Package 'shiny.benchmark'

January 20, 2023

Title Benchmark the Performance of 'shiny' Applications

Version 0.1.1

Description
Compare performance between different versions of a 'shiny' application based on 'git' references.

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URL <https://github.com/Appsilon/shiny.benchmark>,

<https://github.com/Appsilon/shiny.benchmark>

BugReports <https://github.com/Appsilon/shiny.benchmark/issues>

SystemRequirements yarn 1.22.17 or higher, Node 12 or higher

Encoding UTF-8

RoxygenNote 7.2.3

Depends R (>= 3.1.0)

Suggests covr, knitr, lintr, rcmdcheck, rmarkdown, mockr, spelling

Imports dplyr, ggplot2, glue, jsonlite, methods, progress, renv,
shinytest2, stringr, testthat, fs

Language en-US

NeedsCompilation no

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Repository CRAN

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R topics documented:

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benchmark   *Execute performance tests for a list of commits*

Description

Execute performance tests for a list of commits

Usage

```
benchmark(
  commit_list,
  cypress_dir = NULL,
  shinytest2_dir = NULL,
  tests_pattern = NULL,
  app_dir = getwd(),
  port = 3333,
  use_renv = TRUE,
  renv_prompt = TRUE,
  n_rep = 1,
  debug = FALSE
)
```

Arguments

commit_list	A list of commit hash codes, branches' names or anything else you can use with git checkout ...
cypress_dir	The directory with tests recorded by Cypress. It can also be a vector of the same size of commit_list
shinytest2_dir	The directory with tests recorded by shinytest2 It can also be a vector of the same size of commit_list
tests_pattern	Cypress/shinytest2 files pattern. E.g. 'performance' It can also be a vector of the same size of commit_list. If it is NULL, all the content in cypress_dir/shinytest2_dir will be used
app_dir	The path to the application root
port	Port to run the app
use_renv	In case it is set as TRUE, package will try to apply renv::restore() in all branches. Otherwise, the current loaded list of packages will be used in all branches.

renv_prompt	Prompt the user before taking any action?
n_rep	Number of replications desired
debug	Logical. TRUE to display all the system messages on runtime

Value

Return a `shiny_benchmark` object containing the benchmark call, elapsed time and a `list` with the collected performance times

---

benchmark_cypress	*Run the performance test based on multiple commits using Cypress*

Description

Run the performance test based on multiple commits using Cypress

Usage

```
benchmark_cypress(
  commit_list,
  cypress_dir,
  tests_pattern,
  app_dir,
  port,
  use_renv,
  renv_prompt,
  n_rep,
  debug
)
```

Arguments

commit_list	A list of commit hash codes, branches' names or anything else you can use with git checkout ...
cypress_dir	The directory with tests recorded by Cypress. It can also be a vector of the same size of commit_list
tests_pattern	Cypress/shinytest2 files pattern. E.g. 'shinytest2' It can also be a vector of the same size of commit_list. If it is NULL, all the content in cypress_dir/shinytest2_dir will be used
app_dir	The path to the application root
port	Port to run the app
use_renv	In case it is set as TRUE, package will try to apply renv::restore() in all branches. Otherwise, the current loaded list of packages will be used in all branches.
renv_prompt	Prompt the user before taking any action?
n_rep	Number of replications desired
debug	Logical. TRUE to display all the system messages on runtime

Value

Return a `list` with the collected performance times

---

benchmark_shinytest2   *Run the performance test based on a multiple commits using shinytest2*

Description

Run the performance test based on a multiple commits using shinytest2

Usage

```
benchmark_shinytest2(
  commit_list,
  shinytest2_dir,
  tests_pattern,
  app_dir,
  use_renv,
  renv_prompt,
  n_rep,
  debug
)
```

Arguments

commit_list	A list of commit hash codes, branches' names or anything else you can use with git checkout ...
shinytest2_dir	The directory with tests recorded by shinytest2 It can also be a vector of the same size of commit_list
tests_pattern	shinytest2 files pattern. E.g. 'performance' It can also be a vector of the same size of commit_list. If it is NULL, all the content in cypress_dir/shinytest2_dir will be used
app_dir	The path to the application root
use_renv	In case it is set as TRUE, package will try to apply renv::restore() in all branches. Otherwise, the current loaded list of packages will be used in all branches.
renv_prompt	Prompt the user before taking any action?
n_rep	Number of replications desired
debug	Logical. TRUE to display all the system messages on runtime

Value

Return a `list` with the collected performance times

---

load_example *Load an application and instructions to run shiny.benchmark*

Description

This function aims to generate a template to be used by shiny.benchmark. It will create the necessary structure on path with some examples of tests using Cypress and shinytest2. Also, a simple application will be added to the folder as well as instructions on how to perform the performance checks. Be aware that a new git repo is need in the selected path.

Usage

```
load_example(path, force = FALSE)
```

Arguments

path	A character vector of full path name
force	Create example even if directory does not exist or is not empty

Value

Print on the console instructions to run the example

Examples

```
load_example(file.path(tempdir(), "example_destination"), force = TRUE)
```

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plot.shiny_benchmark *Plot for shiny_benchmark class*

Description

Plot for shiny_benchmark class

Usage

```
## S3 method for class 'shiny_benchmark'
plot(x, ...)
```

Arguments

x	shiny_benchmark object
...	Other parameters

Value

Return a ggplot object that compares different git refs

---

print.shiny_benchmark   *Print for shiny_benchmark class*

Description

Print for shiny_benchmark class

Usage

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

Arguments

x	shiny_benchmark object
...	Other parameters

Value

Print on the console information about the `shiny_benchmark` object

---

run_cypress_ptest   *Run the performance test based on a single commit using Cypress*

Description

Run the performance test based on a single commit using Cypress

Usage

```
run_cypress_ptest(
  commit,
  project_path,
  cypress_dir,
  tests_pattern,
  use_renv,
  renv_prompt,
  n_rep,
  debug
)
```

Arguments

`commit`	A commit hash code or a branch's name
`project_path`	The path to the project with all needed packages installed
`cypress_dir`	The directory with tests recorded by Cypress
`tests_pattern`	Cypress files pattern. E.g. 'performance'. If it is NULL, all the content will be used
`use_renv`	In case it is set as TRUE, package will try to apply renv::restore() in all branches. Otherwise, the current loaded list of packages will be used in all branches.
`renv_prompt`	Prompt the user before taking any action?
`n_rep`	Number of replications desired
`debug`	Logical. TRUE to display all the system messages on runtime

Value

Return a `data.frame` with the collected performance time

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run_shinytest2_ptest   *Run the performance test based on a single commit using shinytest2*

Description

Run the performance test based on a single commit using shinytest2

Usage

```
run_shinytest2_ptest(
  commit,
  project_path,
  app_dir,
  shinytest2_dir,
  tests_pattern,
  use_renv,
  renv_prompt,
  n_rep,
  debug
)
```

Arguments

`commit`	A commit hash code or a branch's name
`project_path`	The path to the project
`app_dir`	The path to the application root
`shinytest2_dir`	The directory with tests recorded by shinytest2

tests_pattern	shinytest2 files pattern. E.g. 'performance'. If it is NULL, all the content will be used
use_renv	In case it is set as TRUE, package will try to apply renv::restore() in all branches. Otherwise, the current loaded list of packages will be used in all branches.
renv_prompt	Prompt the user before taking any action?
n_rep	Number of replications desired
debug	Logical. TRUE to display all the system messages on runtime

Value

Return a data.frame with the collected performance time

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shiny_benchmark-class   *An object of 'shiny_benchmark' class*

Description

An object of 'shiny_benchmark' class

Slots

call Function call

time Time elapsed

performance List of measurements (one entry for each commit)

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summary.shiny_benchmark

Summary for shiny_benchmark class

Description

Summary for shiny_benchmark class

Usage

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

Arguments

| object | shiny_benchmark object |
| ... | Other parameters |

Value

Return a data.frame with performance tests' summary statistics

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