



Hello Positron

Part of "Introduction to Positron" workshop

Posit, PBC



pos.it/ron-caskdr

Install Positron

- Latest released version: <https://positron.posit.co/download>
- Latest pre-release: <https://github.com/posit-dev/positron/releases>
 - For Cascadia R Conf, latest pre-release is 2025.07.0 (Universal) build ??

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Developer Educator

Developer Relations

Posit, PBC

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 @cwick.co.nz

 @cvwickham

Your turn

Introduce yourself to your neighbor(s)

- Name
- What you use R for
- One word that describes how you are feeling about Positron

hello.qmd — positron-workshop

New Open

Search

R 4.4.2 positron-workshop

raukr.qmd setup.qmd 01-hello-positron.qmd hello.qmd

Preview Render on Save Source Visual

Insert Code Cell

hello.qmd > Meet the penguins

```
1 ---
2 title: "Hello, Quarto"
3 format: html
4 editor: visual
5 ---
6
7 {r}
8 # label: load-packages
9 # include: false
10
11 library(tidyverse)
12 library(palmerpenguins)
13
14
15 ## Meet Quarto
16
17 Quarto enables you to weave together content and executable code into a
18 finished document.
19 To learn more about Quarto see <https://quarto.org>.
20
21 ## Meet the penguins
22
23 {style="float:right;"
25 fig-alt="Illustration of three species of Palmer Archipelago penguins:
26 Chinstrap, Gentoo, and Adelie. Artwork by @allison_horst." width="401"}
```

SESSION CONNECTIONS HELP VIEWER

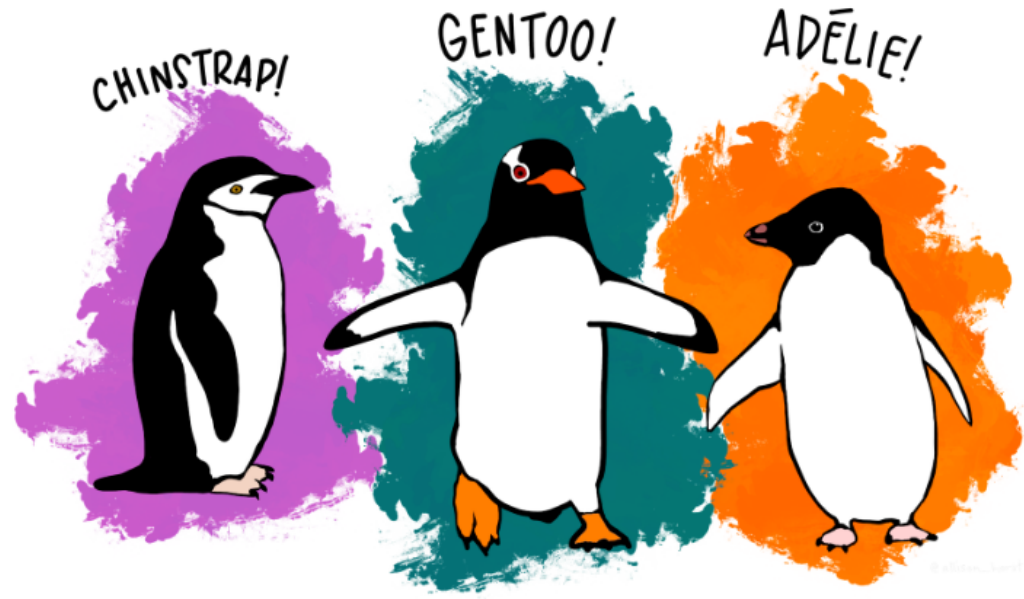
http://localhost:7212/hello.html Zoom: 100%

Hello, Quarto

Meet Quarto

Quarto enables you to weave together content and executable code into a finished document. To learn more about Quarto see <https://quarto.org>.

Meet the penguins



The `penguins` data from the `palmerpenguins` package contains size measurements for 344 penguins from three species observed on three islands in the Palmer Archipelago, Antarctica.

The plot below shows the relationship between

Ln 22, Col 238 Spaces: 2 UTF-8 LF {} Quarto

Positron is ...


- A next-generation **data science** IDE
- A tool for writing code **and** exploring data
- Familiar (RStudio-ish) and extensible (soft fork of VS Code)
- Multilingual data science: R and Python (as of today)
- Plots, variables, console, help, viewer, data explorer

Should I switch from RStudio to Positron?

- It's still early days for Positron! Are you happy as an early adopter?
- RStudio is not going away. >10 years of engineering has gone into RStudio. It's very stable and completely built-out.
- If you work in both R and Python (or any other language), Positron is probably a good fit.
- If you like to customize your working environment, you'll appreciate the extension ecosystem and the possibility of creating your own.
- Positron is under much more active development.

Why didn't you just do {this other thing} ?

- Why not build a polyglot IDE based on RStudio?
- Why not build a VS Code extension?
- Watch Jonathan McPherson's posit::conf talk "How Positron Works"
 - Clip about general IDE features
 - Clip about R crashing and Positron not crashing



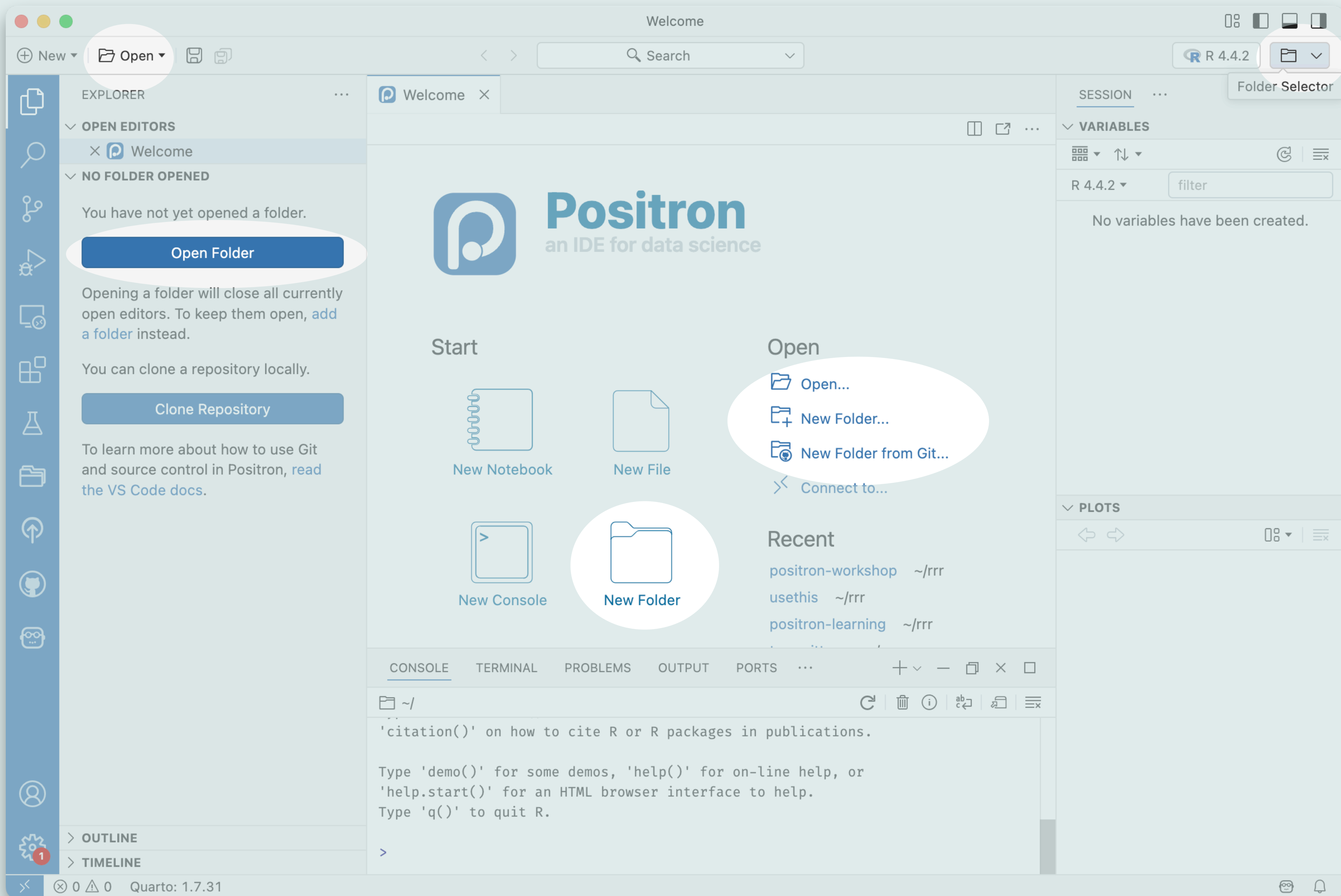
Workspace is a core concept in Positron

A **workspace** is just a **folder***

Similar to a **Project** in RStudio

Pro tip: work in a **folder** most (all?) of the time

* Or, at least, it can be and often is that simple



New

Open

Save

Copy

Search

R 4.4.2

usethis

EXPLORER

OPEN EDITORS

create.R R

USETHIS

.github

.Rproj.user

.vscode

docs

inst

man

pkgdown

R

addin.R

air.R

author.R

badge.R

block.R

browse.R

ci.R

citation.R

code-of-conduct.R

course.R

coverage.R

cpp11.R

cran.R

create.R

data-table.R

data.R

description.R

directory.R

OUTLINE

TIMELINE

create.R

R > create.R > ...

1 #' Create a package or project

2 #'

3 #' @description

4 #' These functions create an R project:

5 #' * `create_package()` creates an R package

6 #' * `create_project()` creates a non-package project, i.e. a data analysis

7 #' project

8 #'

9 #' Both functions can be called on an existing project; you will be asked before

10 #' any existing files are changed.

11 #'

12 #' @inheritParams use_description

13 #' @param fields A named list of fields to add to `DESCRIPTION`, potentially

14 #' overriding default values. See [use_description()] for how you can set

15 #' personalized defaults using package options.

16 #' @param path A path. If it exists, it is used. If it does not exist, it is

17 #' created, provided that the parent path exists.

18 #' @param roxygen Do you plan to use roxygen2 to document your package?

19 #' @param rstudio If `TRUE`, calls [use_rstudio()] to make the new package or

20 #' project into an [RStudio

21 #' Project](https://r-pkgs.org/workflow101.html#sec-workflow101-rstudio-projects).

22 #' If `FALSE` and a non-package project, a sentinel `.here` file is placed so

23 #' that the directory can be recognized as a project by the

24 #' [here](https://here.r-lib.org) or

CONSOLE

TERMINAL

PROBLEMS

TEST RESULTS

OUTPUT

PORTS

~/rrr/usethis

> |

SESSION

VARIABLES

R 4.4.2

filter

No variables have been created.

PLOTS

main

0 ↓ 1 ↑

0 0

usethis

Quarto: 1.7.31

Ln 1, Col 1

Spaces: 2

UTF-8

LF

R

R 4.3.3

R 4.4.3

R 4.5.0



The image shows the Visual Studio Code (VS Code) interface. A modal dialog titled "Select Interpreter Session" is open, showing "R 4.4.2 Currently Selected" with the path "/Library/Frameworks/R.framework/Versions/4.4-arm64/Resource...". Below the dialog, the Explorer sidebar on the left shows the file structure with "create.R" selected under the "R" folder. The main editor area displays the content of "create.R", which is a script for creating an R project. The Console at the bottom shows the R startup sequence, including the license notice, the message "Natural language support but running in an English locale", and the loading of the "usethis" package via "devtools::load_all()". The status bar at the bottom indicates the current file is "main*" and the project is "usethis" using "Quarto: 1.7.31".

New

Open

EXPLORER

OPEN EDITORS

USETHIS

OUTLINE

TIMELINE

create.R

R >

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CONSOLE

TERMINAL

PROBLEMS

TEST RESULTS

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~/rrr/usethis

>

Start New Interpreter Session

Python 3.11.11 (Pyenv)

~/.pyenv/versions/3.11.11/bin/python

Python 3.10.16 (Pyenv)

~/.pyenv/versions/3.10.16/bin/python

Python 3.13.3 (Global)

/opt/homebrew/bin/python3

Python 3.9.6 (Global)

/usr/bin/python3

R 4.4.2

/Library/Frameworks/R.framework/Versions/4.4-arm64/Resources/bin/R

R 4.5.0

/Library/Frameworks/R.framework/Versions/4.5-arm64/Resources/bin/R

R 4.3.3

/Library/Frameworks/R.framework/Versions/4.3-arm64/Resources/bin/R

R 4.4.2

usethis

SESSION

VARIABLES

R 4.4.2

filter

No variables have been created.

PLOTS

main

0↓ 1↑

0 0

usethis

Quarto: 1.7.31

Ln 1, Col 1

Spaces: 2

UTF-8

LF

R

The screenshot displays the RStudio IDE interface. The main editor window shows the 'create.R' script, which contains the following comments:

```
R > create.R > ...  
1 #' Create a package or project  
2 #'  
3 #' @description  
4 #' These functions create an R project:  
5 #' * `create_package()` creates an R package  
6 #' * `create_project()` creates a non-package project, i.e. a data analysis  
7 #' project  
8 #'  
9 #' Both functions can be called on an existing project; you will be asked before  
10 #' any existing files are changed.  
11 #'  
12 #' @inheritParams use_description  
13 #' @param fields A named list of fields to add to `DESCRIPTION`, potentially  
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17 #' created, provided that the parent path exists.  
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23 #' that the directory can be recognized as a project by the  
24 #' [here](https://here.r-lib.org) or
```

The left sidebar shows the file explorer with the 'create.R' file selected. The right sidebar shows the 'SESSION' and 'VARIABLES' panels. A dropdown menu is open in the bottom right corner, showing the R version selection options: R 4.4.2, R 4.5.0, R 4.5.0, and R 4.3.3.



rig

Standalone tool to manage multiple R installations

Not part of Positron, but a great complement

Especially important for macOS users

<https://github.com/r-lib/rig>

Positron defaults to the "blank slate" lifestyle

```
R --no-save --no-restore-data
```


create.R — usethis

New

Open

EXPLORER

OPEN EDITORS

create.R R

USETHIS

> .github

> .Rproj.user

> .vscode

> docs

> inst

> man

> pkgdown

R

addin.R

air.R

author.R

badge.R

block.R

browse.R

ci.R

citation.R

code-of-conduct.R

course.R

coverage.R

cpp11.R

cran.R

create.R

data-table.R

data.R

description.R

directory.R

OUTLINE

TIMELINE

create.R

R > create.R > ...

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CONSOLE

TERMINAL

PROBLEMS

OUTPUT

PORTS

DEBUG CONSOLE

~/rrr/usethis

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> devtools::load_all()

i Loading usethis

>

R 4.4.2

R 4.5.0

R 4.3.3

SESSION

VARIABLES

R 4.4.2

filter

No variables have been created.

PLOTS

main*

0 0 0

usethis

Quarto: 1.7.31

Ln 1, Col 1

Spaces: 2

UTF-8

LF

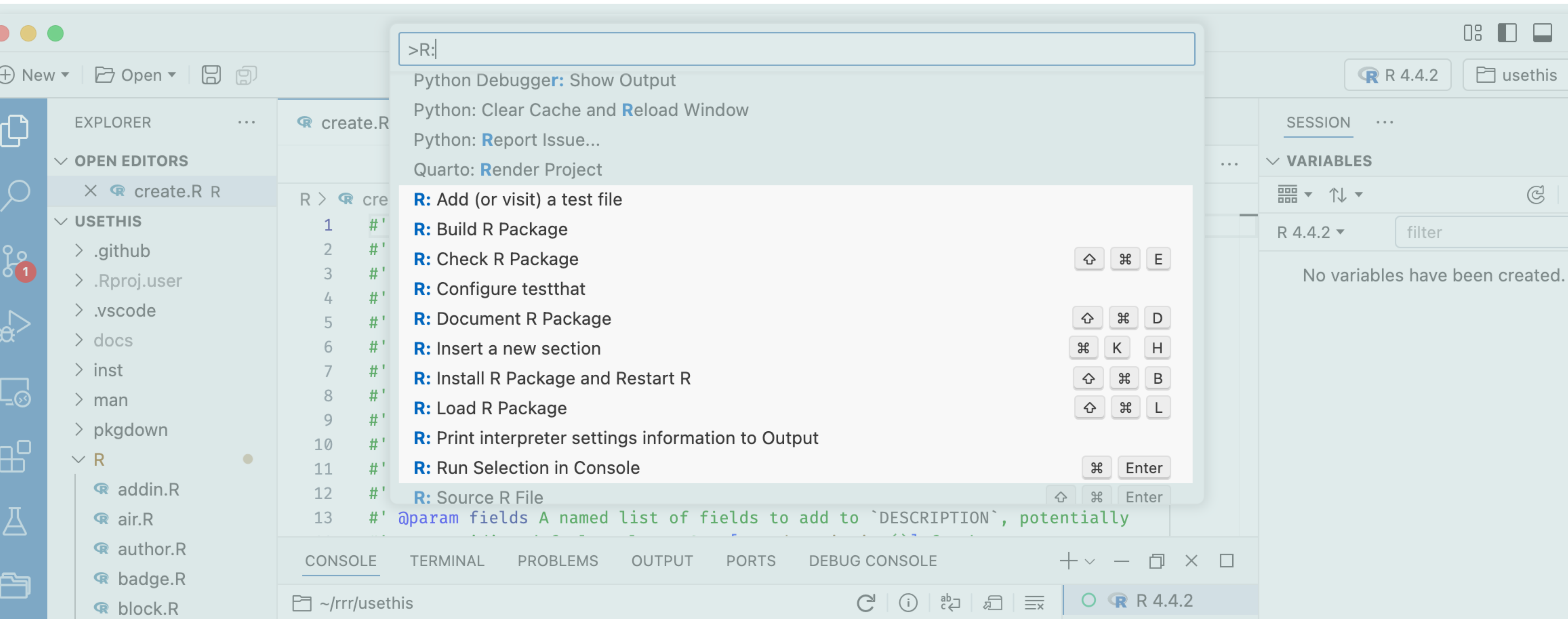
R



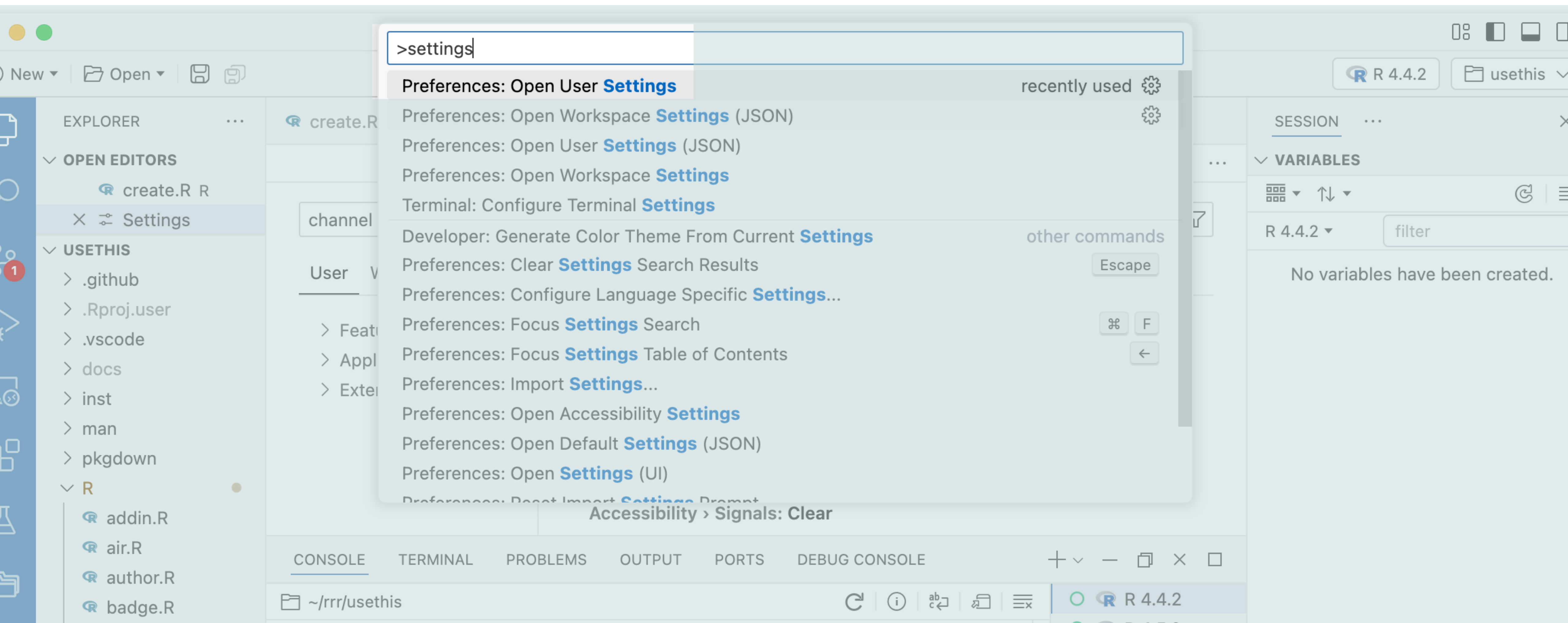
The
command palette
is a core concept in Positron

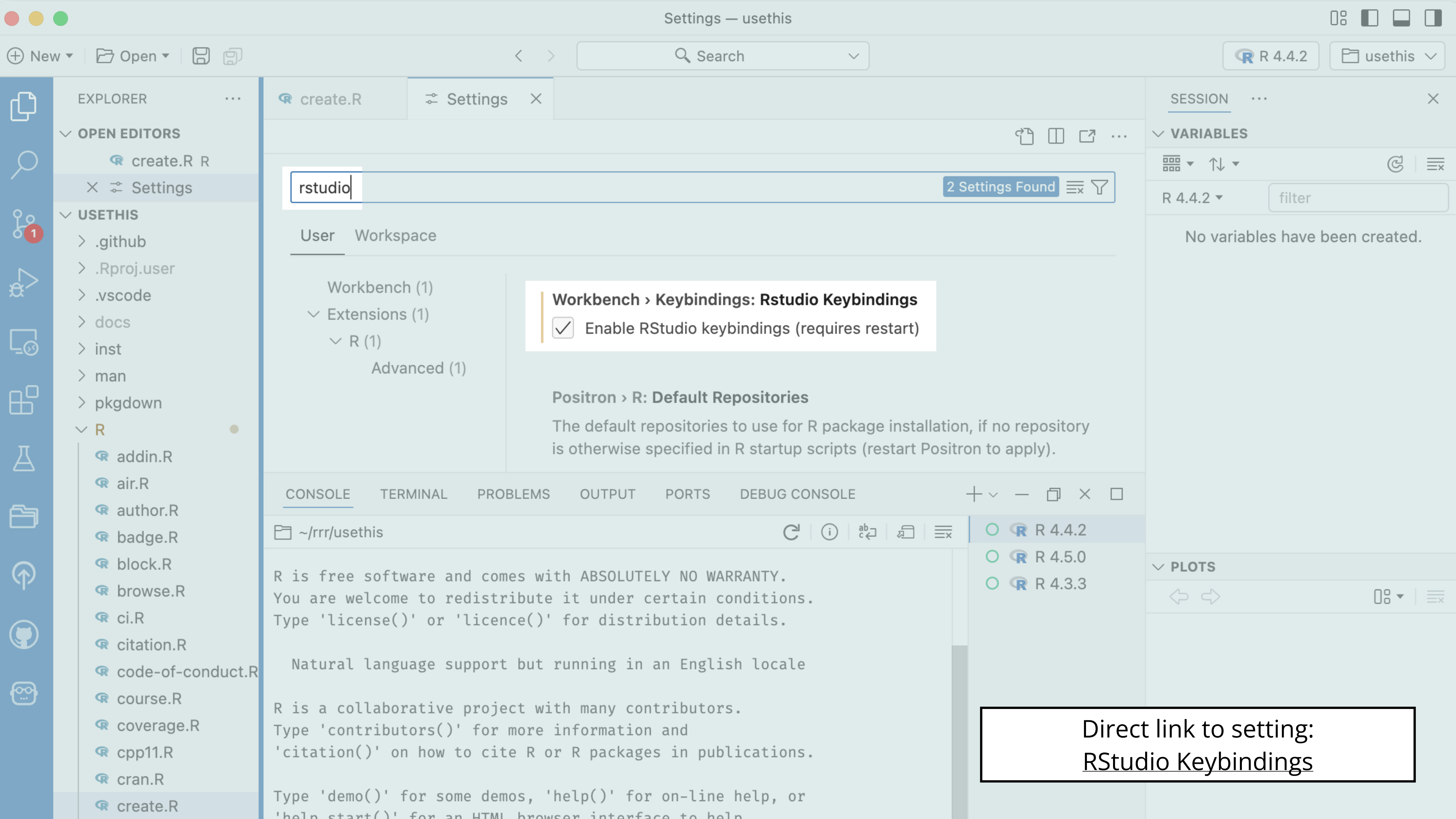
Ctrl/Cmd + Shift + P

Ctrl/Cmd + Shift + P

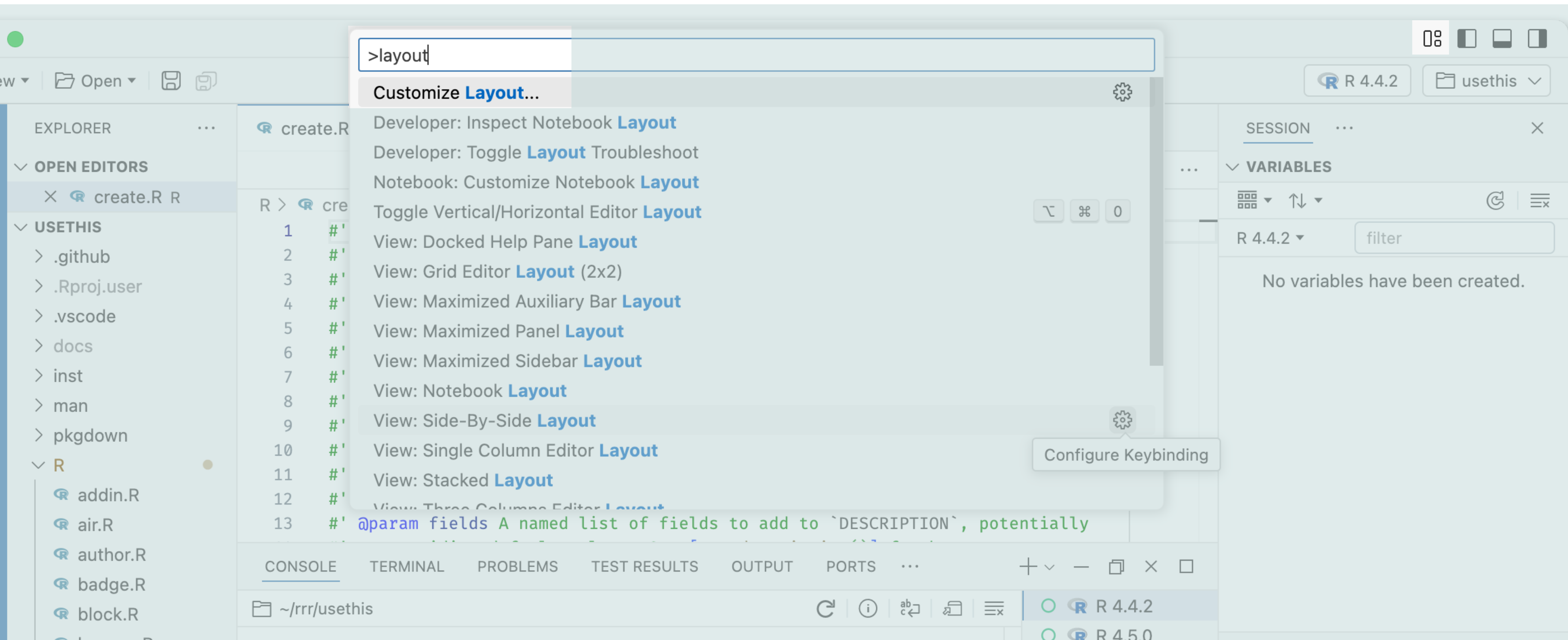


Ctrl/Cmd + Shift + P





Ctrl/Cmd + Shift + P



⊕ New ▾

📂 Open ▾

💾

📄

EXPLORER

...

create.R

OPEN EDITORS

create.R R

USETHIS

.github

.Rproj.user

.vscode

docs

inst

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R

addin.R

air.R

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R >

create.R

1 #'

2 #'

3 #'

4 #'

5 #'

6 #'

7 #'

8 #'

9 #'

10 #'

11 #'

12 #'

13 #' @param fields A named list of fields to add to `DESCRIPTION`, potentially

CONSOLE

TERMINAL

PROBLEMS

TEST RESULTS

OUTPUT

PORTS

...

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📄

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~/rrr/usethis

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📄

☰

R 4.4.2

R 4.5.0

R 4.3.3

R is free software and comes with ABSOLUTELY NO WARRANTY.

Customize Layout

↶

×

Layout Presets

📄 Stacked Layout

📄 Side-By-Side Layout

📄 Notebook Layout

☐ Top Bar

☐ Activity Bar

☒ Primary Side Bar

☐ Secondary Side Bar

☐ Panel

☐ Status Bar

Visibility

⌘

B

⌘

B

⌘

J

☒ Left ✓

☐ Right

Primary Side Bar Position

☐ Left

☐ Right

☒ Center ✓

☐ Justify

Panel Alignment

SESSION

...

×

VARIABLES

...

🔍

↕

↕

🔄

☰

R 4.4.2

filter

No variables have been created.

PLOTS

Install extensions from Open VSX

