

Package ‘SweaveLst’

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Type Package

Title X

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Imports stargazer

Suggests

Description Data

Remotes yihui/tikzDevice

License GPL (>= 2)

LazyLoad yes

LazyData true

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compile	<i>Run pdflatex, bibtex, pdflatex pdflates on file</i>
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Description

Run pdflatex, bibtex, pdflatex pdflates on file

Usage

```
compile(filepath)
```

graph2pdffile	<i>Creates a pdf file by converting a graph to tikz and lualatexing the output</i>
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Description

Based on tikzDevice::tikz.

Usage

```
graph2pdffile(
  texte,
  output = tempfile(fileext = ".pdf"),
  widthe = 7,
  heighte = 7,
  caption = NULL,
  label = NULL,
  addfigureenv = FALSE,
  sanitize = FALSE,
  modify = NULL,
  addtopreamble = NULL,
  ...
)
```

Arguments

texte	file containing tikz code
output	output fill path (will be overwritten if existing with no warning)
widthe	a numeric
heighte	a numeric
caption	a character string.
label	a character string.

addfigureenv	a boolean
sanitize	a boolean
modify	a function that takes a character string as a parameter and returns a character string
...	additional parameters to pass to tikzDevice::tikz
usepackages	a character string

Examples

First example: we generate the tikz code for a graph.

```
outputpdf<-tempfile(fileext = ".pdf")
command="print(ggplot2::ggplot(data=cars,ggplot2::aes(x=speed,y=dist))+ggplot2::geom_point())"
graph2pdf(command,output=outputpdf)
readLines(outputpdf)
fs::file_show(outputpdf)
graph2pdf(command,output=outputpdf,width=7,height=3)
fs::file_show(outputpdf)
command="print(ggplot2::ggplot(data=cars,ggplot2::aes(x=speed,y=dist,color=dist))+
ggplot2::geom_point())"
fs::file_show(graph2pdf(command,width=7,height=3,modify=function(y){
gsub("dist","$\\frac{1-\\exp\\left(-\\mathrm{x}^2\\right)}{\\sin(\\mathrm{x})+\\mathds{1}_{\\{0\\}}(\\mathrm{x})"}

```

graph2pngfile	<i>Creates a png file by converting a graph to tikz and lualatexing the output</i>
---------------	------------------------------------------------------------------------------------

Description

Based on tikzDevice::tikz.

Usage

```
graph2pngfile(
  texte,
  output = tempfile(fileext = ".png"),
  width = 7,
  height = 7,
  caption = NULL,
  label = NULL,
  addfigureenv = FALSE,
  sanitize = FALSE,
  modify = NULL,
  addtopreamble = NULL,
  ...
)
```

Arguments

texte	file containing tikz code
output	output fill path (will be overwritten if existing with no warning)
width	a numeric
height	a numeric
caption	a character string.
label	a character string.
addfigureenv	a boolean
sanitize	a boolean
modify	a function that takes a character string as a parameter and returns a character string
...	additional parameters to pass to tikzDevice::tikz
usepackages	a character string

Examples

First example: we generate the tikz code for a graph.

```
outputpngfile<-tempfile(fileext = ".png")
command="print(ggplot2::ggplot(data=cars,ggplot2::aes(x=speed,y=dist))+ggplot2::geom_point())"
graph2pngfile(command,output=outputpngfile)
readLines(outputpngfile)
fs::file_show(outputpngfile)
graph2pngfile(command,output=outputpngfile,width=7,height=3)
fs::file_show(outputpngfile)
command="print(ggplot2::ggplot(data=cars,ggplot2::aes(x=speed,y=dist,color=dist))+
ggplot2::geom_point())"
fs::file_show(graph2pngfile(command,width=7,height=3,modify=function(y){
gsub("dist","$\\frac{1-\\exp\\left(-\\mathrm{x}^2\\right)}{\\sin(\\mathrm{x})+\\mathds{1}_{\\{0\\}}(\\mathrm{x})"}

```

graph2texfile

Modifies the output of the tikz command and copies it to a tex file.

Description

Based on tikzDevice::tikz.

Usage

```
graph2texfile(
  texte,
  output = tempfile(fileext = ".tex"),
  modify = NULL,
  width = 7,
  height = 7,
```

```

    caption = NULL,
    label = NULL,
    addfigureenv = FALSE,
    sanitize = FALSE,
    standalone = FALSE,
    addtopreamble = NULL,
    ...
)

```

Arguments

texte	file containing tikz code
modify	a function that takes a character string as a parameter and returns a character string
width	a numeric
height	a numeric
caption	a character string.
label	a character string.
addfigureenv	a boolean
sanitize	a boolean
standalone	a boolean
...	additional parameters to pass to tikzDevice::tikz
scale=c(1, 1)	a two parameters scale to apply to the graph
yxratio=c(1, 1),	
usepackages	a character string

Examples

First example: we generate the tikz code for a graph.

```

outputtexfile<-tempfile(fileext = ".tex")
graph2texfile(
  "print(ggplot2::ggplot(data=cars,ggplot2::aes(x=speed,y=dist))+
    ggplot2::geom_point())",
  output=outputtexfile)
readLines(outputtexfile)
graph2texfile(
  "print(ggplot2::ggplot(data=cars,ggplot2::aes(x=speed,y=dist))+
    ggplot2::geom_point())",
  standalone=TRUE,
  output=outputtexfile,
  modify=function(y){
    gsub("dist","$\\\\\\\\\\\\\\\\left(1-\\\\\\\\\\\\\\\\exp\\\\\\\\\\\\\\\\left(-\\\\\\\\\\\\\\\\mathrm{x}^2\\\\\\\\\\\\\\\\right)\\\\left(\\\\\\\\\\\\\\\\sin(\\\\\\\\\\\\\\\\right)",
    system(paste0("cd ",dirname(outputtexfile),"; lualatex '",basename(outputtexfile),"'"))
    fs::file_show(gsub(".tex",".pdf",outputtexfile))
  }
)

```

graphtikzcode	<i>Reads the output file of the tikz command into an R character string.</i>
---------------	------------------------------------------------------------------------------

Description

Based on tikzDevice::tikz.

Usage

```
graphtikzcode(
  texte,
  width = 7,
  height = 7,
  scale = c(1, 1),
  yxratio = c(1, 1),
  caption = NULL,
  label = NULL,
  addfigureenv = FALSE,
  sanitize = FALSE,
  modify = NULL,
  addtopreamble = character(0),
  standalone = FALSE,
  ...
)
```

Arguments

texte	file containing tikz code
width	a numeric
height	a numeric
caption	a character string.
label	a character string.
addfigureenv	a boolean
sanitize	a boolean
modify	a function that takes a character string as a parameter and returns a character string
standalone	a boolean
...	additional parameters to pass to tikzDevice::tikz
scale=c(1, 1)	a two parameters scale to apply to the graph
yxratio=c(1, 1),	
usepackages	a character string

Examples

```
## First example: we generate the tikz code for a graph.
library(ggplot2)
texte="print(ggplot(data=cars,aes(x=speed,y=dist))+geom_point())"
graphtikzcode("print(ggplot(data=cars,aes(x=speed,y=dist))+geom_point())")
## Second example, we create a rnw file
## This rnw file will be interpreted by Sweave and will print the
## tikz code of the plot into the corresponding tex file.

figonlyrnwfile<-tempfile(fileext = ".rnw")
file.create(figonlyrnwfile);
sink(figonlyrnwfile)
cat(
'\Sexpr{graphtikzcode("print(ggplot(data=cars,aes(x=speed,y=dist))+geom_point())")}'
')
sink()
SweaveLst::SweaveLst(fullpath = figonlyrnwfile)
readLines(gsub(".rnw",".tex",figonlyrnwfile))
```

nettoie

get rid of all latex compilation files

Description

get rid of all latex compilation files

Usage

```
nettoie(directory = getwd())
```

Arguments

directory a character string indicating a file path.

print_demo_file

Gives the tex code to print a demo code

Description

Gives the tex code to print a demo code

Usage

```
print_demo_file(topic, package)
```

sanitizeLatexS	<i>sanitise latex</i>
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Description

sanitise latex

Usage

sanitizeLatexS(str)

Arguments

str a character string

stargazer2	<i>Prints a multidimensional array</i>
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Description

Prints a multidimensional array

Usage

stargazer2(...)

Arguments

... additional arguments to pass to SweaveLst::stargazer2

stargazerarray	<i>Prints a multidimensional array</i>
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Description

Prints a multidimensional array

Usage

stargazerarray(XX, ...)

Arguments

... additional arguments to pass to SweaveLst::stargazer2

Sweavelst	<i>Sweaves a document and replace all R code by lstlisting environment in the output</i>
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Description

Sweaves a document and replace all R code by lstlisting environment in the output

Usage

```
Sweavelst(
  file = NULL,
  path = getwd(),
  fullpath = NULL,
  out.width = 10,
  width = 50,
  height = 10,
  prompte = " "
)
```

Arguments

file	a character string, the filename of the file to Sweave
fullpath	a full path
out.width	a numeric value
width	a numeric value
height	a numeric value
prompte	a character string

texify_file	<i>sanitise latex</i>
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Description

sanitise latex

Usage

```
texify_file(fullpath)
```

Arguments

fullpath	a path to a file
----------	------------------

Examples

```
temp.file=tempfile()
sink(temp.file)
cat("$x=1$
")
sink()
readLines(temp.file)
fullpath=temp.file
```

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