

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

Author Wolfgang Rolke [aut, cre] (<<https://orcid.org/0000-0002-3514-726X>>)

Maintainer Wolfgang Rolke <wolfgang.rolke@upr.edu>

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R topics documented:

gen.cont.table.data	2
genquiz	3
make.xml	3
mc	4
moodle.table	4
moodleRexample1	5
moodleRexample10	6
moodleRexample11	6
moodleRexample12	7

moodleRexample13	7
moodleRexample14	8
moodleRexample15	8
moodleRexample2	9
moodleRexample3	9
moodleRexample4	10
moodleRexample5	10
moodleRexample6	11
moodleRexample7	11
moodleRexample8	12
moodleRexample9	12
nm	13
paste.data	13
png64	14
qamatrix	14
rcategorical	15
RtoHTML	16
sa	16
shinymoodlequizR	17

Index 18

gen.cont.table.data *gen.cont.table.data*

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	<i>genquiz</i>
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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	<i>make.xml</i>
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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 were fun.R is located
...	further arguments passed to fun

Value

None

`mc`

*mc***Description**

This function generates the code for a multiple choice CLOZE question

Usage

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

Arguments

`options` vector of choices

`w` vector of weights

`which.true` either which of the options gets 100 or a logical value TRUE=first option, False=second option

`pts` 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)
```

`moodle.table`

*moodle.table***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

png64 Function

Description

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

Usage

png64(plt)

Arguments

plt some graph object

Value

a character vector

qamatrix

qamatrix

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))
```

<code>rcategorical</code>	<i>rcategorical</i>
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Description

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

Usage

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

Arguments

<code>n</code>	sample size
<code>p</code>	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

RtoHTML

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

sa

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))
```

shinymoodlequizR *shinymoodlequizR*

Description

This function runs the moodlequizR shiny app

Usage

```
shinymoodlequizR()
```

Value

None

Index

* datasets

- moodleRexample1, [5](#)
 - moodleRexample10, [6](#)
 - moodleRexample11, [6](#)
 - moodleRexample12, [7](#)
 - moodleRexample13, [7](#)
 - moodleRexample14, [8](#)
 - moodleRexample15, [8](#)
 - moodleRexample2, [9](#)
 - moodleRexample3, [9](#)
 - moodleRexample4, [10](#)
 - moodleRexample5, [10](#)
 - moodleRexample6, [11](#)
 - moodleRexample7, [11](#)
 - moodleRexample8, [12](#)
 - moodleRexample9, [12](#)
- gen.cont.table.data, [2](#)
- genquiz, [3](#)
- make.xml, [3](#)
- mc, [4](#)
- moodle.table, [4](#)
- moodleRexample1, [5](#)
 - moodleRexample10, [6](#)
 - moodleRexample11, [6](#)
 - moodleRexample12, [7](#)
 - moodleRexample13, [7](#)
 - moodleRexample14, [8](#)
 - moodleRexample15, [8](#)
 - moodleRexample2, [9](#)
 - moodleRexample3, [9](#)
 - moodleRexample4, [10](#)
 - moodleRexample5, [10](#)
 - moodleRexample6, [11](#)
 - moodleRexample7, [11](#)
 - moodleRexample8, [12](#)
 - moodleRexample9, [12](#)
- nm, [13](#)
- paste.data, [13](#)
- png64, [14](#)
- qamatrix, [14](#)
- rcategorical, [15](#)
- RtoHTML, [16](#)
- sa, [16](#)
- shinymoodlequizR, [17](#)