Package 'tinysnapshot'

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Type Package

Title Snapshots for Unit Tests using the 'tinytest' Framework

Version 0.0.8

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Description Snapshots for unit tests using the 'tinytest' framework for R. Includes expectations to test base R and 'ggplot2' plots as well as console output from print().

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URL https://github.com/vincentarelbundock/tinysnapshot

BugReports https://github.com/vincentarelbundock/tinysnapshot/issues

Imports diffobj, magick (>= 2.7.4), tinytest (>= 1.4.1)

Suggests fontquiver, ggplot2, ragg, rsvg, svglite

Encoding UTF-8

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NeedsCompilation no

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`expect_equivalent_images` *Test if two image files are equivalent*

Description

Test if two image files are equivalent

Usage

```
expect_equivalent_images(
  current,
  target,
  tol = getOption("tinysnapshot_tol", default = 0),
  metric = getOption("tinysnapshot_metric", default = "AE"),
  fuzz = getOption("tinysnapshot_fuzz", default = 0),
 style = getOption("tinysnapshot_plot_diff_style", default = c("old", "new", "diff")),
  diffpath = NULL
)
```

Arguments

current	path to an image file
target	path to an image file
tol	distance estimates larger than this threshold will trigger a test failure. Scale depends on the metric argument. With the default metric="AE" (absolute error), the tolerance corresponds roughly to the number of pixels of difference between the plot and the reference image.
metric	string with a metric from magick::metric_types() such as "AE" or "phash".
fuzz	relative color distance between 0 and 100 to be considered similar.
style	A character vector to control the panels of the diff image saved to file. The order and number of entries controls the side-by-side panels. Allowable values are: "old", "new", "diff".
diffpath	path where to save an image which shows the differences between current and target. NULL means that the diff image is not saved.

Value

A tinytest object. A tinytest object is a logical with attributes holding information about the test that was run

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expect_snapshot_plot *Test if the new plot matches a target (snapshot) plot*

Description

This expectation can be used with tinytest to check if the new plot matches a target plot.

When the expectation is checked for the first time, the expectation fails and a reference plot is saved to the inst/tinytest/_tinysnapshot folder.

When the expectation fails, the reference plot, the new plot, and a diff are saved to the inst/tinytest/label folder. Call the review() function to compare.

To update a snapshot, delete the reference file from the _tinysnapshot folder and run the test suite again.

See the package README file or website for detailed examples.

Usage

```
expect_snapshot_plot(
  current,
  label,
  width = getOption("tinysnapshot_width", default = NULL),
  height = getOption("tinysnapshot_height", default = NULL),
  tol = getOption("tinysnapshot_tol", default = 0),
  metric = getOption("tinysnapshot_metric", default = "AE"),
```

```
  fuzz = getOption("tinysnapshot_fuzz", default = 0),
  device = getOption("tinysnapshot_device", default = "svg"),
  device_args = getOption("tinysnapshot_device_args", default = list()),
 style = getOption("tinysnapshot_plot_diff_style", default = c("old", "new", "diff")),
  os = getOption("tinysnapshot_os", default = Sys.info()["sysname"])
)
```

Arguments

current	an object of class ggplot or a function which returns a base R plot.
label	a string to identify the snapshot (alpha-numeric, hyphens, or underscores). Each plot in the test suite must have a unique label.
width	of the snapshot. PNG default: 480 pixels. SVG default: 7 inches.
height	of the snapshot. PNG default: 480 pixels. SVG default: 7 inches.
tol	distance estimates larger than this threshold will trigger a test failure. Scale depends on the metric argument. With the default metric="AE" (absolute error), the tolerance corresponds roughly to the number of pixels of difference between the plot and the reference image.
metric	string with a metric from magick::metric_types() such as "AE" or "phash".
fuzz	relative color distance between 0 and 100 to be considered similar.
device	"svg", "png", "ragg" or "svglite"
device_args	list of arguments to pass to the device call (e.g., user_fonts for svglite device).
style	A character vector to control the panels of the diff image saved to file. The order and number of entries controls the side-by-side panels. Allowable values are: "old", "new", "diff".
os	character vector of operating systems on which the test should be run (e.g., "Windows", "Linux", "Darwin"). Tests are skipped when no element of the vector matches the output of: Sys.info()["sysname"]

Value

A tinytest object. A tinytest object is a logical with attributes holding information about the test that was run

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expect_snapshot_print *Test if printed output matches a target printout*

Description

This expectation can be used with tinytest to check if the new plot matches a target plot.

When the expectation is checked for the first time, the expectation fails and a reference text file is saved to the inst/tinytest/_tinysnapshot folder.

To update a snapshot, delete the reference file from the _tinysnapshot folder and run the test suite again.

See the package README file or website for detailed examples.

Usage

```
expect_snapshot_print(
  current,
  label,
  mode = getOption("tinysnapshot_mode", default = "unified"),
  format = getOption("tinysnapshot_format", default = "ansi256"),
 ignore_white_space = getOption("tinysnapshot_ignore_white_space", default = FALSE),
  ...
)
```

Arguments

current	an object which returns text to the console when calling `print(x)`‘
label	a string to identify the snapshot (alpha-numeric, hyphens, or underscores). Each plot in the test suite must have a unique label.
mode	"unified", "sidebyside", "context", or "auto". See `?diffobj::diffPrint`
format	"raw", "ansi8", "ansi256", "html", or "auto". See `?diffobj::diffPrint`
ignore_white_space	`TRUE` to ignore horizontal white space and empty lines.
...	Additional arguments are passed to `diffobj::diffPrint()`

Value

A `tinytest` object. A `tinytest` object is a `logical` with attributes holding information about the test that was run

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