

Package ‘packagefinder’

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Type Package

Title Comfortable Search for R Packages on CRAN

Version 0.0.7

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Description Tool to search for R packages on CRAN, based on their title, short and long descriptions. 'packagefinder' allows to search for multiple keywords at once and to combine the keywords with logical operators (AND/OR).

License GPL-3

Encoding UTF-8

BugReports <https://github.com/jsugarelli/packagefinder/issues>

URL <https://github.com/jsugarelli/packagefinder/>

Repository CRAN

LazyData true

Imports httr, utils, jsonlite, pander, formattable, stringr, tools

RoxygenNote 6.0.1

NeedsCompilation no

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| buildIndex | <i>Creating a search index for findPackage()</i> |
|------------|--|

Description

Builds a search index that can be used with `findPackage`.

Usage

```
buildIndex(filename = "", download.stats = FALSE)
```

Arguments

| | |
|-----------------------------|---|
| <code>filename</code> | Name of .rdata file to which the new index is saved. |
| <code>download.stats</code> | Indicates if the search index shall include download figures from the RStudio CRAN mirror logs. |

Details

`buildIndex` creates the index that is needed by the `findPackage` function to search CRAN. Optionally, this index can include download figures for the packages (this feature is turned on with `download.stats = TRUE`). Including download stats requires significant time (may be > 1 hour) for the index to be built. Therefore, when `findPackage` is called without providing an index, the index that is created ad hoc does not contain CRAN download figures.

Value

Returns the search index. As a side effect, the index is saved to a file, if a filename is provided via the filename argument.

Author(s)

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Examples

```
index <- buildIndex(filename = file.path(tempdir(), "searchindex.rdata"), download.stats = FALSE)
```

| | |
|-------------|---------------------------------------|
| findPackage | <i>Searching for packages on CRAN</i> |
|-------------|---------------------------------------|

Description

Searches for packages on CRAN based on the user's specification of search terms. Considers the package name, description as well as the long description, and prioritizes the results.

Usage

```
findPackage(keywords, index = NULL, mode = "or", case.sensitive = FALSE,
  always.sensitive = NULL, weights = c(1, 2, 1, 2), display = "viewer",
  results.longdesc = FALSE)
```

Arguments

| | |
|------------------|---|
| keywords | A vector of keywords to be searched for. |
| index | Either a path (or URL) to a search index, or a search index that is already loaded. If no index is provided, findPackage creates an ad hoc search index. |
| mode | Indicates whether the search terms in keywords shall be combined with a logical OR or with a logical AND; accordingly, permitted values are "or" (default) and "and". In "or" mode, every package that contains <i>at least one</i> of the keywords from the keywords argument is a search hit, in "and" mode generating a search hit requires <i>all</i> search terms from the keywords argument to be found. |
| case.sensitive | Indicates if the search shall be case sensitive, or not. |
| always.sensitive | A vector of search terms for which capitalization is always considered relevant (even if case.sensitive = FALSE). This allows to better reflect abbreviations like 'GLM'. |
| weights | A numeric vector describing how search hits in different fields of the a package's data shall be weighted. The first three elements of the vector are the weights assigned to hits in the package's <i>title</i> , <i>short description</i> and <i>long description</i> , respectively. The fourth element is a factor applied to the overall score of a search hit if all search terms from the keywords argument are found (obviously only meaningful in "or" mode). All weights must be 1 or larger. |
| display | Describes where the search results shall be shown. Either "viewer" or "console". If "viewer", the results are shown as a formatted web page in the browser (or in RStudio's Viewer pane if the RStudio IDE is being used). If results = "console" the search results are shown as a text table in the R console. |
| results.longdesc | Indicates whether the packages' long descriptions shall also be included in the search results. Given the length of some long descriptions this may make the search results harder to read. |

Details

The GO column in the search results is an index number that can be used to address the found package easily with the `go()` function. The DOWNL_TOTAL column in the search results gives the overall number of downloads of the respective package since its submission to CRAN. The number is based on the figures for the RStudio CRAN mirror server. This field is only provided if the search index contains download figures. Ad hoc indices (when `index = NULL`) never include download statistics. Please refer to [buildIndex](#) for more details.

Value

No return value.

Author(s)

Joachim Zuckarelli <joachim@zuckarelli.de>

Examples

```
search <- "regression"
findPackage(search)

findPackage(c("text", "tables"), mode="and")

searchindex <- buildIndex()
findPackage(keywords=c("regression", "linear"), index=searchindex,
            mode="and", always.sensitive="GLM")
```

go

Showing information about a package

Description

Allows to inspect a package found with `findPackage` by showing its manual (PDF) or go to its CRAN webpage.

Usage

```
go(package, index = NULL, where.to = "manual")
```

Arguments

| | |
|---------|---|
| package | Either the name of the package (capitalization does generally not matter) or the search result number shown in the results of <code>findPackage</code> (the number in the GO column). |
| index | Either a path (or URL) to a search index, or a search index that is already loaded. If no index is provided, <code>findPackage</code> creates an ad hoc search index. |

`where.to` Either "manual", "cran" or "install". With `where.to = "manual"` `go()` opens the package's PDF manual from the web, `where.to = "cran"` pulls up the package's CRAN website and `where.to = "install"` installs the package (including dependencies).

Details

`go()` is made to inspect a package found with `findPackage()` and to decide whether or not this package serves the intended purposes.

Value

No return value.

Author(s)

Joachim Zuckarelli <joachim@zuckarelli.de>

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