01\_explore-libraries\_jenny.R

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#created .md file  
## how jenny might do this in a first exploration  
## purposely leaving a few things to change later!

Which libraries does R search for packages?

.libPaths()

## [1] "C:/Users/subha/Documents/R/win-library/3.4"  
## [2] "C:/Program Files/R/R-3.4.3/library"

## let's confirm the second element is, in fact, the default library  
.Library

## [1] "C:/PROGRA~1/R/R-34~1.3/library"

#options(repos = c(CRAN = "https://cran.rstudio.com/"))  
#install.packages("fs")  
#install.packages("devtools")  
library(fs)  
path\_real(.Library)

## C:/Program Files/R/R-3.4.3/library

Installed packages

library(tidyverse)

## -- Attaching packages -------------------------------------------------------------------------------------- tidyverse 1.2.1 --

## v ggplot2 2.2.1 v purrr 0.2.4  
## v tibble 1.4.2 v dplyr 0.7.4  
## v tidyr 0.7.2 v stringr 1.2.0  
## v readr 1.1.1 v forcats 0.2.0

## -- Conflicts ----------------------------------------------------------------------------------------- tidyverse\_conflicts() --  
## x dplyr::filter() masks stats::filter()  
## x dplyr::lag() masks stats::lag()

ipt <- installed.packages() %>%  
 as\_tibble()  
  
## how many packages?  
nrow(ipt)

## [1] 164

Exploring the packages

## count some things! inspiration  
## \* tabulate by LibPath, Priority, or both  
ipt %>%  
 count(LibPath, Priority)

## # A tibble: 4 x 3  
## LibPath Priority n  
## <chr> <chr> <int>  
## 1 C:/Program Files/R/R-3.4.3/library base 14  
## 2 C:/Program Files/R/R-3.4.3/library recommended 15  
## 3 C:/Program Files/R/R-3.4.3/library <NA> 1  
## 4 C:/Users/subha/Documents/R/win-library/3.4 <NA> 134

## \* what proportion need compilation?  
ipt %>%  
 count(NeedsCompilation) %>%  
 mutate(prop = n / sum(n))

## # A tibble: 3 x 3  
## NeedsCompilation n prop  
## <chr> <int> <dbl>  
## 1 no 71 0.433   
## 2 yes 87 0.530   
## 3 <NA> 6 0.0366

## \* how break down re: version of R they were built on  
ipt %>%  
 count(Built) %>%  
 mutate(prop = n / sum(n))

## # A tibble: 3 x 3  
## Built n prop  
## <chr> <int> <dbl>  
## 1 3.4.1 16 0.0976   
## 2 3.4.2 1 0.00610  
## 3 3.4.3 147 0.896

Reflections

## reflect on ^^ and make a few notes to yourself; inspiration  
## \* does the number of base + recommended packages make sense to you?  
## \* how does the result of .libPaths() relate to the result of .Library?

Going further

## if you have time to do more ...  
  
## is every package in .Library either base or recommended?  
all\_default\_pkgs <- list.files(.Library)  
all\_br\_pkgs <- ipt %>%  
 filter(Priority %in% c("base", "recommended")) %>%  
 pull(Package)  
setdiff(all\_default\_pkgs, all\_br\_pkgs)

## [1] "translations"

## study package naming style (all lower case, contains '.', etc  
  
## use `fields` argument to installed.packages() to get more info and use it!  
ipt2 <- installed.packages(fields = "URL") %>%  
 as\_tibble()  
ipt2 %>%  
 mutate(github = grepl("github", URL)) %>%  
 count(github) %>%  
 mutate(prop = n / sum(n))

## # A tibble: 2 x 3  
## github n prop  
## <lgl> <int> <dbl>  
## 1 F 79 0.482  
## 2 T 85 0.518

devtools::session\_info()

## Session info -------------------------------------------------------------

## setting value   
## version R version 3.4.3 (2017-11-30)  
## system x86\_64, mingw32   
## ui RTerm   
## language (EN)   
## collate English\_United States.1252   
## tz America/Los\_Angeles   
## date 2018-01-31

## Packages -----------------------------------------------------------------

## package \* version date source   
## assertthat 0.2.0 2017-04-11 CRAN (R 3.4.3)  
## backports 1.1.2 2017-12-13 CRAN (R 3.4.3)  
## base \* 3.4.3 2017-12-06 local   
## bindr 0.1 2016-11-13 CRAN (R 3.4.3)  
## bindrcpp \* 0.2 2017-06-17 CRAN (R 3.4.3)  
## broom 0.4.3 2017-11-20 CRAN (R 3.4.3)  
## cellranger 1.1.0 2016-07-27 CRAN (R 3.4.3)  
## cli 1.0.0 2017-11-05 CRAN (R 3.4.3)  
## colorspace 1.3-2 2016-12-14 CRAN (R 3.4.3)  
## compiler 3.4.3 2017-12-06 local   
## crayon 1.3.4 2017-09-16 CRAN (R 3.4.3)  
## datasets \* 3.4.3 2017-12-06 local   
## devtools 1.13.4 2017-11-09 CRAN (R 3.4.3)  
## digest 0.6.14 2018-01-14 CRAN (R 3.4.3)  
## dplyr \* 0.7.4 2017-09-28 CRAN (R 3.4.3)  
## evaluate 0.10.1 2017-06-24 CRAN (R 3.4.3)  
## forcats \* 0.2.0 2017-01-23 CRAN (R 3.4.3)  
## foreign 0.8-69 2017-06-22 CRAN (R 3.4.3)  
## fs \* 1.1.0 2018-01-26 CRAN (R 3.4.3)  
## ggplot2 \* 2.2.1 2016-12-30 CRAN (R 3.4.3)  
## glue 1.2.0 2017-10-29 CRAN (R 3.4.3)  
## graphics \* 3.4.3 2017-12-06 local   
## grDevices \* 3.4.3 2017-12-06 local   
## grid 3.4.3 2017-12-06 local   
## gtable 0.2.0 2016-02-26 CRAN (R 3.4.3)  
## haven 1.1.1 2018-01-18 CRAN (R 3.4.3)  
## hms 0.4.1 2018-01-24 CRAN (R 3.4.3)  
## htmltools 0.3.6 2017-04-28 CRAN (R 3.4.3)  
## httr 1.3.1 2017-08-20 CRAN (R 3.4.3)  
## jsonlite 1.5 2017-06-01 CRAN (R 3.4.3)  
## knitr 1.18 2017-12-27 CRAN (R 3.4.3)  
## lattice 0.20-35 2017-03-25 CRAN (R 3.4.3)  
## lazyeval 0.2.1 2017-10-29 CRAN (R 3.4.3)  
## lubridate 1.7.1 2017-11-03 CRAN (R 3.4.3)  
## magrittr 1.5 2014-11-22 CRAN (R 3.4.3)  
## memoise 1.1.0 2017-04-21 CRAN (R 3.4.3)  
## methods \* 3.4.3 2017-12-06 local   
## mnormt 1.5-5 2016-10-15 CRAN (R 3.4.1)  
## modelr 0.1.1 2017-07-24 CRAN (R 3.4.3)  
## munsell 0.4.3 2016-02-13 CRAN (R 3.4.3)  
## nlme 3.1-131 2017-02-06 CRAN (R 3.4.3)  
## parallel 3.4.3 2017-12-06 local   
## pillar 1.1.0 2018-01-14 CRAN (R 3.4.3)  
## pkgconfig 2.0.1 2017-03-21 CRAN (R 3.4.3)  
## plyr 1.8.4 2016-06-08 CRAN (R 3.4.3)  
## psych 1.7.8 2017-09-09 CRAN (R 3.4.3)  
## purrr \* 0.2.4 2017-10-18 CRAN (R 3.4.3)  
## R6 2.2.2 2017-06-17 CRAN (R 3.4.3)  
## Rcpp 0.12.15 2018-01-20 CRAN (R 3.4.3)  
## readr \* 1.1.1 2017-05-16 CRAN (R 3.4.3)  
## readxl 1.0.0 2017-04-18 CRAN (R 3.4.3)  
## reshape2 1.4.3 2017-12-11 CRAN (R 3.4.3)  
## rlang 0.1.6 2017-12-21 CRAN (R 3.4.3)  
## rmarkdown 1.8 2017-11-17 CRAN (R 3.4.3)  
## rprojroot 1.3-2 2018-01-03 CRAN (R 3.4.3)  
## rstudioapi 0.7 2017-09-07 CRAN (R 3.4.3)  
## rvest 0.3.2 2016-06-17 CRAN (R 3.4.3)  
## scales 0.5.0 2017-08-24 CRAN (R 3.4.3)  
## stats \* 3.4.3 2017-12-06 local   
## stringi 1.1.6 2017-11-17 CRAN (R 3.4.2)  
## stringr \* 1.2.0 2017-02-18 CRAN (R 3.4.3)  
## tibble \* 1.4.2 2018-01-22 CRAN (R 3.4.3)  
## tidyr \* 0.7.2 2017-10-16 CRAN (R 3.4.3)  
## tidyverse \* 1.2.1 2017-11-14 CRAN (R 3.4.3)  
## tools 3.4.3 2017-12-06 local   
## utf8 1.1.3 2018-01-03 CRAN (R 3.4.3)  
## utils \* 3.4.3 2017-12-06 local   
## withr 2.1.1 2017-12-19 CRAN (R 3.4.3)  
## xml2 1.2.0 2018-01-24 CRAN (R 3.4.3)

#sessionInfo()