



Quarto + Positron

Part of "Doing data science in Positron" workshop

Posit Software, PBC



Positron is Quarto-ready out-of-the-box

- Bundles Quarto CLI (or uses Quarto it finds on your path)
- Bundles Quarto VS Code Extension

Demo

Basic Workflow

- Open `hello.qmd`
- Preview button (aka Render button in RStudio)
 - Quarto commands are run in Terminal pane
 - Preview opens in Viewer pane
- Command: **Quarto: Preview format...**

Preview button

Opens in Viewer

Runs quarto preview in Terminal

Quarto version

hello.qmd — positron-workshop-project

Search

hello.qmd X

Preview Render on Save Source Visual Insert Code Cell

hello.qmd > load-packages

1 ---

2 title: "Hello, Quarto"

3 format:

4 html: default

5 pdf: default

6 ---

7

8 > Run Cell | Run Next Cell

9 ```{r}

10 #| label: load-packages

11 #| include: false

12 library(tidyverse)

13 library(palmerpenguins)

14 ```

15

16 # Meet the penguins

17

18

19

20

21

22

get-studio-netto/rstudio/ter_penguins.png){style= float:right;

fig alt="Illustration of three species of Palmer Archipelago penguins:

SESSION HELP VIEWER CONNECTIONS

← → ↺ http://localhost:6004/ Zoom: 100%

Hello, Quarto

Meet Quarto

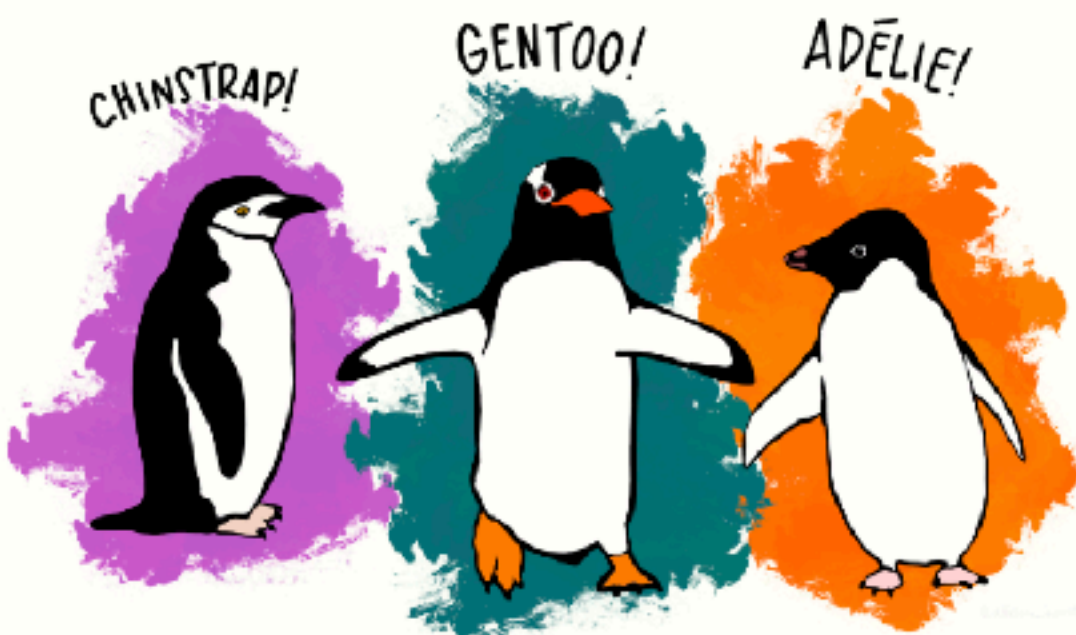
Quarto enables you to weave together content and executable code into a finished document. To learn more about Quarto see <https://quarto.org>.

Meet the penguins

The

guins

a from



[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 flipper and bill

ckham (6 days ago) Ln 9, Col 24 Spaces: 2 UTF-8 LF {} Quarto

CONSOLE TERMINAL PROBLEMS OUTPUT

Quarto Preview

posit/positron-workshop-project \$ quarto preview /Users/charlottewickham/Document

s/posit/positron-workshop-project/hello.qmd --no-browser --no-watch-inputs

title: Hello, Quarto

Output created: hello.html

Watching files for changes

Browse at http://localhost:6004/

Listening on http://127.0.0.1:6004/

main* 0 0 Quarto: 1.8.11

NewOpen

hello.qmd

PreviewRender on SaveSource

hello.qmd > ...

```
1 ---
2 title: "Hello, Quarto"
3 format:
4   html: default
5   pdf: default
6 ---
7
8 > Run Cell | Run Next Cell
9 ```{r}
10 #| label: load-packages
11 #| include: false
```

CONSOLE

TERMINAL

```
posit/positron-workshop-project $
ers/charlottewickham/Documents/posit/positron-worksh
op-project/hello.qmd --no-browser --no-watch-inputs

pandoc
to: html
output-file: hello.html
standalone: true
section-divs: true
html-math-method: mathjax
wrap: none
default-image-extension: png
variables: {}

metadata
document-css: false
link-citations: true
date-format: long
lang: en
title: Hello, Quarto

Output created: hello.html

Watching files for changes
Browse at http://localhost:3482/
Listening on http://127.0.0.1:3482/
```

Declared Formats

Preview HTML
format: html

Preview PDF (LaTeX)
format: pdf

Preview PDF (Typst)
format: typst

Preview MS Word
format: docx

Other Formats


Command:

Quarto: Preview format ...

R 4.3.3positron-workshop-project

Zoom: 100%

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 flipper and bill

main

Quarto: 1.8.11

Charlotte Wickham (1 week ago) Ln 5, Col 15 Spaces: 2 UTF-8 LF {} Quarto

NewOpenSave

hello.qmd

PreviewRender on SaveSource

hello.qmd > ...
1 ---
2 title: "Hello, Quarto"
3 format:
4 html: default
5 pdf: default
6 ---
7
8 > Run Cell | Run Next Cell
9 ```{r}
10 #| label: load-packages
11 #| include: false

CONSOLETERMINAL...
posit/positron-workshop-project \$ quarto preview /Users/charlottewickham/Documents/posit/positron-workshop-project/hello.qmd --no-browser --no-watch-inputs
4/4 [plot-penguins]
output file: hello.knit.md

pandoc
to: html
output-file: hello.html
standalone: true
section-divs: true
html-math-method: mathjax
wrap: none
default-image-extension: png
variables: {}

metadata
document-css: false
link-citations: true
date-format: long
lang: en
title: Hello, Quarto

Output created: hello.html

Watching files for changes

> Quarto:
Quarto: Preview Format...
Explorer: Focus on Quarto View
Quarto: Clear Cache...
Quarto: Create Project
Quarto: Edit in Visual Mode
Quarto: Edit Mode
Quarto: Format Cell
Quarto: Go to Next Cell
Quarto: Go to Previous Cell
Quarto: Insert Code Cell
Quarto: New Document
Quarto: New Notebook (ipynb)
Quarto: New Presentation
Quarto: Pin Assist Panel
Quarto: Preview

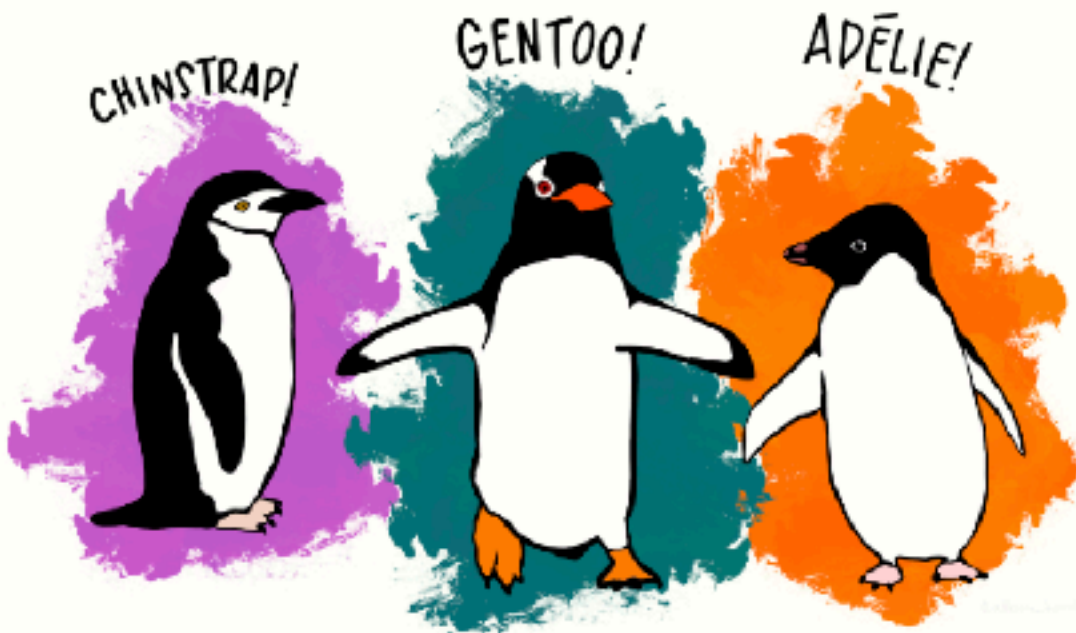
recently used
F1 other commands
F4
K F
PageDown
PageUp
I

R 4.3.3positron-workshop-project

Zoom: 100%

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 flipper and bill length of these penguins

mainQuarto: 1.8.11Charlotte Wickham (1 week ago)Ln 5, Col 15Spaces: 2UTF-8LF{}Quarto

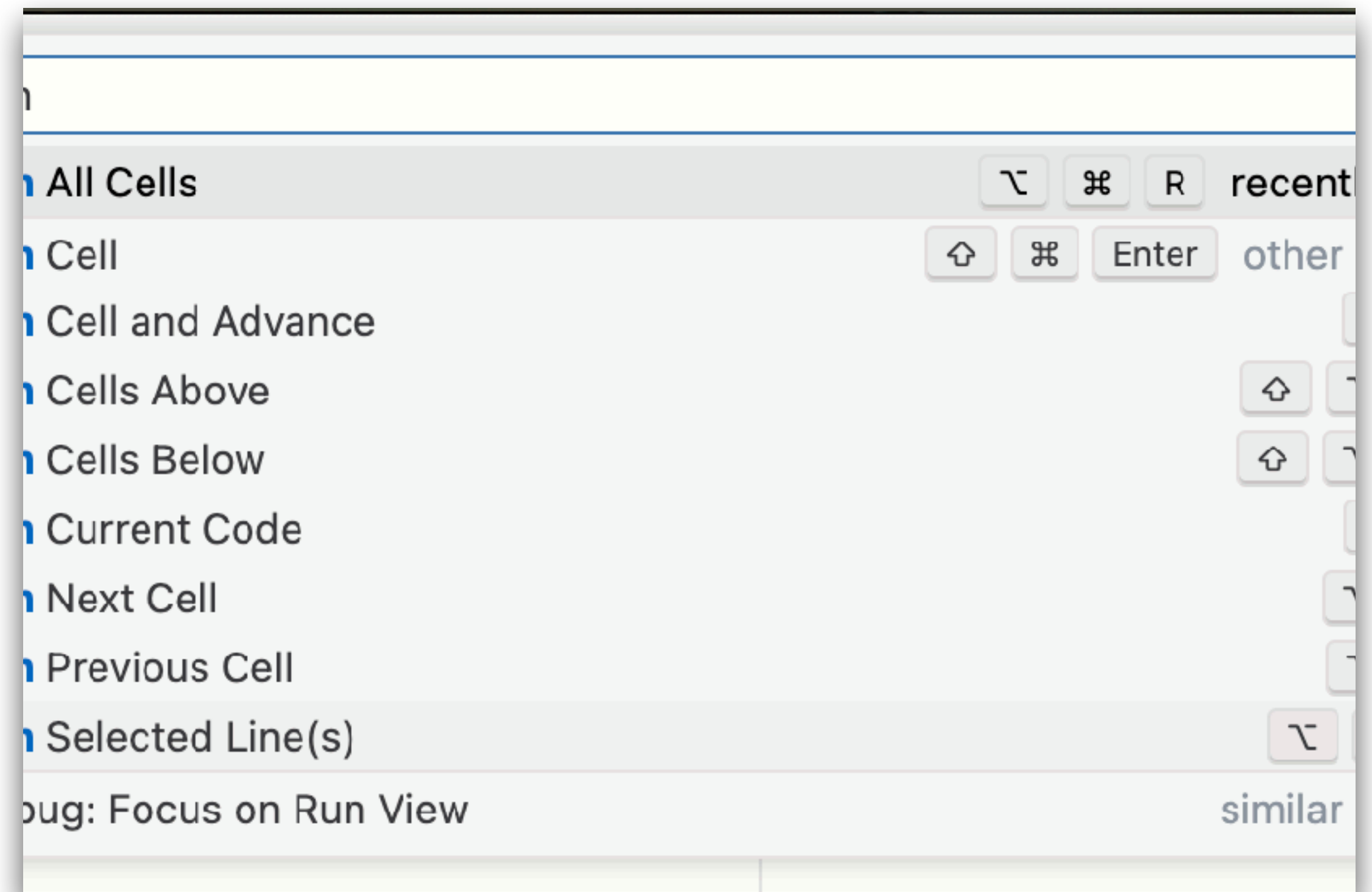
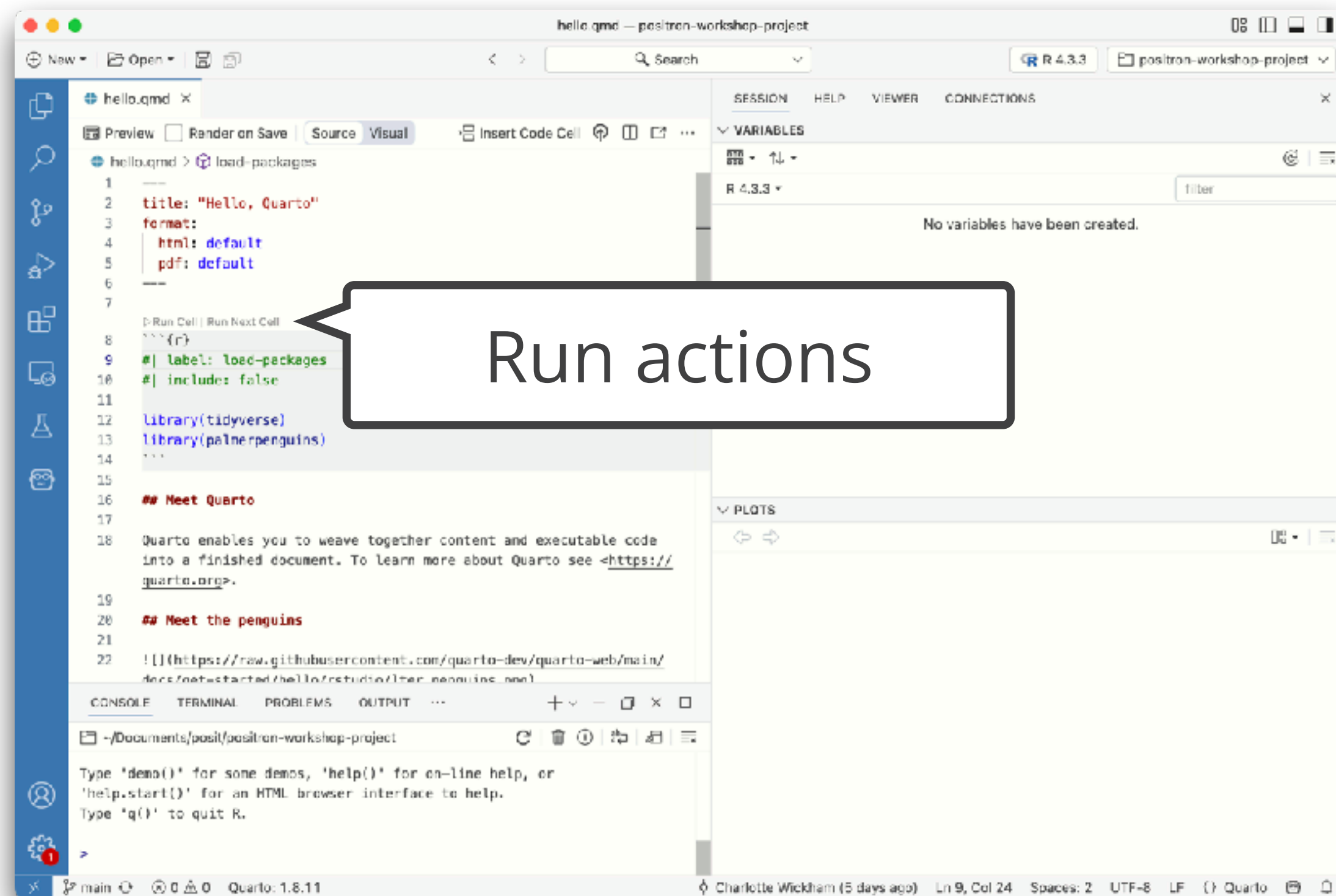
Demo

Document Workflow

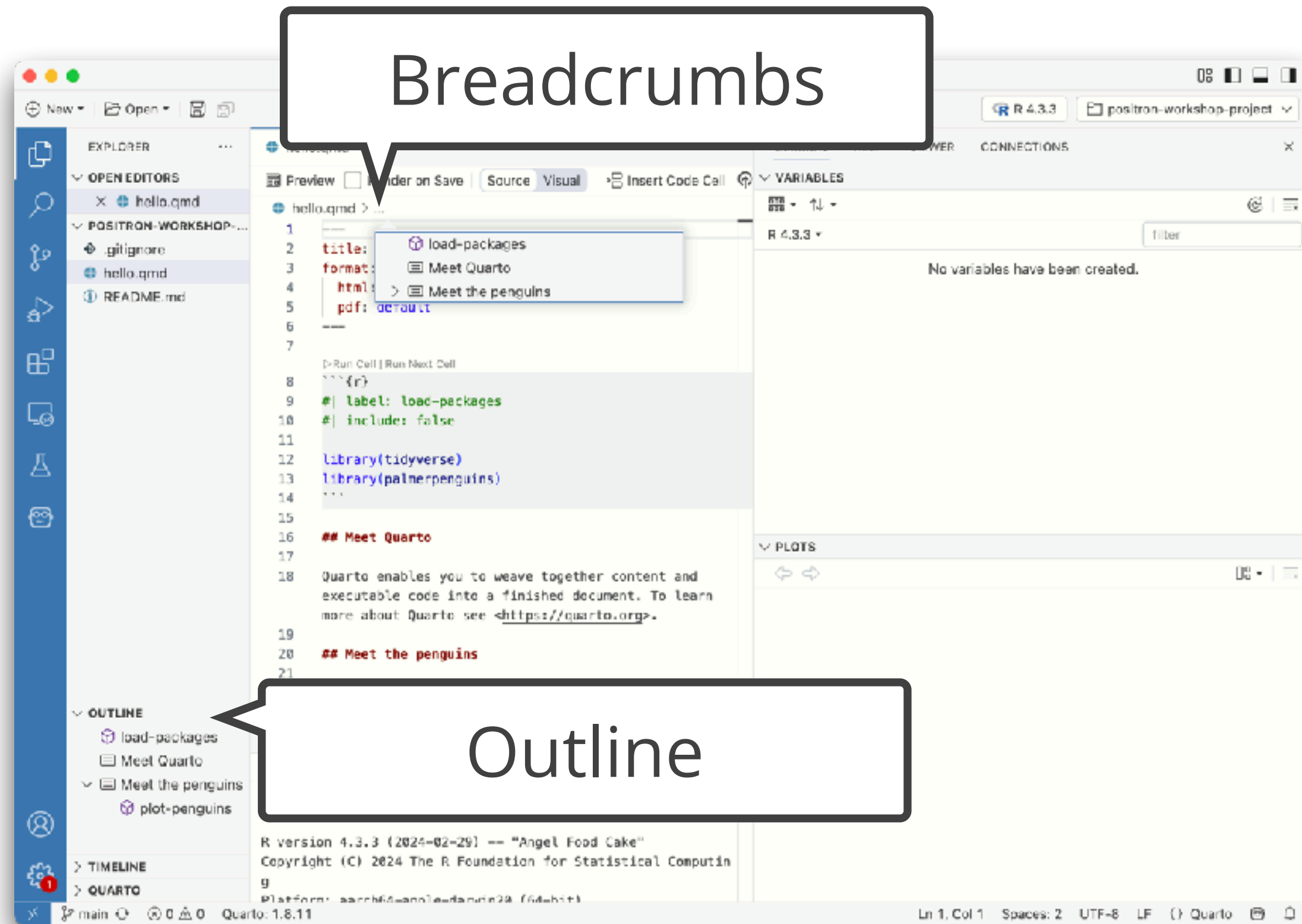
- Code cells
 - Run Selection: `cmd/ctrl+enter`
 - Run Cell: `shift+cmd/ctrl+enter`
 - Command Palette: **Quarto: Run ...**
- Navigation: Breadcrumbs, Outline pane, Command palette: **Go to Symbol in Editor**
- Visual mode
 - Insert Anything: `/`

Code Cells

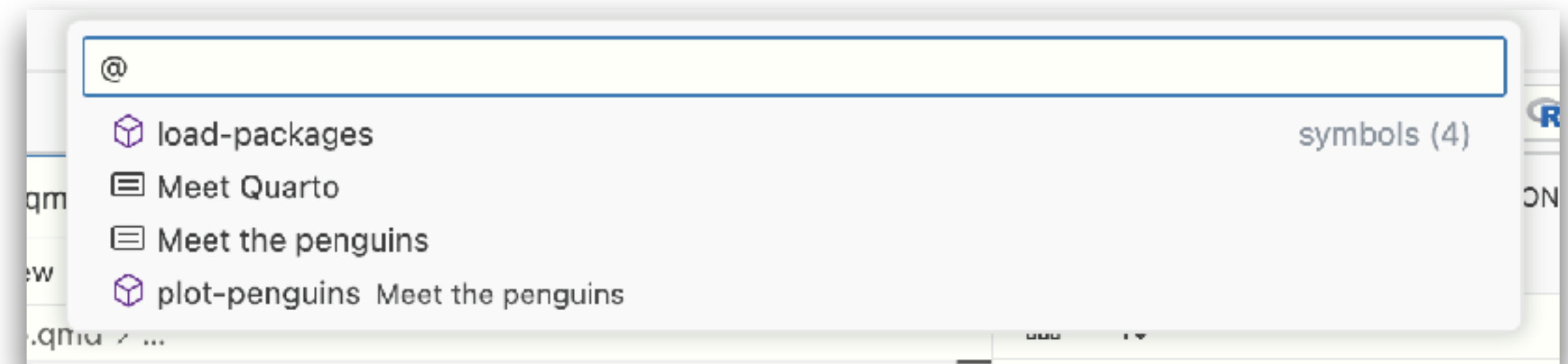
Commands:
Quarto: Run ...



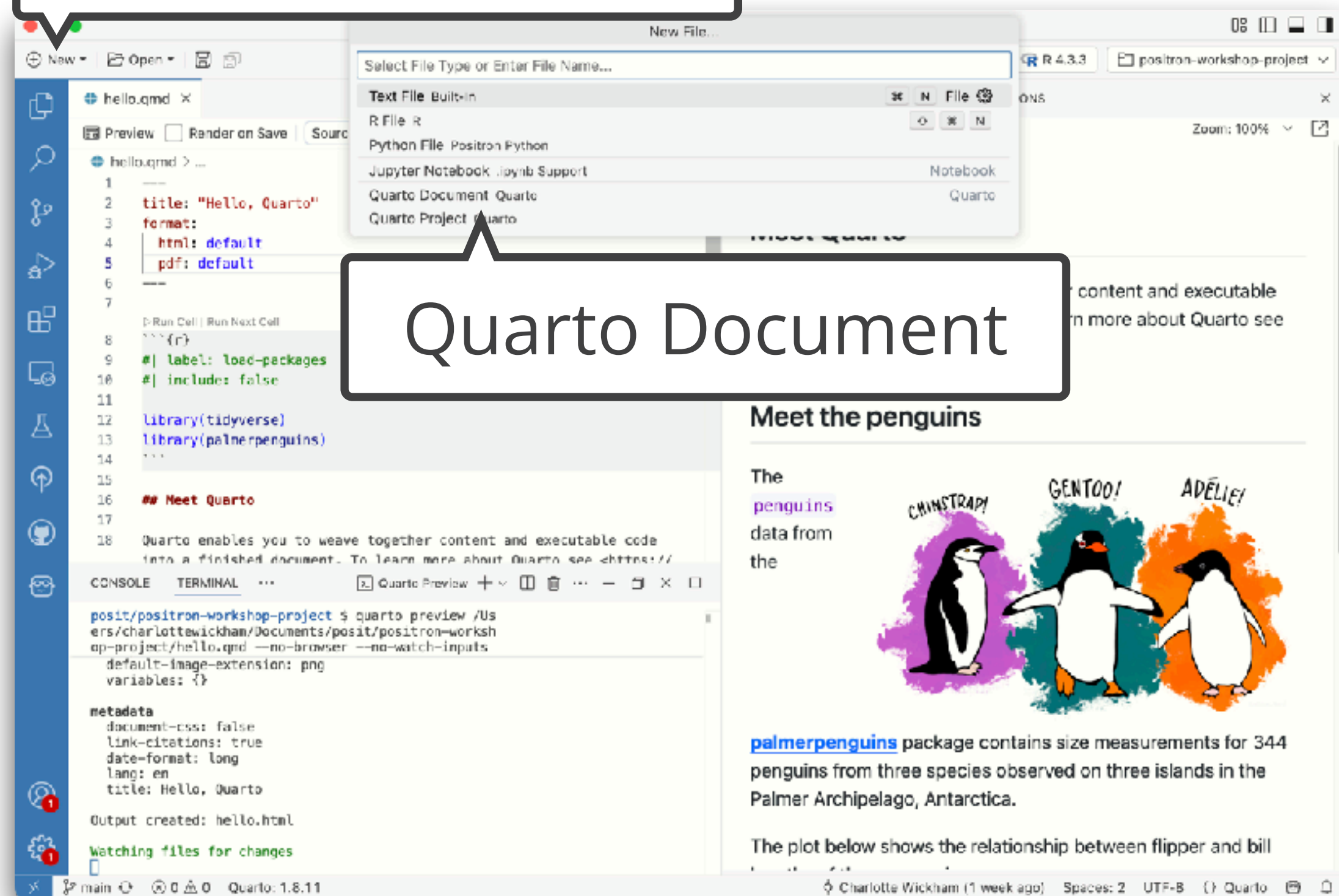
Navigation



Command:
Go to Symbol in Editor

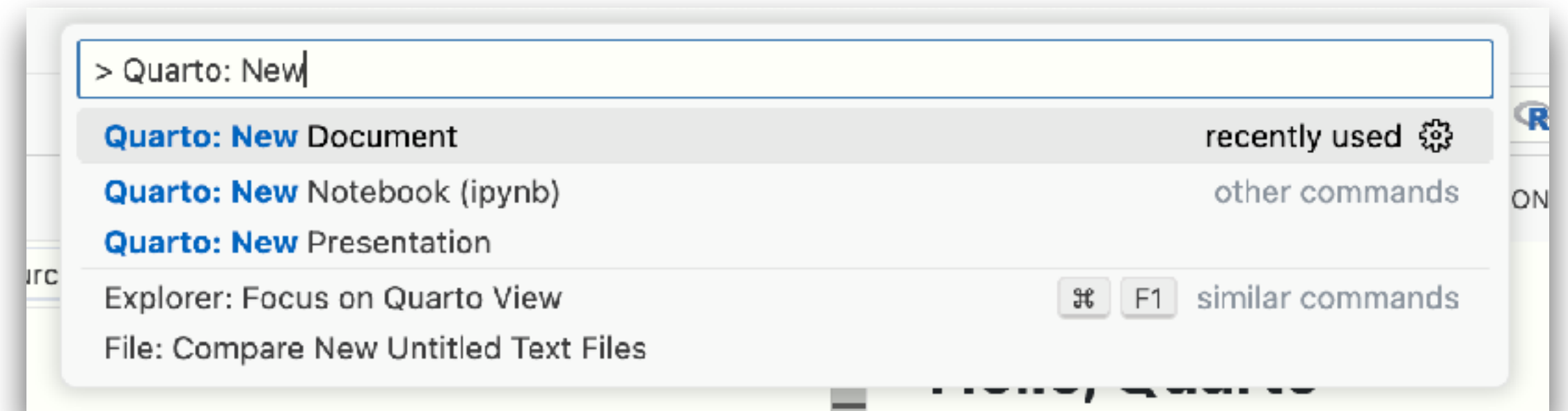


New > New File...



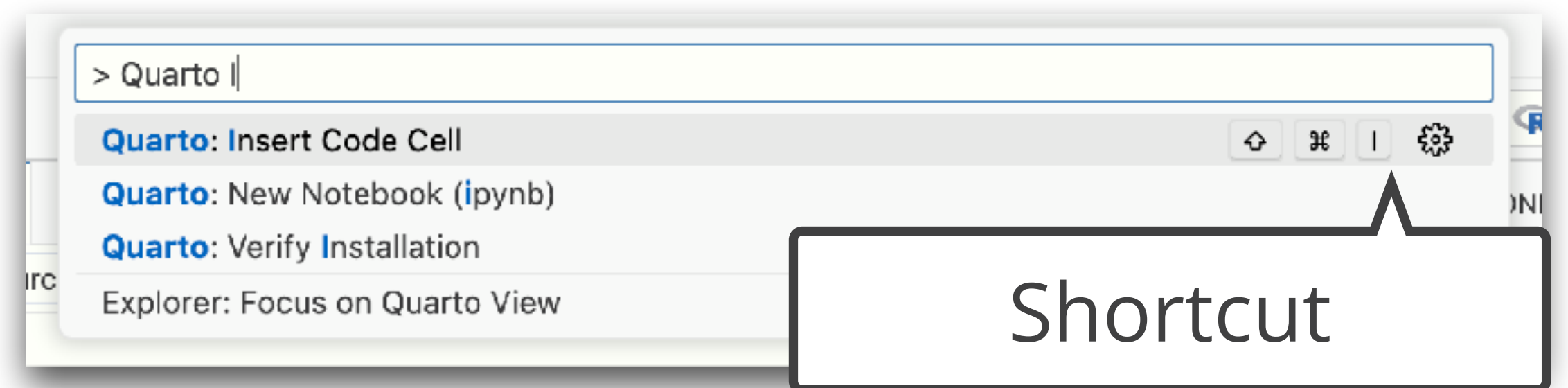
Quarto Document

Command:
Quarto: New Document





Command:
Quarto: Insert Code Cell



What's different?

- No inline preview of code output (aka **Chunk Output Inline** in RStudio)
- No push button publishing except to Posit Connect via Posit Publisher extension
- RMarkdown (.Rmd) files preview via Quarto.
Command palette: **R: Render with Document RMarkdown**

Updating Quarto

- **Strategy 1:** Rely entirely on Positron's bundled Quarto
 - Get updates as Positron is updated (⚙ Setting: Update: Auto Update)
 - Currently, no easy way to use this version outside of Positron
- **Strategy 2:** Manage Quarto outside of Positron
 - Update manually from quarto.org
 - Positron will prefer the manually installed version, even if it is older
- You can specify a specific Quarto with ⚙ Setting: Quarto: Path

Demo

Git Pane

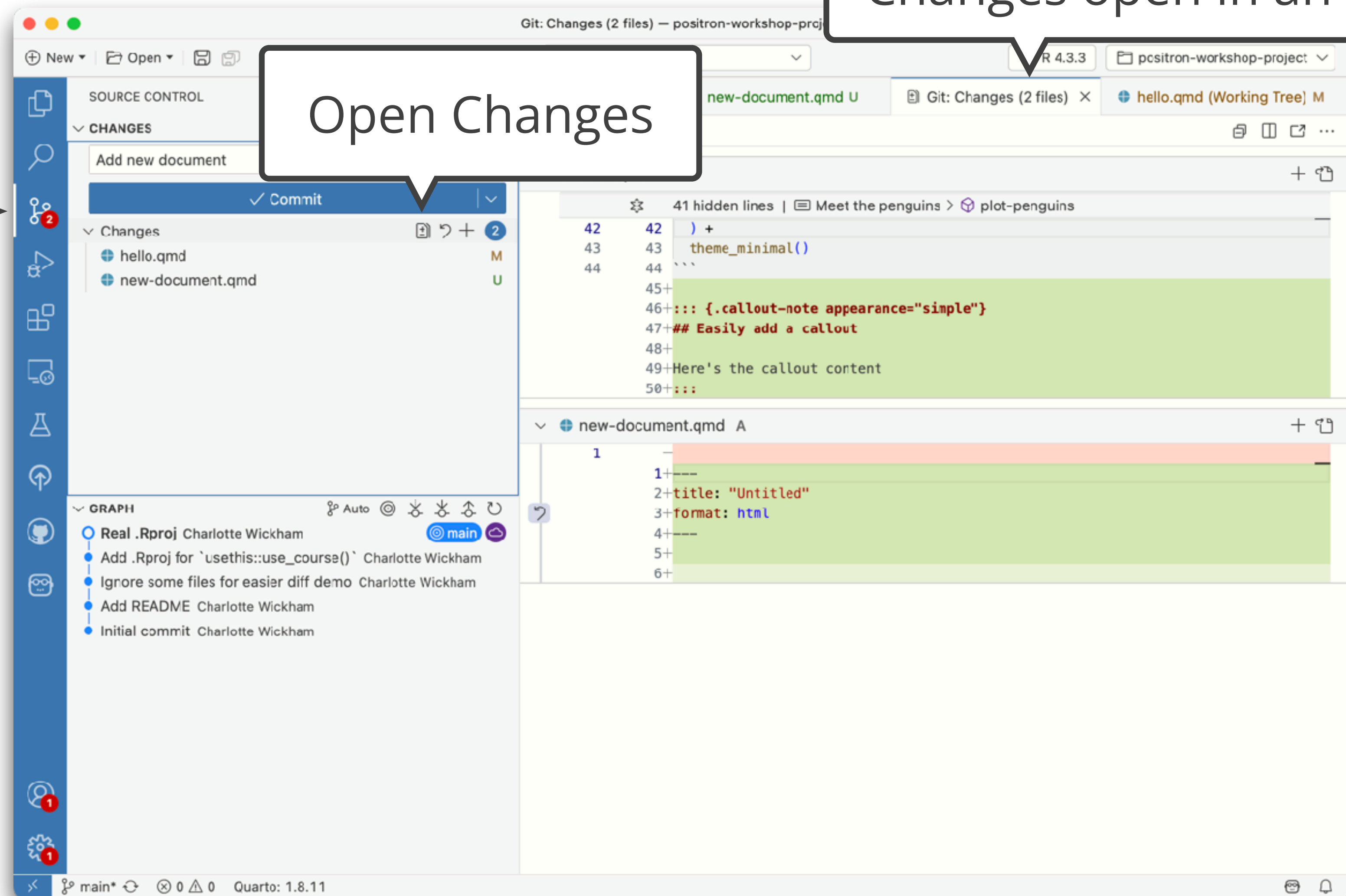
- Changes Pane
 - **Open Changes** closest to RStudio's diff
 - Changes open in Editor
 - Add, Commit
- Graph Pane
 - Pull/Push
 - Like RStudio's History view
- Current Branch
 - Click to get branch actions

Examine changes

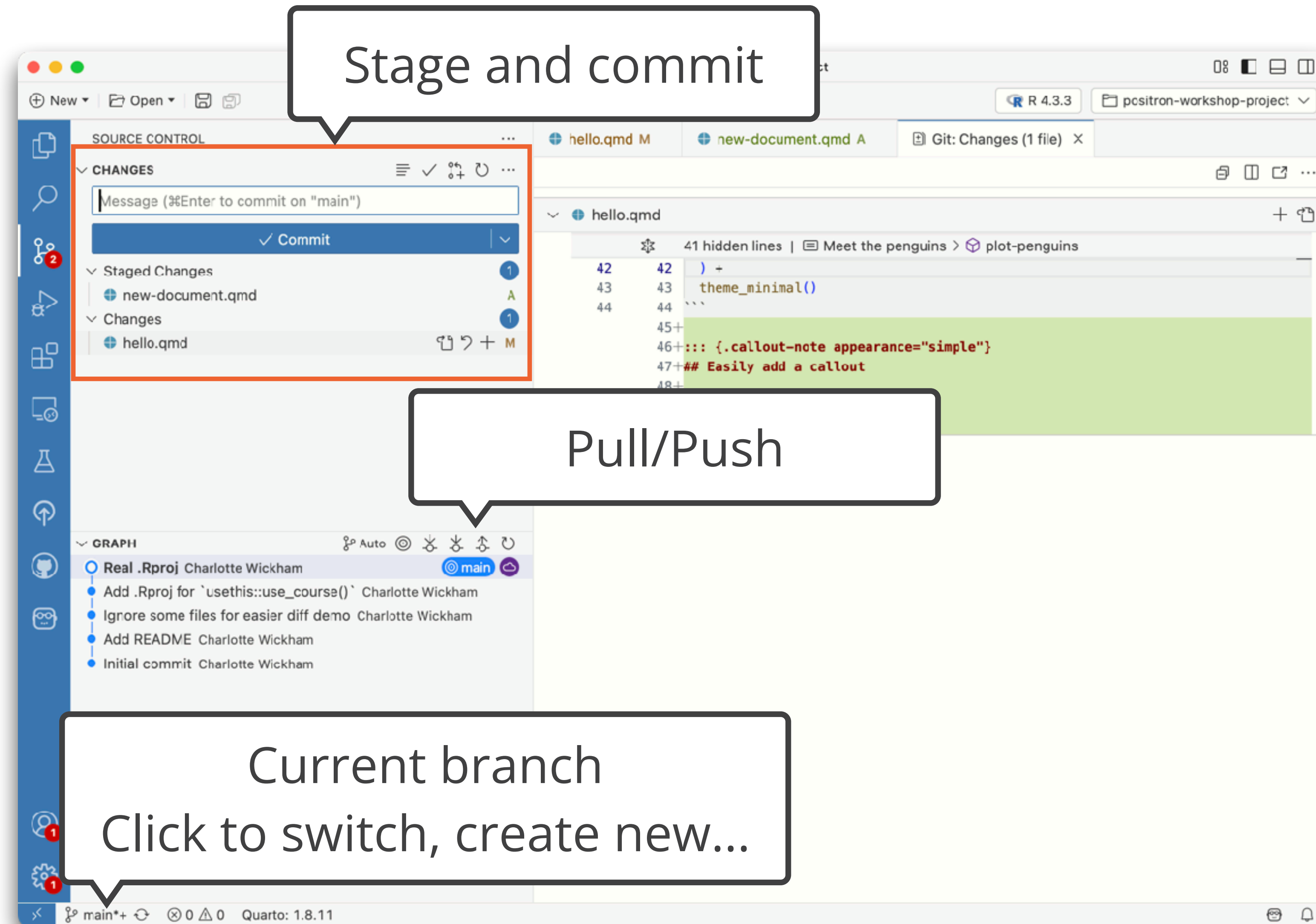
Changes open in an Editor

Git Pane

Open Changes



Git workflow



Learn more

Quarto docs: Guide > Tools > Positron

<https://quarto.org/docs/tools/positron/>

VS Code docs: Source Control

<https://code.visualstudio.com/docs/sourcecontrol/overview>