CRAN Trends: Exploring Options

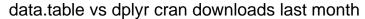
Shukry Zablah December 25, 2018

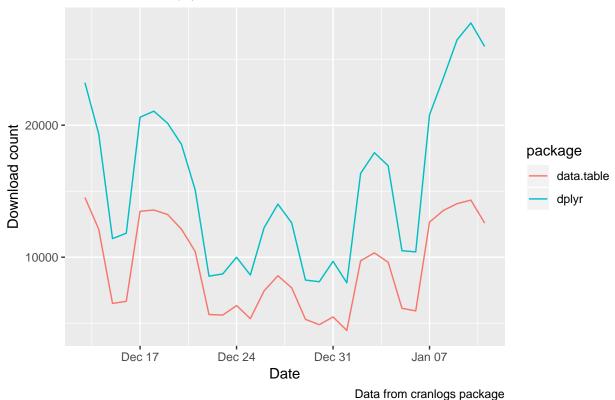
Setup

```
library(dplyr)
library(ggplot2)
library(cranlogs)
library(adjustedcranlogs)
```

We will be using the cranlogs package for our queries, and ggplot2 for our graphics.

Usage: Cranlogs





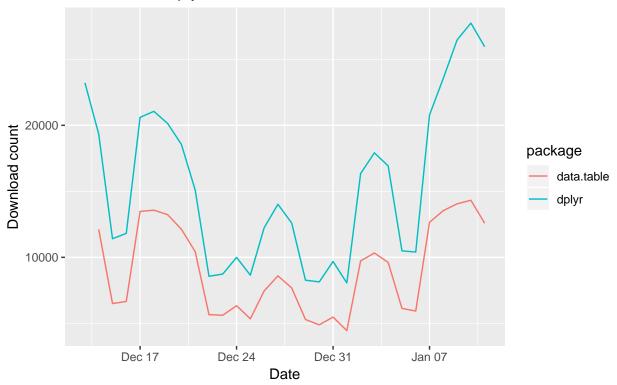
Commentary

- The existence of the package makes it simple for us to make queries. The prototype can be built on shiny, but I know that there is also a json api, which depending on how things go, would mean building a small webapp without an R backend.
- We are considering including the following functionality (as in this would be ideal, we recognize that some of this will not be possible to implement.):
- · package search
- · related packages
- · search history
- top packages
- trending packages
- inclusion of github downloads
- Another point to consider is the usage of the adjusted cranlogs package, that presumably fixes some of the download counts related to package updates.

Usage: Adjusted Cranlogs

```
Downloads <- adj_cran_downloads(packages = c("dplyr", "data.table"),
               when = "last-month")
glimpse(Downloads)
## Observations: 59
## Variables: 8
## $ date
                              <date> 2018-12-14, 2018-12-15, 2018-12-16, ...
## $ mindownloads
                              <dbl> 3, 8, 3, 1, 8, 12, 4, 5, 2, 6, 3, 6, ...
## $ count
                              <dbl> 12122, 6498, 6658, 13477, 13573, 1323...
                              <chr> "data.table", "data.table", "data.tab...
## $ package
## $ updateday
                              <lgl> FALSE, FALSE, FALSE, FALSE, FALSE, FA...
## $ adjusted downloads
                              <dbl> 12119, 6490, 6655, 13476, 13565, 1321...
## $ adjusted_total_downloads <dbl> 12119, 18609, 25264, 38740, 52305, 65...
## $ total_downloads
                              <dbl> 12122, 18620, 25278, 38755, 52328, 65...
ggplot(data = Downloads, aes(x = date, y = count, color = package)) +
    geom_line() +
   labs(x = "Date", y = "Download count",
         title = "data.table vs dplyr cran downloads last month",
         caption = "Data from adjustedcranlogs package")
```

data.table vs dplyr cran downloads last month



Data from adjustedcranlogs package