

Package ‘tinysnapshot’

August 23, 2024

Type Package

Title Snapshots for Unit Tests using the 'tinytest' Framework

Version 0.0.6

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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

RoxygenNote 7.3.1

NeedsCompilation no

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Repository CRAN

Date/Publication 2024-08-23 04:10:02 UTC

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tinysnapshot-package *Snapshots for Unit Tests using the 'tinytest' Framework*

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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```

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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),
  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 <code>metric</code> argument. With the default <code>metric="AE"</code> (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 <code>magick::metric_types()</code> such as "AE" or "phash".
fuzz	relative color distance between 0 and 100 to be considered similar.
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

`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()),
  os = getOption("tinysnapshot_os", default = Sys.info()["sysname"])
)
```

Arguments

current	an object of class <code>ggplot</code> 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 <code>metric</code> argument. With the default <code>metric="AE"</code> (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 <code>magick::metric_types()</code> 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., <code>user_fonts</code> for <code>svglite</code> device).
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: <code>Sys.info()["sysname"]</code>

Value

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

`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"),
  ...
)
```

Arguments

current	an object which returns text to the console when calling <code>print(x)</code>
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 <code>?diffobj::diffPrint</code>
format	"raw", "ansi8", "ansi256", "html", or "auto". See <code>?diffobj::diffPrint</code>
...	Additional arguments are passed to <code>diffobj::diffPrint()</code>

Value

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

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