

Package ‘moodlequizR’

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Type Package

Title Easily Create Fully Randomized 'Moodle' Test Questions

Version 2.1.1

Description Routines to generate fully randomized 'moodle' quizzes. It also contains 15 examples and a 'shiny' app.

License GPL (>= 2)

Encoding UTF-8

LazyData true

RoxygenNote 7.2.1

Depends R (>= 2.10)

Imports base64, mvtnorm, shiny, stats, NMcalc

Suggests markdown, rmarkdown, knitr, shinyWidgets, shinyMatrix

VignetteBuilder knitr

NeedsCompilation no

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gen.cont.table.data	<i>gen.cont.table.data</i>
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Description

This function generates data for problems that use contingency tables

Usage

```
gen.cont.table.data(n, A, B, tbl = FALSE, rho)
```

Arguments

n	sample size
A	vector of values of first categorical variable
B	vector of values of second categorical variable
tbl	should output be a table
rho	correlation between A and B

Value

A matrix with two columns

Examples

```
gen.cont.table.data(10, c("a", "b"), 1:3, rho=0.9)
```

genquiz

genquiz

Description

This function generates an xml file for import into moodle.

Usage

```
genquiz(k = 1, fun, folder, problem = 0, funname, Show = FALSE, ...)
```

Arguments

k	=1, how many quizzes?
fun	name of the R routine that makes a quiz
folder	where is the .R located?
problem	(optional) which problem should be done?
funname	name of quiz
Show	=FALSE (optional) want to see what it looks like?
...	further arguments passed to fun

Value

None

make.xml

make.xml

Description

This function is a simple wrapper for genquiz. It reads file from folder and runs genquiz. The default is to then remove the quiz.

Usage

```
make.xml(fun, k = 1, folder, ...)
```

Arguments

fun	(unquoted) name of function that makes a quiz, or number of a quiz
k	how many quizzes?
folder	folder where fun.R is located
...	further arguments passed to fun

Value

None

<code>mc</code>	<i>mc</i>
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Description

This function generates the code for a multiple choice CLOZE question

Usage

```
mc(options, w, which.true, pts = 1)
```

Arguments

<code>options</code>	vector of choices
<code>w</code>	vector of weights
<code>which.true</code>	either which of the options gets 100 or a logical value TRUE=first option, False=second option
<code>pts</code>	how many points is question worth?

Value

a list with the elements for qmc and amc

Examples

```
mc(c("Yes", "No"), c(100, 0), 10)
```

<code>moodle.table</code>	<i>moodle.table</i>
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Description

This function takes a data frame or vector and generates the html code to display it in a moodle quiz

Usage

```
moodle.table(x, DoRowNames = FALSE, DoBorder = FALSE, ncols = 10)
```

Arguments

x	df or vector
DoRowNames	print row names?
DoBorder	print border?
ncols	for vectors, how many items per row?

Value

A character vector with html code

Examples

```
moodle.table(round(rnorm(50), 1))  
moodle.table(mtcars)
```

moodleRexample1

Info for moodlequizR example 1

Description

A dataset containing the info to create the xml file for example 1

Usage

```
moodleRexample1
```

Format

A list

quizname example1

category MoodlequizR Examples / 1 ...

`moodleRexample10`*Info for moodlequizR example 10*

Description

A dataset containing the info to create the xml file for example 10

Usage

```
moodleRexample10
```

Format

A list

quizname example10

category MoodlequizR Examples / 10 ...

`moodleRexample11`*Info for moodlequizR example 11*

Description

A dataset containing the info to create the xml file for example 11

Usage

```
moodleRexample11
```

Format

A list

quizname example11

category MoodlequizR Examples / 11 ...

moodleRexample12*Info for moodlequizR example 12*

Description

A dataset containing the info to create the xml file for example 12

Usage

moodleRexample12

Format

A list

quizname example12

category MoodlequizR Examples / 12 ...

moodleRexample13*Info for moodlequizR example 13*

Description

A dataset containing the info to create the xml file for example 13

Usage

moodleRexample13

Format

A list

quizname example13

category MoodlequizR Examples / 13 ...

`moodleRexample14`*Info for moodlequizR example 14*

Description

A dataset containing the info to create the xml file for example 14

Usage

```
moodleRexample14
```

Format

A list

quizname example14

category MoodlequizR Examples / 14 ...

`moodleRexample15`*Info for moodlequizR example 15*

Description

A dataset containing the info to create the xml file for example 15

Usage

```
moodleRexample15
```

Format

A list

quizname example12

category MoodlequizR Examples / 15 ...

`moodleRexample2`*Info for moodlequizR example 2*

Description

A dataset containing the info to create the xml file for example 2

Usage

```
moodleRexample2
```

Format

A list

quizname example2

category MoodlequizR Examples / 2 ...

`moodleRexample3`*Info for moodlequizR example 3*

Description

A dataset containing the info to create the xml file for example 3

Usage

```
moodleRexample3
```

Format

A list

quizname example3

category MoodlequizR Examples / 3 ...

`moodleRexample4`*Info for moodlequizR example 4*

Description

A dataset containing the info to create the xml file for example 4

Usage

```
moodleRexample4
```

Format

A list

quizname example4

category MoodlequizR Examples / 4 ...

`moodleRexample5`*Info for moodlequizR example 5*

Description

A dataset containing the info to create the xml file for example 5

Usage

```
moodleRexample5
```

Format

A list

quizname example5

category MoodlequizR Examples / 5 ...

`moodleRexample6`*Info for moodlequizR example 6*

Description

A dataset containing the info to create the xml file for example 6

Usage

```
moodleRexample6
```

Format

A list

quizname example6

category MoodlequizR Examples / 6 ...

`moodleRexample7`*Info for moodlequizR example 7*

Description

A dataset containing the info to create the xml file for example 7

Usage

```
moodleRexample7
```

Format

A list

quizname example7

category MoodlequizR Examples / 7 ...

`moodleRexample8`*Info for moodlequizR example 8*

Description

A dataset containing the info to create the xml file for example 8

Usage

```
moodleRexample8
```

Format

A list

quizname example8

category MoodlequizR Examples / 8 ...

`moodleRexample9`*Info for moodlequizR example 9*

Description

A dataset containing the info to create the xml file for example 9

Usage

```
moodleRexample9
```

Format

A list

quizname example9

category MoodlequizR Examples / 9 ...

nm	<i>nm</i>
----	-----------

Description

This function generates the code for a numerical CLOZE question

Usage

```
nm(x, w, eps, ndigits, pts = 1)
```

Arguments

x	vector of values
w	list of weights
eps	vector of precision
ndigits	answers have to be rounded to ndigits, otherwise gives partial credit. Overrides eps
pts	how many points is question worth?

Value

a character vector with the code for a CLOZE question

Examples

```
nm(50)
nm(c(50, 40), w=c(100, 50))
```

paste.data	<i>paste.data</i>
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Description

This function is used to read data from moodle into R

Usage

```
paste.data(sep = "", header = TRUE, is.table = FALSE)
```

Arguments

sep	symbol used for separation
header	does data have a header?
is.table	is data a table? Needed if all data is character.

Value

the data in the clipboard

png64	<i>png64 Function</i>
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Description

This function creates a plot object that can be used in a moodle quiz

Usage

```
png64(plt)
```

Arguments

plt	some graph object
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Value

a character vector

qamatrix	<i>qamatrix</i>
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Description

This function takes a matrix and generates the html code for questions and answers in a moodle quiz

Usage

```
qamatrix(tbl, points = 100, precision = 0, Border = 1, before, after)
```

Arguments

tbl	a matrix
points	Points for correct answers
precision	required
Border	should table have a border?
before	text that appears before question
after	text that appears after question

Value

a list for the qmc and amc portions of genquiz

Examples

```
p=matrix(1:6,2,3)
qamatrix(p)
qamatrix(p, c(100,80), c(0,0.1))
```

rcategorical	<i>rcategorical</i>
--------------	---------------------

Description

This function generates data from a univariate or a bivariate discrete distribution

Usage

```
rcategorical(n, p)
```

Arguments

n	sample size
p	vector or matrix of values

Value

a vector or a matrix

Examples

```
p=1:3
names(p)=letters[1:3]
x=rcategorical(1000, p)
p=matrix(1:6, 2, 3)
dimnames(p)=list(c("A","B"), letters[1:3])
x=rcategorical(1000, p)
```

RtoHTML	<i>RtoHTML</i>
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Description

This function creates the code needed to make the output of selected R function appear correctly in moodle quizzes.

Usage

RtoHTML(method, x, y, n, varnames, ...)

Arguments

- | | |
|----------|---|
| method | name of the R routine |
| x | data passed to all functions |
| y | data passed to functions t.test (two-sample) and lm |
| n | data passed to function binom.test |
| varnames | names of variables as they are shown in quiz |
| ... | additional arguments passed to method |

Value

a string

sa	<i>sa</i>
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Description

This function creates a text question for moodle in CLOZE format.

Usage

sa(txt, w = 100, caps = TRUE, pts = 1)

Arguments

- | | |
|------|--|
| txt | character vector with possible answers |
| w | vector of weights |
| caps | keep capital letters |
| pts | points for answers |

Value

a character vector

Examples

```
sa("Los Angeles")  
sa(c("Los Angeles", "San Francisco"), w=c(100, 80))
```

<i>shinymoodlequizR</i>	<i>shinymoodlequizR</i>
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Description

This function runs the moodlequizR shiny app

Usage

```
shinymoodlequizR()
```

Value

None

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