Chapter 18 2020-02-18: R packages: Documenting

https://github.com/2DegreesInvesting/ds-incubator/issues/26

18.1 Objectives

- Why documenting your package is important for users and developers.
- How to generate a roxygen skeleton to document a function.
- Why the examples section is important?
- Why README is important?
- What are common README gotchas
 - Why README can't find functions in your package?
 - Why README should not use tidyverse
- How to navigate a package website.

18.2 Why is documenting important?

- How it helps users?
- · How it helps developers?
- Why using a consistent format might be useful for users/developers?

18.3 Code > Insert Roxygen Skeleton

```
#' Title
#'
#' @param x
#'
#' @return
#' @export
#'
#' @examples
f <- function(x) {
    x
}</pre>
```

18.4 How useful are examples?

- Help users understand how to use a function.
- Help developers understand what a function should do.
- Can be reused in tests/ and README

18.5 README: usethis::use_readme_rmd()

Gotchas:

- Used packages (library()) need to be listed in DESCRIPTION.
- Your package needs to be installed (devtools::install()).
- Needs to be in sync with README.md (i.e. must knit).
- tip: tidyverse is for EDA not packages

(This rigor feels annoying but helps find problems with the package structure.)

18.6 Websites

- usethis::use_pkgdown() + pkgdown::build_site().
- GitHub > Settings > GitHub Pages: Choose "master branch docs/ folder"