Go social coding!
Make open source more open!

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\textsuperscript{1}Lightning talk at useR! 2012, Vanderbilt University, Nashville, TN
About me

- love open source
- author of 8 R packages (animation, knitr, formatR, Rd2roxygen, fun, iBUGS, MSG, R2SWF)
- love web design
- appearance equally important as content, so prefer cute interfaces
Package development

- first R package (animation) in 2007
  - no version control in the beginning
  - R-Forge came out soon, so SVN
- R-Forge broken randomly
- SVN interface is ugly
- SVN vs GIT
- GitHub: https://github.com/yihui
GitHub
```r
# format a single inline object
.inline.hook = function(x) {
  if (is.numeric(x)) x = round(x,getOption('digits'))
  paste(as.character(x), collapse = ', ')
}
$out.hook = function(x, options) x
$plot.hook = function(x, options) paste(x, collapse = '.')
.default.hooks = list(
  source = $out.hook, output = $out.hook, warning = $out.hook,
  message = $out.hook, error = $out.hook, plot = $plot.hook,
  inline = .inline.hook, chunk = .out.hook
}

#' Hooks for R code chunks, inline R code and output
#' #' A hook is a function of a pre-defined form (arguments) that takes values of
#' arguments and returns desired output. The object \code{knit_hooks} is used to
#' access or set hooks in this package.
#' @export
#' @references Usage: \url{http://yihui.name/knitr/objects}
```
Isn't it stupid to `diff()` the results of `cumsum()`?! 

```r
concord_gen = function(infile, outfile) {
  
  # generate data structure
  linesout = cumsum(steps)
  vals = rle(diff(linesout))
  vals = c(linesout[1L], as.numeric(rbind(vals$lengths, vals$values)))
  vals = rle(steps)
  vals = c(steps[1L], as.numeric(rbind(vals$lengths, vals$values)))
  concordance = paste(strwrap(paste(vals, collapse = " ")), collapse = " %\n")

  # build record
}
```
<table>
<thead>
<tr>
<th>#</th>
<th>Issue Description</th>
<th>Status</th>
<th>Assigned</th>
<th>Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>#269</td>
<td>partially evaluate chunks</td>
<td>Feature</td>
<td>yihui</td>
<td>3 days ago</td>
</tr>
<tr>
<td>#267</td>
<td>Options for external chunks</td>
<td>Feature</td>
<td>inv</td>
<td>4 days ago</td>
</tr>
<tr>
<td>#264</td>
<td>Different color for error and warning messages</td>
<td>Feature</td>
<td>muelleki</td>
<td>10 days ago</td>
</tr>
<tr>
<td>#252</td>
<td>knitr support in other editors (Emacs/ESS/Vim/Eclipse...)</td>
<td>Feature</td>
<td>yihui</td>
<td>18 days ago</td>
</tr>
<tr>
<td>#251</td>
<td>Rendering of other languages</td>
<td>TODO</td>
<td>fonnesbeck</td>
<td>18 days ago</td>
</tr>
<tr>
<td>#247</td>
<td>upload to photobucket.com?</td>
<td>Feature</td>
<td>yihui</td>
<td>20 days ago</td>
</tr>
<tr>
<td>#246</td>
<td>adjust the table; image size</td>
<td></td>
<td>cloudy</td>
<td>20 days ago</td>
</tr>
<tr>
<td>#239</td>
<td>knitr and comments</td>
<td>Feature</td>
<td>jamielfolson</td>
<td>25 days ago</td>
</tr>
</tbody>
</table>
Discussion under issues

*barryrowlingson* opened this issue 17 days ago

**cache error**

No one is assigned  
Milestone: **v0.6**

Another randomly occurring cache error:

```plaintext
Error in process_file(text):
  Quitting from lines 58-60: Error in exists(str_c("."), hash),
  envir = globalenv(), mode = "character"
  internal error -3 in R_decompress1
```

removing the cache/([chunk]).* files for the chunk being processed at the time clears it, but invalidates all the cached things dependent on those...

But the error comes back soon...

3 participants

*MatthieuStigler* commented 17 days ago

Maybe a different issue... maybe related...

I am also encountering many problems with the cache when used with Lyx. Basically, whatever change is done, lyx will
Discussion under code lines

2 notes on commit c99ae83

bboker commented on c99ae83

it works on r-devel for me. woo-hoo!

yihui commented on c99ae83

thanks! fortunately it is not a terribly hard fix :)

R/block.R

```r
@ -136,7 +136,7 @@ block exec = function(params) {
  if (options$fig.show == 'hold') res = c(res[!figs], res[figs]) # move to the end
  res = Filter(function(x) {
    ## filter out plot objects purely for layout (raised by par(), layout())
    - !is.recordedplot(x) || all(plot_calls(x) %in% c('par', 'layout'))
    + !is.recordedplot(x) || all(plot_calls(x) %in% c('par', 'layout', '.External2'))
  }, res)
  figs = sapply(res, is.recordedplot)
  if (sum(figs) > 1) {
```
Pull requests

**jallaire** opened this pull request 3 months ago

**write concordance using sweave format**

No one is assigned

Figured out how to take your data structure and write a sweave-compatible both error navigation and syntax work great.

2 participants

**jallaire** added some commits

bd7542f write concordance using sweave format

**yihui** commented

Wow, that is super cool! Thanks a lot!
1. Installation

To install from CRAN, use

```r
install.packages('formatR')
```

To install the development version from GitHub, use

```r
install.packages('devtools')
library(devtools)
install_github('formatR', 'yihui')
```

This page is always based on the development version.

2. Reformat R code

The `formatR` package was designed to reformat R code to improve readability; the main workhorse is the function `tidy.source()`. Features include:

- long lines of code and comments are reorganized into appropriately shorter ones
- spaces and indent are added where necessary
- comments are preserved in most cases
Stay tuned

- **yihui commented on issue 268 on yihui/knitr 6 hours ago**
  - This is done now. See below for an example:
    - https://github.com/yihui/

- **yihui created tag v0.6 at yihui/knitr 6 hours ago**

- **yihui created tag v0.5 at yihui/knitr 6 hours ago**

- **yihui pushed to master at yihui/knitr 6 hours ago**
  - 1fa80c5 bump version to 0.6; ready for CRAN
  - 8dd91a5 re-roxygenize
  - 6935165 need to set out.format for eclipse_theme() to work
  - 13 more commits »
GitHub pages

knitr

Elegant, flexible and fast
dynamic report generation with R

Overview

The knitr package was designed to be a transparent engine for dynamic report generation with R, solve some long-standing problems in Sweave, and combine features in other add-on packages into one package (knitr ≈ Sweave + cacheSweave + pgfSweave + weaver + animation::saveLatex + R2HTML::RweaveHTML + highlight::HighlightWeaveLatex + 0.2 * brew + 0.1 * SweaveListingUtils + more).
Results for #knitr

Tweets Top / All

Yihui Xie @xieyihui
9 Jun
got an @OpenCPU app working: github.com/yihui/knitr/bl… (knit in the cloud!) #knitr v0.6 is almost ready; testing needed
github.com/yihui/knitr
Expand

klr @timelyportfolio
8 Jun
Timely Portfolio: #knitr Performance Report 4
timelyportfolio.blogspot.com/2012/06/knitr-… #rstats and #knitr fun on a friday afternoon
Expand

Shreyas Karnik @shreyu86
4 Jun
Awesome! RT: @rstudioapp: New blog post: Announcing RPubs, A New Web Publishing Service for R is.gd/lU0o42 #rstats #rstudio #knitr
Expand 🔄 Reply 🔴 Retweet ★ Favorite
Conclusions

- put everything under the sun (i.e. in the browser)
- convenient discussions
- quick feedback (@, # and + can be good friends)