eRrata

Special topics in R

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Table of contents

Welcome to eRrata	3
Preface	4
Introduction Publishing this book (meta)	
I Object-oriented programming	7
Object-oriented programming: basics	8
Object-oriented programming in R	9
II Functions	10
Function names	11
Function arguments	12
Function structure	13
Function environments	14

Welcome to eRrata

A useR's collection of errors, misunderstandings, and collisions with the R programming language.

Preface

This book is collection of topics from the R programming language. It's organized more like a journal than a textbook, and each topic is centered around a problem or error I've encountered while developing R packages, data visualizations, functions, and shiny applications.

Some of the topics I've considered adding to this book have been already been covered (with more style and depth) in either the R inferno or What they forgot to teach you about R. If there's any duplication of content, it's presence should only indicate this topic was especially difficult for me to grasp, even after consulting these resources (multiple times).

This book was written in Quarto (learn more about Quarto books).

Introduction

This is a book created from markdown and executable code. See Knuth (1984) for additional discussion of literate programming.

I've left the boilerplate text above because 1) everyone should know about Donald Knuth and his contributions to computational notebooks, and 2) I wanted to keep a working example for the references.qmd and references.bib files when I build the book.

Publishing this book (meta)

I'm going to include the steps for publishing this book *inside* the book so I can come back later and know what I've done (readers might also find this information useful).

This quarto book project has the following contents:

```
+-- _book
+-- _quarto.yml
+-- cover.png
+-- eRrata.Rproj
+-- fun-arguments.qmd
+-- fun-environments.qmd
+-- fun-names.qmd
+-- fun-structure.qmd
+-- index.html
+-- index.qmd
+-- intro.html
+-- intro.qmd
+-- intro.rmarkdown
+-- intro_files
+-- oop-basics.qmd
+-- oop-in-r.qmd
+-- preface.html
+-- preface.qmd
+-- references.bib
```

```
+-- references.qmd
+-- renv
+-- renv.lock
\-- site_libs
```

The GitHub repo for this book is here, and it's been set up to publish with GitHub pages.

Using Git

Basic knowledge of Git has become somewhat necessary when you decide to enter the R ecosystem (or other open-source projects). I won't be diving into Git commands here, but I will cover what commands I used to store and publish this book.

- 1. Create a repository on GitHub.com like this one: mjfrigaard/eRrata
- 2. Add and commit the files in the book repo:

```
git add -A
git commit -m "first commit"
```

4. Push the local repo to GitHub repo

```
git remote add origin git@github.com:mjfrigaard/eRrata.git
git branch -M main
git push -u origin main
```

Part I Object-oriented programming

Object-oriented programming: basics

Object-oriented programming in R

Part II Functions

Function names

Function arguments

Function structure

Function environments

Knuth, Donald E. 1984. "Literate Programming." Comput.~J.~27~(2):~97-111.~https://doi.org/10.1093/comjnl/27.2.97.