Package 'types'

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Title Type Annotations

Version 1.0.0

Description Provides a simple type annotation for R that is usable in scripts, in the R console and in packages. It is intended as a convention to allow other packages to use the type information to provide error checking, automatic documentation or optimizations.

Depends R (>= 3.0.3)

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Documentation Shortcuts

Description

 $_{\dot{c}}$ when used interactively continues to work as before, accessing the R help pages for the topic requested.

When used within a R expression it can be used to add a type annotation. The annotations are syntactically valid R code rather than comments, which provides additional assurance they are specified properly. However this package does not do anything with the type annotations, they have no effect on the calculated result.

Usage

"?"(e1, e2)

Arguments

e1	The type of documentation
e2	The topic of documentation

See Also

?

Examples

```
# Function arguments can be annotated with types
f <- function(x = 1 ? numeric) {
 x + 1
}
# Default arguments can also be annotated (the `=` is required however)
f <- function(x = ? numeric) {</pre>
 x + 1
}
# Function statements can be annotated with types
f <- function(x = "Yay") {
 paste(x, "types!") ? character
}
# Function return values can be annotated with types
f \leq function(x = 1) 
 Х
} ? boolean
```

removeTypes

Description

These functions provide the same purpose, to remove type annotation from any language object.

Usage

```
removeTypes(x)
```

remove_types(x)

Arguments

R language object

Examples

х

```
# Function arguments can be annotated with types
f <- function(x = 1 ? numeric) {
    x + 1
}
# The types can then be removed if needed
remove_types(f)
# A camelCase function is also available with the same behavior
removeTypes(f)
# They also works on quoted code
remove_types(quote(x + 1 ? numeric))
# Or expressions
remove_types(expression(x + 1 ? numeric))</pre>
```

types

Static types for R

Description

types provides a simple type annotation for R that is usable in scripts, in the R console and in packages. It is intended as a convention to allow other packages to use the type information to provide error checking, automatic documentation or optimizations.

The annotations are syntactically valid R code rather than comments, which provides additional assurance they are specified properly. However this package does not do anything with the type annotations, they have no effect on the calculated result.

 $_{\dot{c}}$ when used on the command line continues to work as before, accessing the R help pages for the topic requested.

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