

Package ‘moodlequizR’

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Type Package

Title Easily Create Fully Randomized 'Moodle' Test Questions

Version 2.1.0

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

Suggests markdown, rmarkdown, knitr, NMcalc, shinyMatrix

VignetteBuilder knitr

NeedsCompilation no

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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

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