 2.16.0; ; 2012-07-07 11:10:48 UTC; unix

-- File: /home/lgatto/R/x86_64-unknown-linux-gnu-library/2.16/QuickPackage/Meta/package.rds
References

- Writing R Extensions, R Development Core Team, (get it with help.start())
\texttt{toLatex(sessionInfo())}

\begin{itemize}
\item R Under development (unstable) (2012-06-21 r59599), x86_64-unknown-linux-gnu
\item Locale: LC\_CTYPE=en\_GB.UTF-8, LC\_NUMERIC=C, LC\_TIME=en\_GB.UTF-8, LC\_COLLATE=en\_GB.UTF-8, LC\_MONETARY=en\_GB.UTF-8, LC\_MESSAGES=en\_GB.UTF-8, LC\_PAPER=C, LC\_NAME=C, LC\_ADDRESS=C, LC\_TELEPHONE=C, LC\_MEASUREMENT=en\_GB.UTF-8, LC\_IDENTIFICATION=C
\item Base packages: base, datasets, graphics, grDevices, methods, stats, tools, utils
\item Other packages: cacheSweave 0.6-1, codetools 0.2-8, filehash 2.2-1, formatR 0.5, highlight 0.3.2, parser 0.0-15, pgfSweave 1.3.0, QuickPackage 1.0, Rcpp 0.9.12, stashR 0.3-5
\item Loaded via a namespace (and not attached): digest 0.5.2, tikzDevice 0.6.2
\end{itemize}