Package: TidyMultiqc (via r-universe)

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```
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Author Michael Milton
Maintainer Michael Milton <michael.r.milton@gmail.com>
Description Provides the means to convert 'multige data.json' files,
     produced by the wonderful 'MultiQC' tool, into tidy data frames
     for downstream analysis in R. This analysis might involve
     cohort analysis, quality control visualisation, change-point
     detection, statistical process control, clustering, or any
     other type of quality analysis.
License GPL (>= 3)
Encoding UTF-8
Imports assertthat, dplyr, jsonlite, magrittr, purrr, rlang, stringr,
Suggests tidyr, testthat (>= 3.0.0), knitr, rmarkdown, ggplot2,
     HistDat
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RoxygenNote 7.1.2
Roxygen list(markdown = TRUE)
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URL https://multimeric.github.io/TidyMultiqc/,
     https://github.com/multimeric/TidyMultiqc,
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BugReports https://github.com/multimeric/TidyMultiqc/issues
Repository https://multimeric.r-universe.dev
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```

Title Converts 'MultiQC' Reports into Tidy Data Frames

Type Package

2 list_plots

Contents

	TidyMultiqc-pa	ackage .	 												- 2	2
	list_plots		 												2)
	load_multiqc		 												3	3
Index																

TidyMultiqc-package

TidyMultiqc: Converting MultiQC reports into tidy data frames

Description

This package provides the means to convert multiqc_data.json files, produced by the wonderful MultiQC tool, into tidy data.frames for downstream analysis in R. If you are reading this manual, you should immediately stop reading this and instead refer to the documentation website at https://multimeric.github.io/TidyMultiqc/, which provides more accessible documentation.

list_plots

List the plot identifiers of all the plots in a given multiqc report

Description

List the plot identifiers of all the plots in a given multiqc report

Usage

list_plots(path)

Arguments

path

The file path to the multique report. This should be a length 1 character vector

Details

The main use for this function is finding the plot identifiers that you will then pass into the plots argument of the <code>load_multiqc()</code> function. Refer to the section on "Extracting Plot Data" in the main vignette for more information.

Value

A data frame containing n rows, where n is the number of plots in the report you have provided, and two columns:

id The identifier for the plot. This is the one you should use as a name in plot_opts.

name The plot title. This is likely what you see in the multiqc report when you open it with your browser.

load_multiqc 3

Examples

```
# Ignore this, choose your own filepath as the `filepath` variable
filepath <- system.file("extdata", "HG00096/multiqc_data.json", package = "TidyMultiqc")
# This is the actual invocation
list_plots(filepath)</pre>
```

load_multiqc

Loads one or more MultiQC reports into a data frame

Description

Loads one or more MultiQC reports into a data frame

Usage

```
load_multiqc(
  paths,
  plots = NULL,
  find_metadata = function(...) {      list() },
  plot_parsers = list(),
  sections = "general"
)
```

Arguments

paths A string vector of filepaths to multiqc_data.json files

plots A string vector, each of which contains the ID of a plot you want to include in

the output. You can use list_plots() to help here.

find_metadata A single function that will be called with a sample name and the parsed JSON

for the entire report and returns a named list of metadata fields for the sample.

Refer to the vignette for an example.

plot_parsers Advanced. A named list of custom parser functions. The names of the list

should correspond to plotly plot types, such as "xy_line", and the values should be functions that return a named list of named lists. For the return value, the outer list is named by the sample ID, and the inner list is named by the name of

the column. Refer to the source code for some examples.

sections A string vector of zero or more sections to include in the output. Each section

can be:

"plot" Parse plot data. Note that you should also provide a list of plots via the plots argument

"general" parse the general stat section

"raw" Parse the raw data section

This defaults to 'general', which tends to contain the most useful statistics

4 load_multiqc

Value

A tibble (data.frame subclass) with QC data and metadata as columns, and samples as rows. Columns are named according to the respective section they belong to, and will always be listed in the following order:

metadata.X	This column contains metadata for this sample. By default this is only the sample ID, but if you have provided the find_metadata argument, there may be more columns.
general.X	This column contains a generally useful summary statistic for each sample
plot.X	This column contains a data frame of plot data for each sample. Refer to the plot parsers documentation (ie the parse_X functions) for more information on the output format.
raw.X	This column contains a raw summary statistic or value relating to each sample

See Also

```
parse_xyline_plot() parse_bar_graph()
```

Examples

```
load_multiqc(system.file("extdata", "wgs/multiqc_data.json", package = "TidyMultiqc"))
```

Index

```
list_plots, 2
list_plots(), 3
load_multiqc, 3
load_multiqc(), 2

parse_bar_graph(), 4
parse_xyline_plot(), 4

TidyMultiqc-package, 2
```