Package: tidyplate (via r-universe)

September 6, 2024

Type Package

Title Transform Microplate Data into Tidy Dataframes

Version 1.1.0.9000

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Description The goal of 'tidyplate' is to help researchers convert different types of microplates into tidy dataframes which can be used in data analysis. It accepts xlsx and csv files formatted in a specific way as input. It supports all types of standard microplate formats such as 6-well, 12-well, 24-well, 48-well, 96-well, 384-well, and, 1536-well plates.

Imports janitor, readr, readxl, tibble, tidyr, dplyr, purrr, rlang

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Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.1

URL https://github.com/shubhamdutta26/tidyplate, https://www.shubhamdutta.com/tidyplate/

BugReports https://github.com/shubhamdutta26/tidyplate/issues

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

Config/testthat/edition 3

VignetteBuilder knitr

Language en-GB

Repository https://shubhamdutta26.r-universe.dev

RemoteUrl https://github.com/shubhamdutta26/tidyplate

RemoteRef HEAD

RemoteSha b8c13fffa6197c07564356e7286d222e94c3e084

Contents

`check_plate` *Checks whether the input file can be used to transform to a tidy plate using the* `tidy_plate()` *function*

Description

Checks whether the input file can be used to transform to a tidy plate using the `tidy_plate()` function

Usage

```
check_plate(file, well_id = "well", sheet = 1)
```

Arguments

`file`	This is the path to a xlsx or csv file containing data for the following types of plates: 6, 12, 24, 48, 96, 384, and 1536. The plate format is described below.
`well_id`	This is takes a character of length 1 and cannot be the same as individual plate names.
`sheet`	If file type is xlsx this is the sheet name (character) or number (integer).

Value

An error or a message saying that input file can be used with the `tidy_plate()` function

Examples

```
file_path <- system.file(
  "extdata",
  "example_12_well.xlsx",
  package = "tidyplate"
)

check_plate(file = file_path)
```

pull_plate *Subset individual plates from the input file*

Description

Subset individual plates from the input file

Usage

```
pull_plate(file, sheet = 1, plate_id)
```

Arguments

file	This is the path to a xlsx or csv file containing data for the following types of plates: 6, 12, 24, 48, 96, 384, and 1536.
sheet	If file type is xlsx this is the sheet name (character) or number (integer).
plate_id	Character or numeric vector that will be used to subset the file.

Value

a list of tibbles

Examples

```
file_path <- system.file("extdata", "example_12_well.xlsx", package = "tidyplate")

n_id = c(1, 3)
c_id = c("drug", "percent_survived")

data_n <- pull_plate(file = file_path, plate_id = n_id)
data_c <- pull_plate(file = file_path, plate_id = c_id)

print(data_n)
print(data_c)
```

tidy_plate *Transforms a plate to a tidy dataframe*

Description

Transforms a plate to a tidy dataframe

Usage

```
tidy_plate(file, well_id = "well", sheet = 1)
```

Arguments

file	This is the path to a xlsx or csv file containing data for the following types of plates: 6, 12, 24, 48, 96, 384, and 1536. The plate format is described below.
well_id	This is takes a character of length 1 and cannot be the same as individual plate names.
sheet	If file type is xlsx this is the sheet name (character) or number (integer).

Value

A tidy dataframe

Examples

```
file_path <- system.file("extdata", "example_12_well.xlsx", package = "tidyplate")

data_12 <- tidy_plate(file = file_path)

head(data_12)
```

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view_plate_names *Returns the name of each plate in the file*

Description

Returns the name of each plate in the file

Usage

```
view_plate_names(file, sheet = 1)
```

Arguments

file	This is the path to a xlsx or csv file containing data for the following types of plates: 6, 12, 24, 48, 96, 384, and 1536.
sheet	If file type is xlsx this is the sheet name (character) or number (integer).

Value

A character vector

Examples

```
file_path <- system.file("extdata", "example_12_well.xlsx", package = "tidyplate")

data_12 <- view_plate_names(file = file_path)

data_12
```

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