R in the Robot or

noamross @

2021-12-07 rOpenSci Community Call
Plumber API to generate reports on package structure and function for the ropensci-review-bot. The package is not intended for general use, and these documents are primarily intended for use in the documentation of this package, although they may serve as useful templates for similar endeavours. Please don’t hesitate to ask any questions.

Uses functionality provided by the pkgcheck and pkgstats packages. To use it requires a few system installs, two for pkgstats of ctags and GNU gprof. Various operating systems are described in the pkgstats package documentation.

The GitHub command-line interface (cli), gh, and dos2unix.

A local GitHub token also needs to be stored as an environment variable: GITHUB_PAT or anything else; the gh-cli only recognises the former.
Buffy calls a service running an R-based Plumber API for checking packages

github.com/ropensci-review-tools/roreviewapi

```r
# ---------------------------------------------- editorcheck ----------------------------------------------
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# Run full range of editor checks and post result to a GitHub issue

@get /editorcheck

function (repourl = "", repo, issue_id) {

  if (nchar (repourl) == 0) {
    return ("Error: Issue template has no 'repourl'")
  }

  repourl <- as.character (repourl) [1]
  repo <- as.character (repo) [1]
  issue_id <- as.integer (issue_id) [1]

  template_chk <- roreviewapi::check_issue_template (repo, issue_id)
  if (!attr (template_chk, "proceed_with_checks")) {
    return (template_chk)
  }

  logfiles <- roreviewapi::stdout_stderr_cache (repourl)
  ps <- callr::bg()
```
And provides badges, logs, and alerts!

github.com/ropensci-review-tools/roreviewapi
roreviewapi delivers comprehensive, R- and rOpenSci-flavored diagnostics of submissions
**Standards Compliance**

1. rOpenSci Statistical Standards (*srr* package)

This package is in the following category:

- Bayesian and Monte Carlo

✓ All applicable standards [v0.1.0.007] have been documented in this package (92 complied with; 32 N/A standards)

Click to see the report of author-reported standards compliance of the package with links to associated lines of code, which can be re-generated locally by running the `srr_report()` function from within a local clone of the repository.

**Standards with srrstats tag (92 / 124)**

**R directory**

Standards in function `act3()` on line#24 of file `R/asymptotic_var.R`:

- BS5.3 Bayesian Software should return convergence statistics or equivalent
- BS5.5 Appropriate diagnostic statistics to indicate absence of convergence should either be returned or immediately accessible.
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Quantitative Code Statistics

2. Statistical Properties

This package features some noteworthy statistical properties which may need to be clarified by a handling editor prior to progressing.

Details of statistical properties (click to open)

The package has:

- code in C++ (73% in 43 files) and R (27% in 31 files)
- 2 authors
- 4 vignettes
- 5 internal data files
- 9 imported packages
- 77 exported functions (median 24 lines of code)
- 261 non-exported functions in R (median 7 lines of code)
- 291 R functions (median 29 lines of code)

Statistical properties of package structure as distributional percentiles in relation to all current CRAN packages

The following terminology is used:

- loc = "Lines of Code"
- fn = "function"
- exp / not_exp = exported / not exported

The final measure (fn_call_network_size) is the total number of calls between functions (in R), or more abstract relationships between code objects in other languages. Values are flagged as "noteworthy" when they lie in the upper or lower 5th percentile.

<table>
<thead>
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<th>measure</th>
<th>value</th>
<th>percentile</th>
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</table>
roreviewapi delivers comprehensive, R- and rOpenSci-flavored diagnostics of submissions.
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Automated checks provide a huge leap in efficiency and comprehensiveness over previous, manual checks.
What’s inside roreviewapi?

More packages you can use!

pkgcheck lets you run check submission-readiness

Check whether a package is ready for submission to rOpenSci’s peer review system. The primary function collates the output of `goodpractice`, including `R CMD check` results, a number of statistics via the `pkgstats` package, and checks for package structure expected for rOpenSci submissions. The output of this function immediately indicates whether or not a package is “Ready to Submit.”
pkgstats provides a database of metrics to compare your package to all of CRAN.

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**srr (software review roclets)** documents standards compliance with code annotations.
Thank you!

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