

# 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] (ORCID:  
<<https://orcid.org/0000-0002-3514-726X>>)

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

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

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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	<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

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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`

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*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>
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**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))
```

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<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

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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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