Package 'moodleR'

February 26, 2026

Type Package

Title Helper Functions to Work with 'Moodle' Data

Version 1.0.5

Date 2026-02-26

Maintainer Aleksander Dietrichson <dietrichson@gmail.com>

Description A collection of functions to connect to a 'Moodle' database, cache relevant tables locally and generate learning analytics.
'Moodle' is an open source Learning Management System (LMS) developed by MoodleHQ. For more information about Moodle, visit <https://moodle.org>.

License MIT + file LICENSE

URL https://github.com/chi2labs/moodleR

Encoding UTF-8

VignetteBuilder knitr

Suggests knitr, rmarkdown, prettyunits, lubridate, testthat

Imports DBI, dplyr, ggplot2, tidytext, ggwordcloud, utils, stringr,
rlang, scales, RMariaDB, glue, config, anytime, cli, lifecycle,
RSQLite, usethis, RPostgres

RdMacros lifecycle

RoxygenNote 7.2.1

NeedsCompilation no

Author Aleksander Dietrichson [aut, cre],
Chi Square Laboratories [cph],
Darko Miletic [ctb],
Pablo Pagnone [ctb],
Alex Ondrus [ctb]

Repository CRAN

Date/Publication 2026-02-26 21:40:10 UTC

Contents

check_mdl_cache   *Check Cached Data*

Description

Checks that the cached data is available.

Usage

```
check_mdl_cache()
```

Value

invisible(NULL)

Examples

```
## Not run:
check_mdl_cache()

## End(Not run)
```

---

example_config_yml *Example Config yml File*

Description

Opens an example config file in the active editor. If you already have a config.yml file cut-and-paste the "moodleR" section, and update the respective fields. Alternatively use "save as" to save this file as config.yml It is recommended that you check the config with config::get()

Usage

```
example_config_yml()
```

Value

invisible(TRUE) on success

Examples

```
## Not run:
example_config_yml()

## End(Not run)
```

---

mdl_config *Moodle Configuration Table*

Description

Get the complete moodle configuration table. Different from most mdl_* functions this function calls dplyr::collect() before returning (as a config-table is not going to cause memory overflow).

Usage

```
mdl_config(con = mdl_get_connection(), tbl_prefix = "mdl_")
```

Arguments

con   database connection object

tbl_prefix   table prefix

Value

A tibble

---

mdl_courses *Get Courses*

Description

Returns a reference to the (cached) course table, with the most relevant columns selected.

Usage

```
mdl_courses(con = mdl_get_connection(), tbl_prefix = "mdl_")
```

Arguments

con   a database connection object

tbl_prefix   prefix for tables

Details

For convenience a join with the category table is made, and "category_name" added

Value

A dbplyr reference object.

---

mdl_create_cache *Creates a Local Cache*

Description

Create local cache from a Moodle Database.

Usage

```
mdl_create_cache(
  con = mdl_get_connection(use_cache = FALSE),
  format = c("sqlite"),
  tbl_prefix = "mdl_",
  output_dir = mdl_get_cache_dir(),
  output_filename = mdl_get_cache_filename()
)
```

Arguments

con	a database connection (to a moodle database)
format	output format (mysql, csv)
tbl_prefix	Moodle DB table prefix
output_dir	where does the cache go
output_filename	
	filename (in the case of sqlite output), or prefix (in_case of CSV download)

Value

invisible(NULL)

---

mdl_forum_posts *Get Forum Posts*

Description

Returns a reference to the (cached) forum_posts table, with the most relevant columns selected.

Usage

```
mdl_forum_posts(con = mdl_get_connection(), tbl_prefix = "mdl_")
```

Arguments

con	a database connection object
tbl_prefix	table prefix

Details

For convenience two additional columns: forum_name and thread_name; are added.

Value

A dbplyr reference object.

`mdl_get_cache_connection`

Connection to Cached Moodle Data

Description

Connection to Cached Moodle Data

Usage

```
mdl_get_cache_connection(access = c("RO", "RWC"))
```

Arguments

access   Specifies RO or RWC access

Value

a DBI connection object

`mdl_get_cache_dir`   *Get the Cache Directory*

Description

The cache directory can be set in the config-file (moodleR:->cache_dir:), which is recommended. If it is not present, or no config is found, a tempdir() will be returned.

Usage

```
mdl_get_cache_dir()
```

Value

Character vector with path

```
mdl_get_cache_filename
```
Get the Cache Filename

Description

The cache filename ("mdl_cache.sqlite" by default), can be set in the config-file((moodleR:->cache_dir:).

Usage

```
mdl_get_cache_filename()
```

Value

Character vector with path

```
mdl_get_connection
```
Connect to Moodle Data

Description

Returns a connection to a Moodle database or the cached version if available.e

Usage

```
mdl_get_connection(use_cache = TRUE, config = "default")
```

Arguments

use_cache	If TRUE (the default) connection to the local cache is returned.
config	Select configuration from config file

Value

a DBI connection object

---

mdl_grades   *Get Grades*

Description

Returns a reference to the (cached) grades table, with the most relevant columns selected.

Usage

```
mdl_grades(con = mdl_get_connection(), tbl_prefix = "mdl_")
```

Arguments

con	database connection object
tbl_prefix	table prefix

Value

A dbplyr reference object

Examples

```
## Not run:
# Get the course grades for courseid 52
course_grades <- mdl_grades() %>%
filter(courseid == 52, item_type == "course") %>%
collect()
# Get the other grades items:
grades_items_grades <- mdl_grades() %>%
filter(courseid == 52, item_type != "course") %>%
collect()

## End(Not run)
```

---

mdl_log   *Access Moodle's Logs*

Description

Returns a reference to the log-table.

Usage

```
mdl_log(con = mdl_get_connection(), tbl_prefix = "mdl_")
```

Arguments

con	A database connection object
tbl_prefix	table prefix

Value

A dbplyr reference object.

---

mdl_users	*Get Moodle Users*

Description

Returns a reference to the (cached) users table, with the most relevant columns selected.

Usage

```
mdl_users(con = mdl_get_connection(), tbl_prefix = "mdl_")
```

Arguments

con	database connection object
tbl_prefix	table prefix

Value

A dbplyr reference object

---

plot.mdl_forum_posts	*Wordcloud Plot*

Description

Create a simple wordcloud plot based on a mdl_posts object.

Usage

```
## S3 method for class 'mdl_forum_posts'
plot(x, use_base_graphics = FALSE, ...)
```

Arguments

x	a lazy tbl reference or data.frame.
use_base_graphics	
	Should base graphics be produces instead of ggplot?
...	passed to ggplot or base graphics

Value

A ggplot

`plot.mdl_grades`	*Plot Moodle Grades*

Description

Histogram (density) of normalized grades

Usage

```
## S3 method for class 'mdl_grades'
plot(x, use_base_graphics = FALSE, ...)
```

Arguments

x	a lazy tbl reference
use_base_graphics	
	Should base graphics be used (instead of ggplot)
...	passed along to ggplot or base graphic function

Value

A ggplot or base graphic plot

`print.mdl_courses_summary`
          Print Moodle Courses Summary

Description

Overrides generic print function to pretty-print a summary of the course information.

Usage

```
## S3 method for class 'mdl_courses_summary'
print(x, ...)
```

Arguments

x	an object used to select a method.
...	further arguments passed to or from other methods.

Value

invisible(x). Typically called for its side effect which is a pretty-print of the relevant information.

```
print.mdl_grades_summary
```
Print Moodle Grades Summary

Description

Overrides generic print function to pretty-print a summary of the grades from the gradebook.

Usage

```
## S3 method for class 'mdl_grades_summary'
print(x, ...)
```

Arguments

x   an object used to select a method.

...   further arguments passed to or from other methods.

Value

invisible(x). Typically called for its side effect which is a pretty-print of the relevant information.

```
print.mdl_post_summary
```
Print Moodle Forum Post Summary

Description

Overrides generic print function to pretty-print a summary of the Moodle posts.

Usage

```
## S3 method for class 'mdl_post_summary'
print(x, ...)
```

Arguments

x   an object used to select a method.

...   further arguments passed to or from other methods.

Value

invisible(x). Typically called for its side effect which is a pretty-print of the relevant information.

`print.mdl_users_summary`
Print Moodle Users Summary

Description

Overrides generic print function to pretty-print a summary of the users.

Usage

```
## S3 method for class 'mdl_users_summary'
print(x, ...)
```

Arguments

x   an object used to select a method.

...   further arguments passed to or from other methods.

Value

invisible(x). Typically called for its side effect which is a pretty-print of the relevant information.

`summary.mdl_courses`   *Summary of mdl_courses Object*

Description

Provides summary statistics for moodle courses

Usage

```
## S3 method for class 'mdl_courses'
summary(object, ...)
```

Arguments

object   a lazy tbl reference with class mdl_grades

...   currently ignored

Value

a tibble with the summary.

---

summary.mdl_forum_posts

Summary of mdl_forum_posts Object

Description

Provides summary statistics for forum posts.

Usage

```
## S3 method for class 'mdl_forum_posts'
summary(object, ...)
```

Arguments

object   a lazy tbl reference with class mdl_grades

...   currently ignored

Value

a tibble with the summary.

---

summary.mdl_grades   *Summary of mdl_grades Object*

Description

Provides summary statistics for moodle grades

Usage

```
## S3 method for class 'mdl_grades'
summary(object, ...)
```

Arguments

object   a lazy tbl reference with class mdl_grades

...   currently ignored

Value

a tibble with the summary.

summary.mdl_users   *Summary of mdl_users Object*

Description

Provides summary statistics for moodle courses

Usage

```
## S3 method for class 'mdl_users'
summary(object, ...)
```

Arguments

object   a lazy tbl reference with class mdl_grades

...   currently ignored

Value

a tibble with the summary.

Index