

Package ‘OhdsiRTools’

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Type Package

Title Tools for Maintaining OHDSI R Packages

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Description

Format and check syntax of R code and packages following the OHDSI R style guidelines.

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Depends R (>= 3.1.0)

Imports lintr,
codetools,
formatR,
snow,
ff,
XML

Suggests testthat

NeedsCompilation no

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checkUsagePackage	<i>Check all code in a package</i>
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Description

Check all code in a package

Usage

```
checkUsagePackage(package, ignoreHiddenFunctions = TRUE,  
  suppressBindingKeywords = c("ggplot2", "ffwhich", "subset.ffdf", "glm"))
```

Arguments

- package The name of the package to check.
- ignoreHiddenFunctions Ignore functions for which the definition cannot be retrieved?
- suppressBindingKeywords A set of keywords that are indicative of non-standard evaluation.

Details

This function uses the codetools package to check the code from problems. Heuristics are used to elimite false positives due to non-standard evaluation.

clusterApply	<i>Apply a function to a list using the cluster</i>
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Description

Apply a function to a list using the cluster

Usage

```
clusterApply(cluster, x, fun, ..., stopOnError = FALSE, progressBar = TRUE,  
  divideFfMemory = TRUE, setFfTempDir = TRUE)
```

Arguments

cluster	The cluster of threads to run the function.
x	The list on which the function will be applied.
fun	The function to apply.
...	Additional parameters for the function.
stopOnError	Stop when one of the threads reports an error? If FALSE, all errors will be reported at the end.
progressBar	Show a progress bar?
divideFfMemory	When TRUE, the memory available for processing ff and ffdF objects will be equally divided over the threads.
setFfTempDir	When TRUE, the ffTempDir option will be copied to each thread.

Details

The function will be executed on each element of x in the threads of the cluster. If there are more elements than threads, the elements will be queued. The progress bar will show the number of elements that have been completed.

Value

A list with the result of the function on each item in x.

clusterRequire	<i>Require a package in the cluster</i>
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Description

Require a package in the cluster

Usage

```
clusterRequire(cluster, package)
```

Arguments

cluster	The cluster object.
package	The name of the package to load in all nodes.

`convertFakeDfToDataFrame`*Convert a fakeDf object to a data.frame*

Description

Convert a fakeDf object to a data.frame

Usage

```
convertFakeDfToDataFrame(fakeDf)
```

Arguments

`fakeDf` An object of type fakeDf.

Value

A data.frame.

`createArgFunction`*Create an argument function*

Description

Create an argument function

Usage

```
createArgFunction(functionName, excludeArgs = c(), includeArgs = NULL,  
  rCode = c(), newName)
```

Arguments

<code>functionName</code>	The name of the function for which we want to create an args function.
<code>excludeArgs</code>	Exclude these arguments from appearing in the args function.
<code>includeArgs</code>	Include these arguments in the args function.
<code>rCode</code>	A character vector representing the R code where the new function should be appended to.
<code>newName</code>	The name of the new function. If not specified, the new name will be automatically derived from the old name.

Details

This function can be used to create a function that has (almost) the same interface as the specified function, and the output of this function will be a list of argument values.

Value

A character vector with the R code including the new function.

excludeFromList	<i>Exclude variables from a list of objects of the same type</i>
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Description

Exclude variables from a list of objects of the same type

Usage

```
excludeFromList(x, exclude)
```

Arguments

x	A list of objects of the same type.
exclude	A character vector of names of variables to exclude.

fakeDfToFdf	<i>Convert a fakeDf object to fdf</i>
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Description

Convert a fakeDf object to fdf

Usage

```
fakeDfToFdf(fakeDf)
```

Arguments

fakeDf	An object of type fakeDf.
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Value

An fdf object.

formatRFile	<i>Format an R file</i>
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Description

Format an R file

Usage

```
formatRFile(file, width.cutoff = 100)
```

Arguments

file	The path to the file.
width.cutoff	Number of characters that each line should be limited to.

formatRFolder	<i>Format all R files in a folder</i>
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Description

Format all R files in a folder

Usage

```
formatRFolder(path = ".", recursive = TRUE, skipAutogenerated = TRUE, ...)
```

Arguments

path	Path to the folder containing the files to format. Only files with the .R extension will be formatted.
recursive	Include all subfolders?
skipAutogenerated	Skip autogenerated files such as RcppExports.R?
...	Parameters to be passed on the the formatRFile function

Examples

```
## Not run:
formatRFolder()

## End(Not run)
```

formatRText	<i>Format R code</i>
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Description

Format R code

Usage

```
formatRText(text, width.cutoff = 100)
```

Arguments

text	A character vector with the R code to be formatted.
width.cutoff	Number of characters that each line should be limited to.

Value

A character vector with formatted R code.

makeCluster	Create a cluster of nodes for parallel computation
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Description

Create a cluster of nodes for parallel computation

Usage

```
makeCluster(numberOfThreads, singleThreadToMain = TRUE)
```

Arguments

numberOfThreads

Number of parallel threads.

singleThreadToMain

If numberOfThreads is 1, should we fall back to running the process in the main thread?

Value

An object representing the cluster.

matchInList	In a list of object of the same type, find those that match the input
-------------	---

Description

In a list of object of the same type, find those that match the input

Usage

```
matchInList(x, toMatch)
```

Arguments

x

A list of objects of the same type.

toMatch

The object to match.

Details

Typically, toMatch will contain a subset of the variables that are in the objects in the list. Any object matching all variables in toMatch will be included in the result.

Value

A list of objects that match the toMatch object.

nrowOfFakeDf	<i>Return number of rows in fakeDf</i>
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Description

Return number of rows in fakeDf

Usage

```
nrowOfFakeDf(fakeDf)
```

Arguments

fakeDf	The fakeDf object
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Value

Number of rows.

ohdsiLintrFile	<i>Check R file for code errors</i>
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Description

Check R file for code errors

Usage

```
ohdsiLintrFile(file)
```

Arguments

file	The R file to check
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Details

This function uses the lintr package to check the code.

ohdsiLintrFolder	<i>Check all R files in a folder</i>
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Description

Check all R files in a folder

Usage

```
ohdsiLintrFolder(path = ".", recursive = TRUE)
```

Arguments

path	Path to the folder containing the files to check. Only files with the .R extension will be checked.
recursive	Include all subfolders?

Details

This function uses the lintr package to check the code.

OhdsiRTools	<i>OhdsiRTools</i>
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Description

OhdsiRTools

prettyPrint	<i>Print a list of objects</i>
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Description

Print a list of objects

Usage

```
prettyPrint(object)
```

Arguments

object	The list to print.
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Details

Will print nested lists using indentation.

<code>rbindFakeDfs</code>	<i>Bind two fakeDf objects by rows</i>
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Description

Bind two fakeDf objects by rows

Usage

```
rbindFakeDfs(fakeDf1, fakeDf2)
```

Arguments

<code>fakeDf1</code>	The first fakeDf object.
<code>fakeDf2</code>	The second fakeDf object.

Value

A fakeDf object with the rows of both fakeDf1 and fakeDf2.

<code>selectFromList</code>	<i>Select variables from a list of objects of the same type</i>
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Description

Select variables from a list of objects of the same type

Usage

```
selectFromList(x, select)
```

Arguments

<code>x</code>	A list of objects of the same type.
<code>select</code>	A character vector of names of variables to select.

<code>stopCluster</code>	<i>Stop the cluster</i>
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Description

Stop the cluster

Usage

```
stopCluster(cluster)
```

Arguments

<code>cluster</code>	The cluster to stop
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subsetFakeDf	Create a subset of fakeDf object
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Description

Create a subset of fakeDf object

Usage

```
subsetFakeDf(fakeDf, index)
```

Arguments

fakeDf	The fakeDf object to subset.
index	An integer vector identifying the rows to extract.

Value

An object of type fakeDf, which is a list of vectors.

subsetFfdFToFakeDf	Create a subset of an ffdF object as a fakeDf object
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Description

Create a subset of an ffdF object as a fakeDf object

Usage

```
subsetFfdFToFakeDf(ffdf, index)
```

Arguments

ffdf	The ffdF object to subset.
index	An integer vector or ri object identifying the rows to extract.

Value

An object of type fakeDf, which is a list of vectors.

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