

Package ‘templates’

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Title A System for Working with Templates

Version 0.4.0

Description Provides tools to work with template code and text in R. It aims to provide a simple substitution mechanism for R-expressions inside these templates. Templates can be written in other languages like 'SQL', can simply be represented by characters in R, or can themselves be R-expressions or functions.

Depends R (>= 3.4.0)

Imports stringr, magrittr

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Encoding UTF-8

Suggests testthat, knitr, rmarkdown, covr

RoxygenNote 6.1.1

VignetteBuilder knitr

NeedsCompilation no

Author Sebastian Warnholz [aut, cre]

Maintainer Sebastian Warnholz <wahani@gmail.com>

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R topics documented:

tmpl	2
tmplUpdate	3

Index

4

tmpl*Template constructors***Description**

`tmpl` is the constructor function for template objects.

Usage

```
tmpl(.t, ...)

## S3 method for class 'character'
tmpl(.t, ..., .envir = parent.frame())

## S3 method for class 'formula'
tmpl(.t, ...)

## S3 method for class 'tmpl'
tmpl(.t, ...)

## S3 method for class 'function'
tmpl(.t, ...)
```

Arguments

- .t something that can be interpreted as template. See defined methods for options.
- ... (name = value | name ~ value) name-value expressions passed on to [tmplUpdate](#)
- .envir (environment) the environment in which template snippets are evaluated. For formulas and functions their environment is used.

Details

Objects of class `tmpl` are stored as a character of length one. They can contain 'snippets' to be evaluated. These snippets are identified by an opening {{ and closing }}. The environment in which they are evaluated is stored in the object. They can be further augmented by supplying arguments in

See Also

[tmplUpdate](#), [tmplEval](#)

Examples

```
tmpl("Hi {{ toupper(a) }}!", a = "there")
tmpl( ~ {y <- {{ a }}}, a ~ x + 1)
tmpl(function(x) {{ a }} + x, a ~ 1)
```

tmplUpdate	<i>Update and evaluate templates</i>
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Description

Functions operating on `tmpl` objects. They can be updated and / or evaluated as an expression.

Usage

```
tmplUpdate(.t, ...)

## S3 method for class 'tmpl'
tmplUpdate(.t, ...)

## S3 method for class 'function'
tmplUpdate(.t, ...)

tmplEval(.t, ..., .envir = new.env(parent = parent.frame()))

tmplAsFun(.t, ...)
```

Arguments

- .t (tmpl) and object of class `tmpl`
- ... (name = value | name ~ value) name-value expressions used to update the snippets in x
- .envir (environment) the environment in which the template is evaluated

Details

`tmplUpdate` will evaluate all snippets in a template. Objects are searched for in the list of arguments supplied as ... and the environment of the template. The results are substituted within the snippets. `tmplEval` will evaluate the template in place or in the specified environment after substituting the elements in

Examples

```
tmpl("This is {{ a }} very similar to {{ b }}", a = "actually", b = "sprintf")
tmpl("But I consider it to be ({{ sprintf('%i', a )}}) orthogonal", a = 1.0)
tmpl("and ({{ sprintf('%i', b )}}) with a different scope:", b = 2.0)
tmpl("SELECT {{ var }} FROM {{ table }} WHERE {{ condition }};", 
      var = "someVar", table = "someTable", condition = "primaryKey = 1")
template <- tmpl("cat('{{ toupper(x )}}")"
tmplUpdate(template, x ~ "hi")
tmplEval(template, x ~ "hi")
```

Index

`tmpl`, [2](#), [3](#)
`tmplAsFun` (`tmplUpdate`), [3](#)
`tmplEval`, [2](#)
`tmplEval` (`tmplUpdate`), [3](#)
`tmplUpdate`, [2](#), [3](#)