Package: pkgGraphR (via r-universe)

September 1, 2024

Type Package

Title Graph the Relationship Between Functions in an R Package

Version 0.2.0

Maintainer David Oliver <doliv071@gmail.com>

BugReports https://gitlab.com/doliv071/pkggraphr/-/issues

URL https://gitlab.com/doliv071/pkggraphr

Description It is often useful when developing an R package to track
the relationship between functions in order to appropriately
test and track changes. This package generates a graph of the
relationship between all R functions in a package. It can also
be used on any directory containing .R files which can be very
useful for 'shiny' apps or other non-package workflows.

License GPL (>= 3)

Encoding UTF-8

LazyData true

RoxygenNote 7.3.1

Imports DiagrammeR, dplyr, purrr, stats, utils

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

Config/testthat/edition 3

VignetteBuilder knitr

Repository https://doliv071.r-universe.dev

RemoteUrl https://gitlab.com/doliv071/pkggraphr

RemoteRef HEAD

RemoteSha fb3fd8208567b2be79cee3092f2c553de03a8fa1

Contents

---

buildPackageGraph   *Build a graph of an R package or directory*

Description

Generates the Nodes and Edges of a set of functions in an R package or directory

Usage

```
buildPackageGraph(x, unique.edges = TRUE, only.connected = FALSE)
```

Arguments

x   A character string specifying the path to an R package or directory

unique.edges   Logical indicating whether there should be only a single edge between nodes. DEFAULT: TRUE

only.connected Logical indicating whether unconnected nodes should be removed from the graph. DEFAULT: FALSE

Value

A named list of length 2 containing a character vector of nodes and a data.frame of edges.

Examples

```
system.file("extdata", package = "pkgGraphR") |>
    buildPackageGraph()
```

---

collectFunNames   *Collect all functions in a package or directory*

Description

collect all the functions defined in an R program, directory, or file

Usage

```
collectFunNames(x)
```

Arguments

x   A character string specifying the path to an R package, directory, or file

Value

A named list of function assignments in each '.R' file in 'x'

Examples

```
system.file("extdata", package = "pkgGraphR") |>
    collectFunNames()
```

---

plotPackageGraph   *Plot a graph or diagram of a package*

Description

From a list of nodes and edges, plots a diagram or graph

Usage

```
plotPackageGraph(graph, fun.list, use.subgraphs = FALSE, use.colors = FALSE)
```

Arguments

graph	A list generated by [buildPackageGraph](#) containing edges and nodes of the graph.
fun.list	An optional list generated by [collectFunNames](#) containing each files function assignments. Used only if 'use.subgraphs' or 'use.colors' are true
use.subgraphs	Logical indicating whether the graph should be partitioned into subgraphs by the file in which the function assignment was made. DEFAULT: FALSE
use.colors	Logical indicating whether the nodes of the graph should be colored by the file in which the function assignment was made. N.B. No legend is plotted for the colors. DEFAULT: FALSE

Value

A grviz plot.

See Also

[collectFunNames](#), [buildPackageGraph](#)

Examples

```
pkgGraph <- system.file("extdata", package = "pkgGraphR") |>
    buildPackageGraph()
plotPackageGraph(graph = pkgGraph)

pkgFuns <- system.file("extdata", package = "pkgGraphR") |>
    collectFunNames()

plotPackageGraph(graph = pkgGraph, fun.list = pkgFuns, use.subgraphs = TRUE)
plotPackageGraph(graph = pkgGraph, fun.list = pkgFuns, use.colors = TRUE)
plotPackageGraph(graph = pkgGraph, fun.list = pkgFuns, use.colors = TRUE, use.subgraphs = TRUE)
```

Index