

Package ‘nomnoml’

November 20, 2023

Type Package

Title Sassy 'UML' Diagrams

Version 0.3.0

Description A tool for drawing sassy 'UML' (Unified Modeling Language) diagrams based on a simple syntax, see <<https://www.nomnoml.com>>. Supports styling, R Markdown and exporting diagrams in the PNG format. Note: you need a chromium based browser installed on your system.

License MIT + file LICENSE

Encoding UTF-8

Depends R (>= 3.1.2)

Imports htmlwidgets, png, webshot2, lifecycle, rlang

RoxygenNote 7.2.3

Suggests V8, knitr, rmarkdown, testthat, shinytest, covr, spelling

SystemRequirements A chromium based browser, required by ``webshot2``
<<https://rstudio.github.io/webshot2/>>

URL <https://rstudio.github.io/nomnoml/>

BugReports <https://github.com/rstudio/nomnoml/issues>

RdMacros lifecycle

Language en-US

Config/testthat/edition 3

NeedsCompilation no

Author Andrie de Vries [aut, cre],
Javier Luraschi [aut],
Daniel Kallin [cph] (nomnoml.js library, <<https://nomnoml.com>>),
RStudio [cph, fnd]

Maintainer Andrie de Vries <apdevries@gmail.com>

Repository CRAN

Date/Publication 2023-11-20 10:10:02 UTC

R topics documented:

nomnoml	2
nomnoml-shiny	3
nomnoml_syntax	4
nomnoml_validate	6

Index	8
--------------	----------

nomnoml	<i>Create and render a nomnoml diagram.</i>
---------	---

Description

[Experimental]

Renders a 'nomnoml' diagram as an 'htmlwidget' or saves it as a '.png' or '.svg' image.

Usage

```
nomnoml(
  code = "[Hello]-[World!]",
  png = NULL,
  width = NULL,
  height = NULL,
  svg = FALSE,
  ...
)
```

Arguments

code	The nomnoml diagram code.
png	Optional file name to export diagram as 'png'.
width	Optional width in pixels for the exported 'png'.
height	Optional height in pixels for the exported 'png'.
svg	Use 'svg' output instead of 'png'? Notice that rendering in 'svg' is not at a par with 'png' and renders incorrectly at times.
...	Additional parameters.

Details

The 'nomnoml' syntax is simple and intuitive, a "Hello World" example can be rendered as an 'htmlwidget' as follows:

```
nomnoml::nomnoml("[Hello]-[World!]")
```

You can also render as a 'png' file with specific dimensions:

```
nomnoml::nomnoml("[Hello]-[World!]", png = "hello.png", 600, 100)
```

Still, complex diagrams can be defined by combining multiple association types, classifier types, directives and custom classifier styles.

You can also use of the nomnoml 'knitr' chunk to render inline diagrams in R Markdown documents.

Syntax

For a summary of available nomnoml syntax, including association types, directives and customer classifier styles, see [nomnoml_syntax](#)

See Also

[nomnomlOutput\(\)](#), [renderNomnoml\(\)](#), [nomnoml_validate\(\)](#), [nomnoml_syntax\(\)](#)

Examples

```
# Render simple diagram:
nomnoml::nomnoml("[Hello]-[World!]")

# Render complex diagram:
nomnoml::nomnoml(
  #stroke: #a86128
  [<frame>Decorator pattern|
  [<abstract>Component| |+ operation()]
  [Client] depends --> [Component]
  [Decorator|- next: Component]
  [Decorator] decorates -- [ConcreteComponent]
  [Component] <:- [Decorator]
  [Component] <:- [ConcreteComponent]
  ]")
```

Description

[Experimental]

Output and render functions for using nomnoml within Shiny applications and interactive Rmd documents.

Usage

```
nomnomlOutput(outputId, width = "100%", height = "400px")
```

```
renderNomnoml(expr, env = parent.frame(), quoted = FALSE)
```

Arguments

outputId	output variable to read from
width, height	Must be a valid CSS unit (like '100%', '400px', 'auto') or a number, which will be coerced to a string and have 'px' appended.
expr	An expression that generates a nomnoml
env	The environment in which to evaluate expr.
quoted	Is expr a quoted expression (with quote())? This is useful if you want to save an expression in a variable.

See Also

[nomnoml\(\)](#)

nomnoml_syntax	<i>Summary of nomnoml syntax.</i>
----------------	-----------------------------------

Description

Summary of nomnoml syntax.

Association Types

```

association -
association ->
association <->
dependency -->
dependency <-->
generalization -:>
generalization <:-
implementation --:>
implementation <:--
composition +-
composition +->
aggregation o-
aggregation o->
note --
hidden -/-
weightless edge _>
weightless dashed __

```

Classifier Types

```

[name]
[<abstract> name]
[<instance> name]
[<note> name]

```

```

[<reference> name]
[<package> name]
[<frame> name]
[<database> name]
[<start> name]
[<end> name]
[<state> name]
[<choice> name]
[<input> name]
[<sender> name]
[<receiver> name]
[<transceiver> name]
[<actor> name]
[<usecase> name]
[<label> name]
[<hidden> name]
[<table> table | a | 5 | b | 7]

```

Directives

```

#arrowSize: 1
#bendSize: 0.3
#direction: down | right
#gutter: 5
#edgeMargin: 0
#edges: hard | rounded
#background: transparent
#fill: #eee8d5; #fdf6e3
#fillArrows: false
#font: Calibri
#fontSize: 12
#leading: 1.25
#lineWidth: 3
#padding: 8
#spacing: 40
#stroke: #33322E
#title: filename
#zoom: 1
#acyclicer: greedy
#ranker: network-simplex | tight-tree | longest-path

```

Custom Classifier Styles

A directive that starts with `.` define a classifier style. The style is written as a space separated list of modifiers and key/value pairs.

```

#.box: fill=#8f8 dashed
#.blob: visual=ellipse
[<box> GreenBox]
[<blob> HideousBlob]

```

Available key/value pairs are::

fill=(any css color)
stroke=(any css color)
align=center
align=left
direction=right
direction=down
visual=actor
visual=class
visual=database
visual=ellipse
visual=end
visual=frame
visual=hidden
visual=input
visual=none
visual=note
visual=package
visual=receiver
visual=rhomb
visual=roundrect
visual=sender
visual=start
visual=transceiver

Style title and text body:

title=left,italic,bold
body=center,italic,bold

Text modifiers::

bold
underline
italic
dashed
empty

Description**[Experimental]**

Although the nomnoml widgets render very quickly in the IDE, it can take a few seconds to grab a static screenshot and create a png file. In these situations it can be helpful to validate if the nomnoml JS library can parse a diagram.

This function returns TRUE if a diagram can be parsed, and FALSE otherwise. If FALSE the function also throws a warning.

Usage

```
nomnoml_validate(diagram = "[test]")
```

Arguments

diagram A nomnoml diagram to validate

Value

Either TRUE or FALSE

See Also

[nomnoml\(\)](#)

Examples

```
## Not run:  
if (requireNamespace("V8", quietly = TRUE)) nomnoml_validate("[hello] -> [world]")  
  
## End(Not run)
```

Index

`'nomnoml-syntax'` (`nomnoml_syntax`), 4

`nomnoml`, 2

`nomnoml()`, 4, 7

`nomnoml-shiny`, 3

`nomnoml_syntax`, 3, 4

`nomnoml_syntax()`, 3

`nomnoml_validate`, 6

`nomnoml_validate()`, 3

`nomnomlOutput` (`nomnoml-shiny`), 3

`nomnomlOutput()`, 3

`renderNomnoml` (`nomnoml-shiny`), 3

`renderNomnoml()`, 3