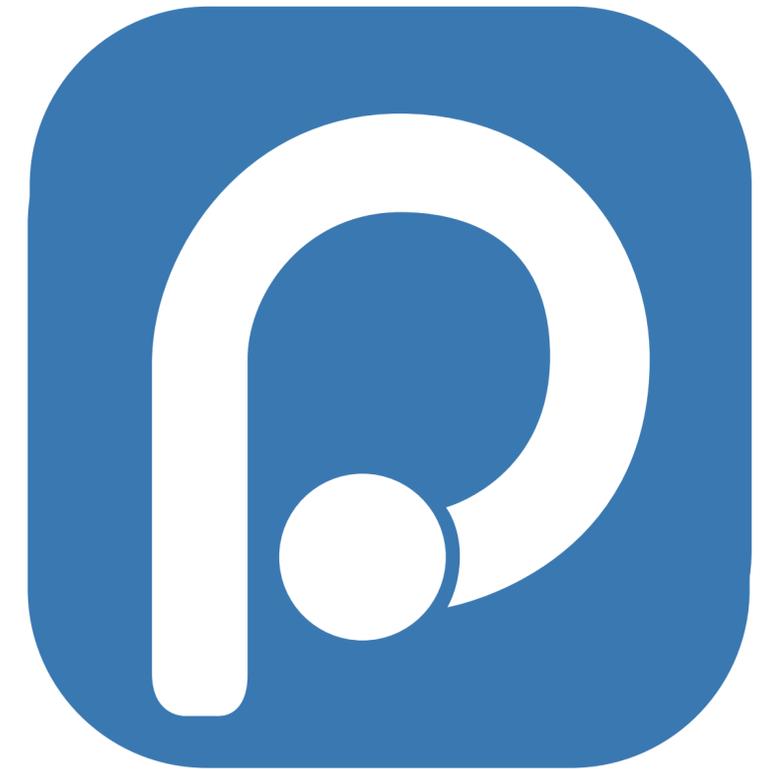


Customization + extensibility

Part of "Introduction to Positron" workshop



Settings

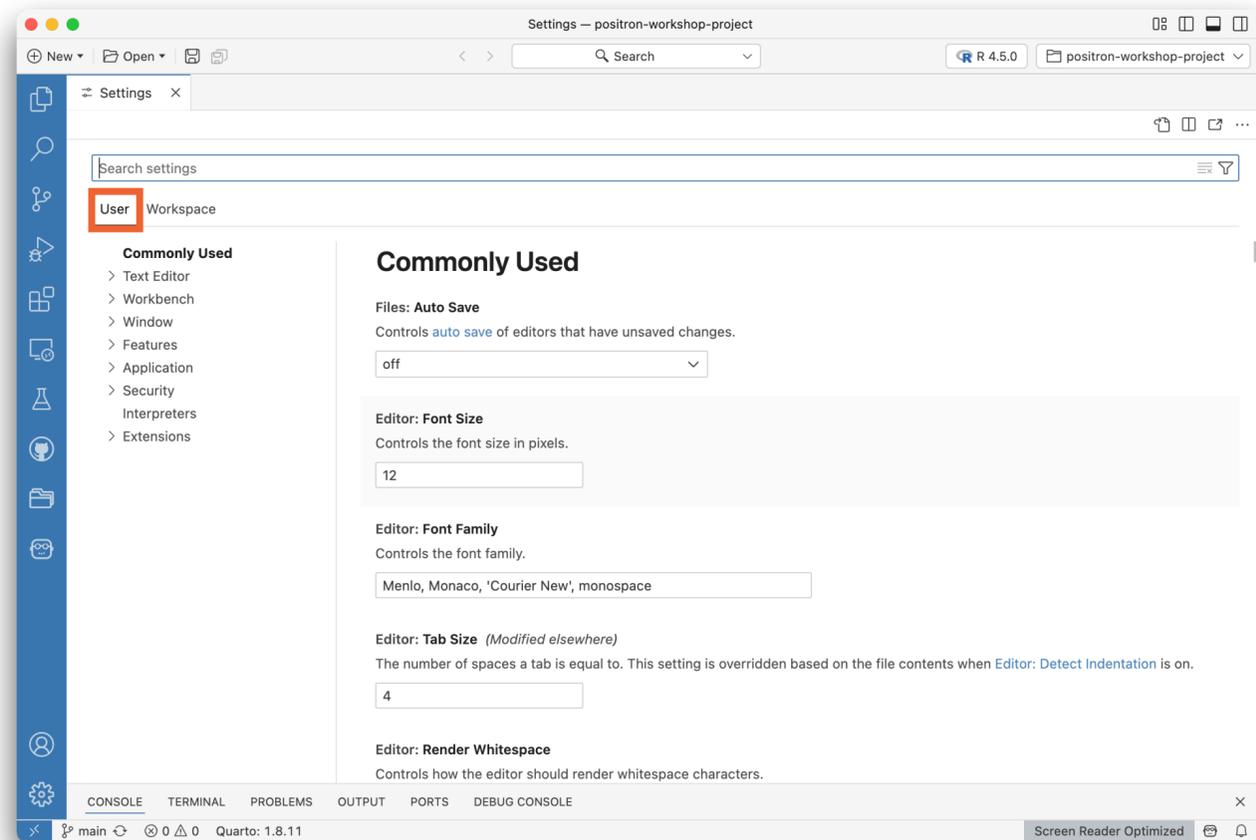
Settings

- Nearly every part of Positron's editor, user interface, and functional behavior has customizable options.
- Settings can be customized at two different scopes:
 - **User settings:** Settings that apply globally to any instance of Positron you open.
 - **Workspace settings:** Settings stored inside your workspace (folder) and only apply when the workspace is opened.
- Positron stores setting values in a settings JSON file.
- Settings can be changed by:
 - editing the settings JSON file or
 - using the Settings editor interface

Updating user settings

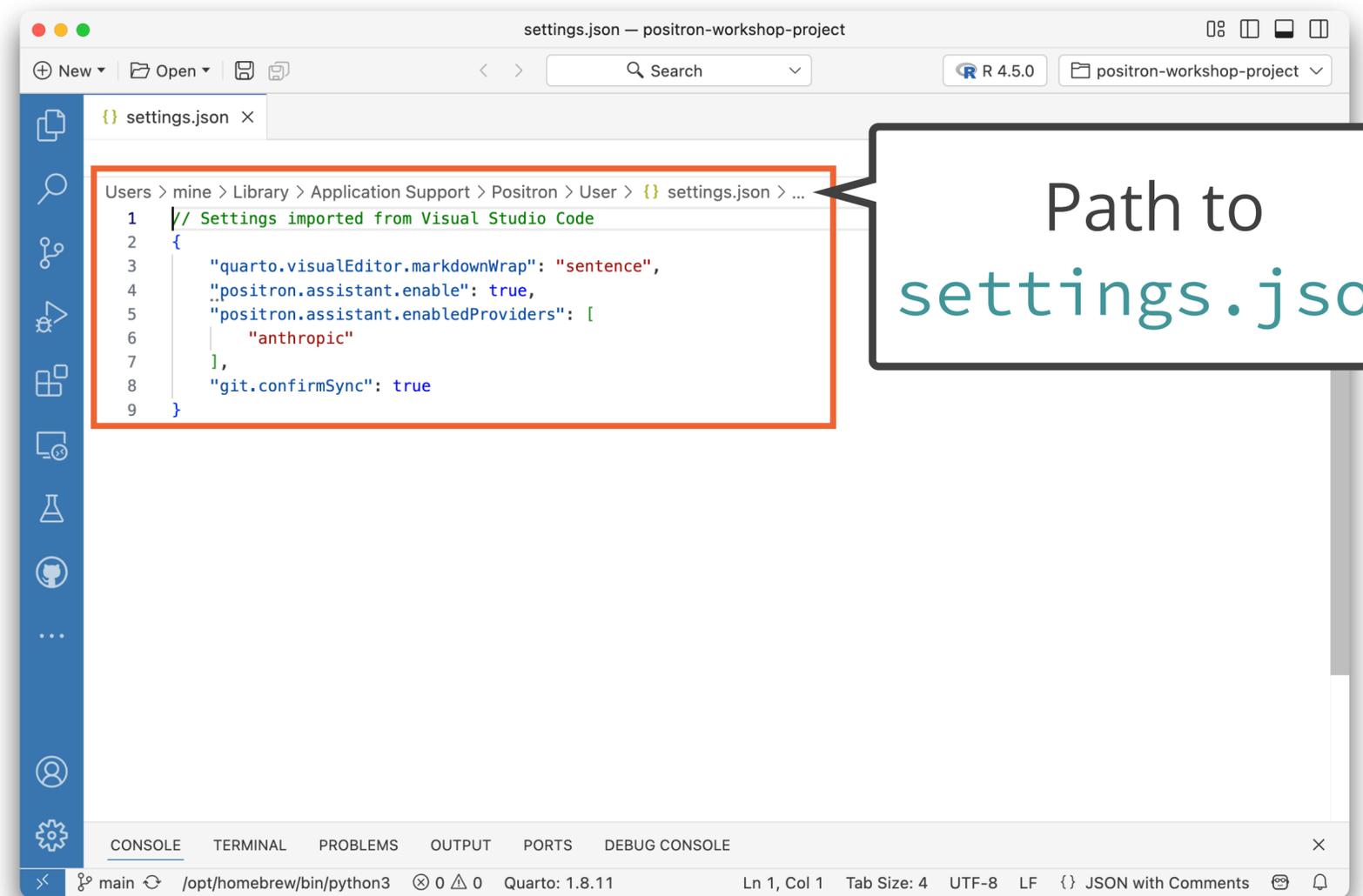
To update using the UI:

- In the Command Palette:
Preferences: Open User Settings
- In the top menu:
Positron > Settings... > Settings



To edit the JSON file:

- In the Command Palette:
Preferences: Open User Settings (JSON)

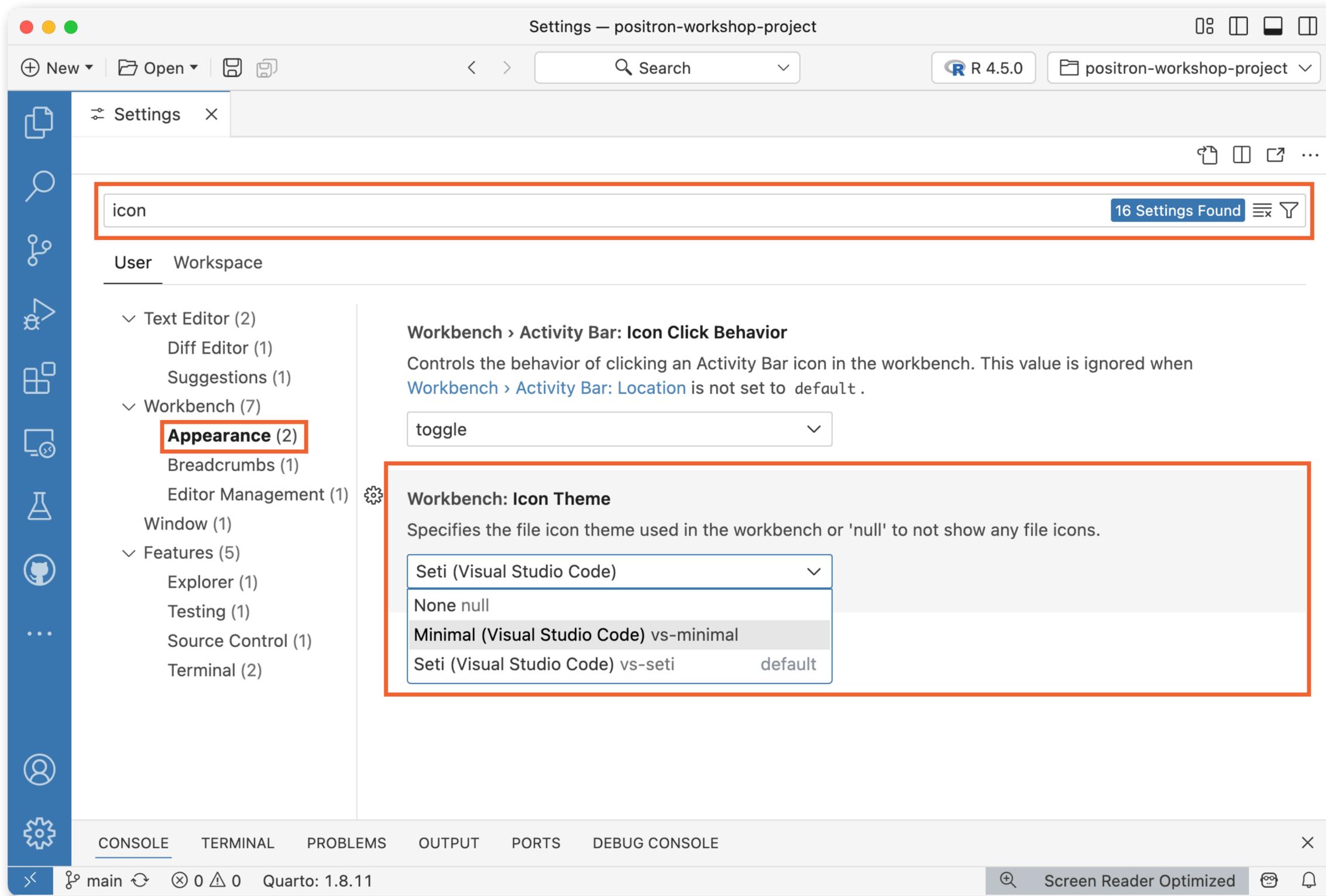


3_m 00_s

Your turn

Customize user settings

- Update your user settings to change the Icon Theme to Minimal via the Settings editor interface.
 - Hint: Filter for settings with the word “icon”.
- Open the `user settings.json` file to confirm the change you made.
- In the `user settings.json` file, change the Icon Theme to `vs-seti` and save your changes.
- Go back to the Icon Theme settings in the Settings editor interface and confirm the change you made in the JSON file.



icon

16 Settings Found

User Workspace

- Text Editor (2)
 - Diff Editor (1)
 - Suggestions (1)
- Workbench (7)
 - Appearance (2)**
 - Breadcrumbs (1)
 - Editor Management (1)
 - Window (1)
- Features (5)
 - Explorer (1)
 - Testing (1)
 - Source Control (1)
 - Terminal (2)

Workbench > Activity Bar: Icon Click Behavior

Controls the behavior of clicking an Activity Bar icon in the workbench. This value is ignored when [Workbench > Activity Bar: Location](#) is not set to default.

toggle

Workbench: Icon Theme

Specifies the file icon theme used in the workbench or 'null' to not show any file icons.

- Seti (Visual Studio Code)
- None null
- Minimal (Visual Studio Code) vs-minimal
- Seti (Visual Studio Code) vs-seti default

CONSOLE TERMINAL PROBLEMS OUTPUT PORTS DEBUG CONSOLE

main 0 errors 0 warnings Quarto: 1.8.11

Screen Reader Optimized

settings.json — positron-workshop-project

⊕ New | 📁 Open | 📄 📄 | 🔍 Search | R 4.5.0 | positron-workshop-project

Settings | settings.json

Users > mine > Library > Application Support > Positron > User > settings.json > ...

```
1 // Settings imported from Visual Studio Code
2 {
3   "quarto.visualEditor.markdownWrap": "sentence",
4   "positron.assistant.enable": true,
5   "positron.assistant.enabledProviders": [
6     "anthropic"
7   ],
8   "git.confirmSync": true,
9   "workbench.iconTheme": "vs-minimal"
10 }
```

CONSOLE | TERMINAL | PROBLEMS | OUTPUT | PORTS | DEBUG CONSOLE

< main /opt/homebrew/bin/python3 0 0 Quarto: 1.8.11 Ln 1, Col 1 Tab Size: 4 UTF-8 LF {} JSON with Comments

settings.json — positron-workshop-project

⊕ New | 📁 Open | 📄 | 📄 | 🔍 Search | R 4.5.0 | positron-workshop-project

Settings | settings.json

Users > mine > Library > Application Support > Positron > User > settings.json > ...

```
1 // Settings imported from Visual Studio Code
2 {
3     "quarto.visualEditor.markdownWrap": "sentence",
4     "positron.assistant.enable": true,
5     "positron.assistant.enabledProviders": [
6         "anthropic"
7     ],
8     "git.confirmSync": true,
9     "workbench.iconTheme": "vs-minimal"
10 }
```

CONSOLE | TERMINAL | PROBLEMS | OUTPUT | PORTS | DEBUG CONSOLE

main | /opt/homebrew/bin/python3 | 0 | 0 | Quarto: 1.8.11 | Ln 1, Col 1 | Tab Size: 4 | UTF-8 | LF | {} JSON with Comments

Change to
"Vs-seti"

The screenshot shows the RStudio interface with a Quarto document open. The Explorer pane on the left shows a file tree for 'POSITRON-WORKSHOP-PROJECT'. A red box highlights the 'OPEN EDITORS' section, which lists several files. The main editor shows the content of 'hello.qmd', which includes a code block for a plot and a section titled 'Meet Quarto'. The console at the bottom displays the output of the code, including a warning about the locale and the text 'R is a collaborative project with many contributors...'. The status bar at the bottom indicates the current line and column: 'Ln 44, Col 4'.

This screenshot is similar to the first one, but with a tooltip visible over the file tree. The tooltip shows the path to a file: '~/Documents/posit/positron-workshop-project/fruit_avg_browser.R'. The main editor and console are the same as in the first screenshot. The status bar at the bottom indicates the current line and column: 'Ln 44, Col 4'.

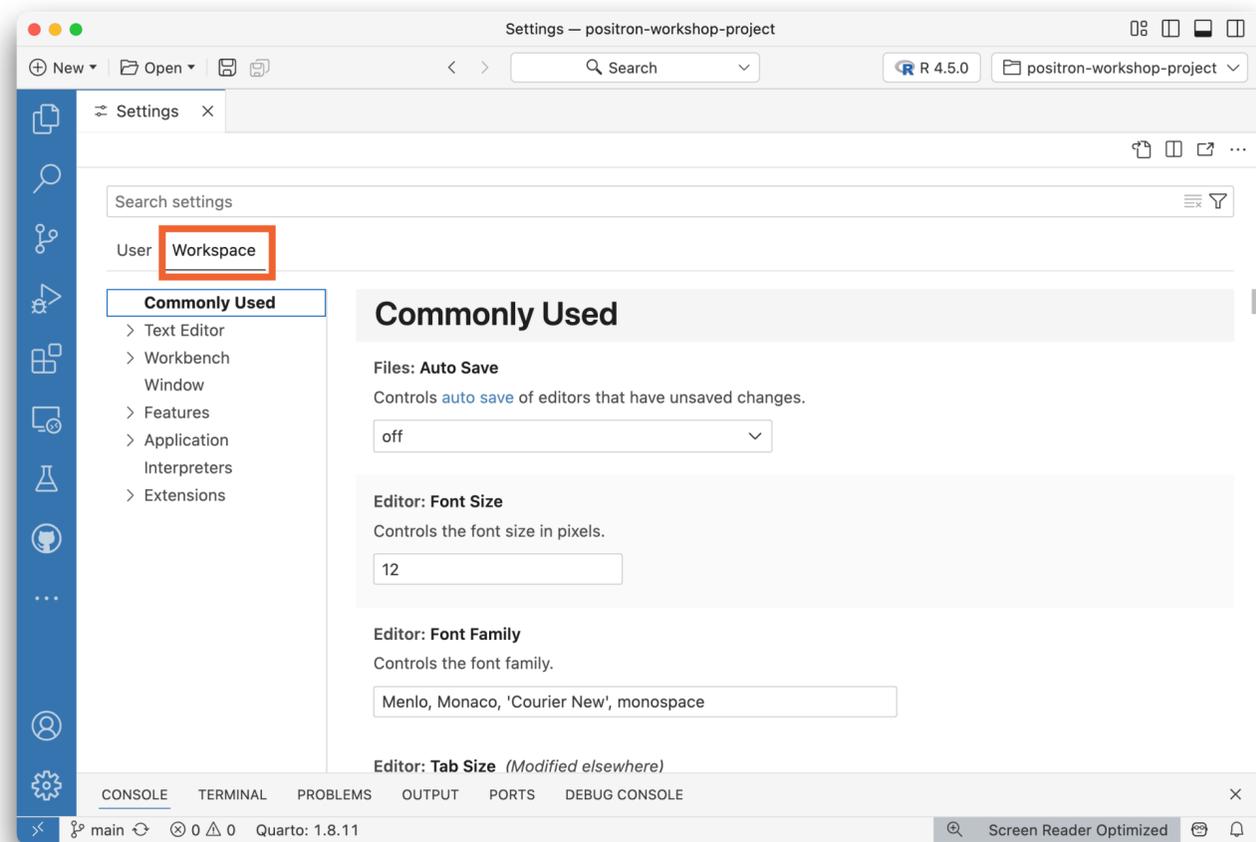
Workspace settings

- Workspace settings are specific to a project and override user settings.
- Positron (like VS Code) stores workspace settings at the root of the project in a `.vscode` folder, making it easy to share settings with others in a version-controlled (e.g., Git) project.

Updating workspace settings

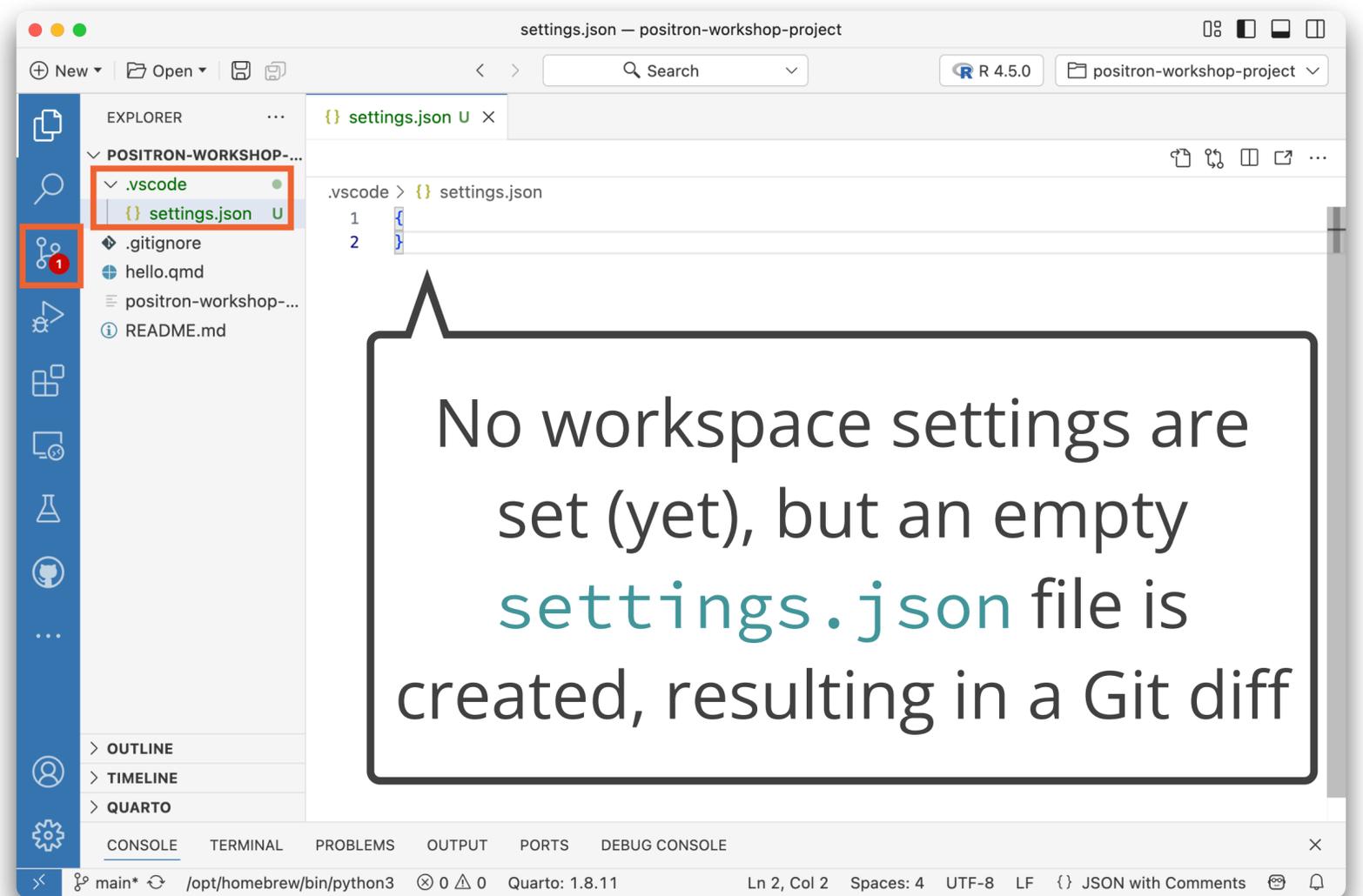
To update using the UI:

- In the Command Palette:
Preferences: Open Workspace Settings
- In the top menu:
Positron > Settings... > Settings



To edit the JSON file:

- In the Command Palette:
Preferences: Open Workspace Settings (JSON)



3_m 00_s

Your turn

Customize workspace settings

- Update your workspace settings in the positron-workshop-project using the Settings editor interface.
 - You can update whatever setting you like.
 - If you need inspiration, change the font size in the editor.
- Open the `settings.json` file in the `.vscode` folder of your project to confirm the change you made.
- Click on the Source Control icon in the Activity bar and view the diff created by updating your settings. Contrast this to what happened (or didn't happen) in the Source Control when you updated your user settings.

Settings — positron-workshop-project

New | Open | Search | R 4.5.0 | positron-workshop-project

Settings

Search settings

User Workspace

Commonly Used

- > Text Editor
- > Workbench
- Window
- > Features
- > Application
- Interpreters
- > Extensions

Commonly Used

Files: Auto Save
Controls [auto save](#) of editors that have unsaved changes.

off

Editor: Font Size
Controls the font size in pixels.

20

Editor: Font Family
Controls the font family.

Menlo, Monaco, 'Courier New', monospace

Editor: Tab Size (Modified elsewhere)

CONSOLE | TERMINAL | PROBLEMS | OUTPUT | PORTS | DEBUG CONSOLE

main* | 0 | 0 | Quarto: 1.8.11 | Screen Reader Optimized

settings.json — positron-workshop-project — Untracked

⊕ New | 📁 Open | 📄 | 📄 | 🔍 Search | R 4.5.0 | positron-workshop-project

EXPLORER

- POSI...
- .vscode
 - settings.json U
- .gitignore
- hello.qmd
- positron-workshop-...
- README.md

OUTLINE

- TIMELINE
- QUARTO

CONSOLE | TERMINAL | PROBLEMS | OUTPUT | PORTS | DEBUG CONSOLE

```
1 {
2   "editor.fontSize": 20
3 }
```

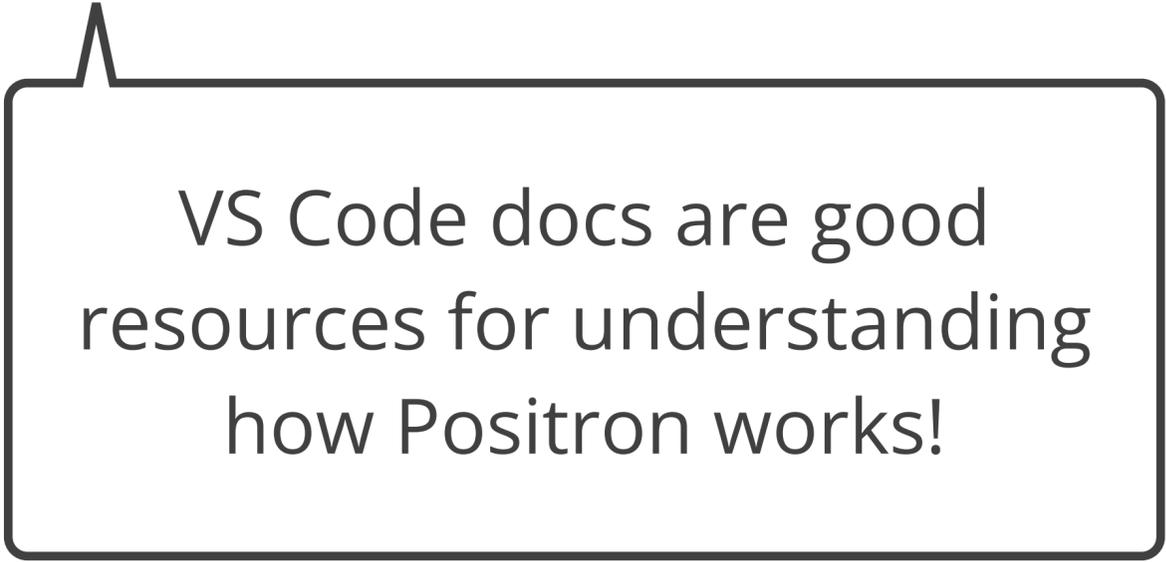
main* /opt/homebrew/bin/python3 0 0 Quarto: 1.8.11 Ln 2, Col 2 Spaces: 4 UTF-8 LF {} JSON with Comments

The screenshot shows the Visual Studio Code interface. The top bar displays the file name 'settings.json — positron-workshop-project — Untracked'. The left sidebar contains the Source Control view, which is currently empty, indicating a new file has been created. A red box highlights the Source Control icon in the sidebar, and a callout box points to it with the text: "Shows that a new a new file was created." The main editor area shows the content of 'settings.json', which is a JSON object with one property: `"editor.fontSize": 20`. The status bar at the bottom shows the current file is on line 2, column 2, and is using UTF-8 encoding with LF line endings.

Learn more

VS Code docs: User and workspace settings

code.visualstudio.com/docs/configure/settings



VS Code docs are good resources for understanding how Positron works!

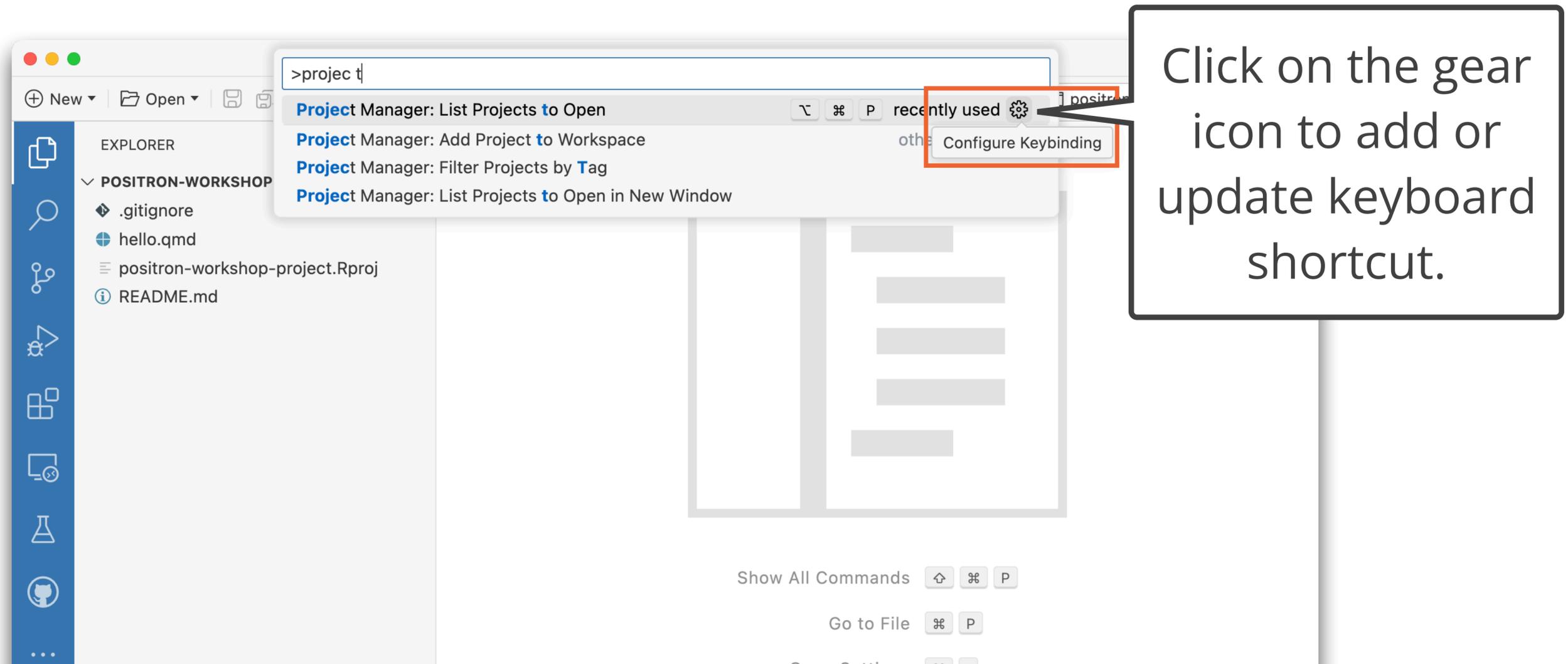
Keyboard shortcuts

Keyboard shortcuts

- Positron lets you perform most tasks directly from the keyboard.
- The Keyboard Shortcuts editor lists all available commands with and without keyboard shortcuts, and enables you to change, remove, or reset their keyboard shortcuts using the available actions.
- You can open the Keyboard Shortcuts editor:
 - From the Command Palette: *Preferences: Open Keyboard Shortcuts*
 - From the top menu: *Code > Settings > Keyboard Shortcuts*

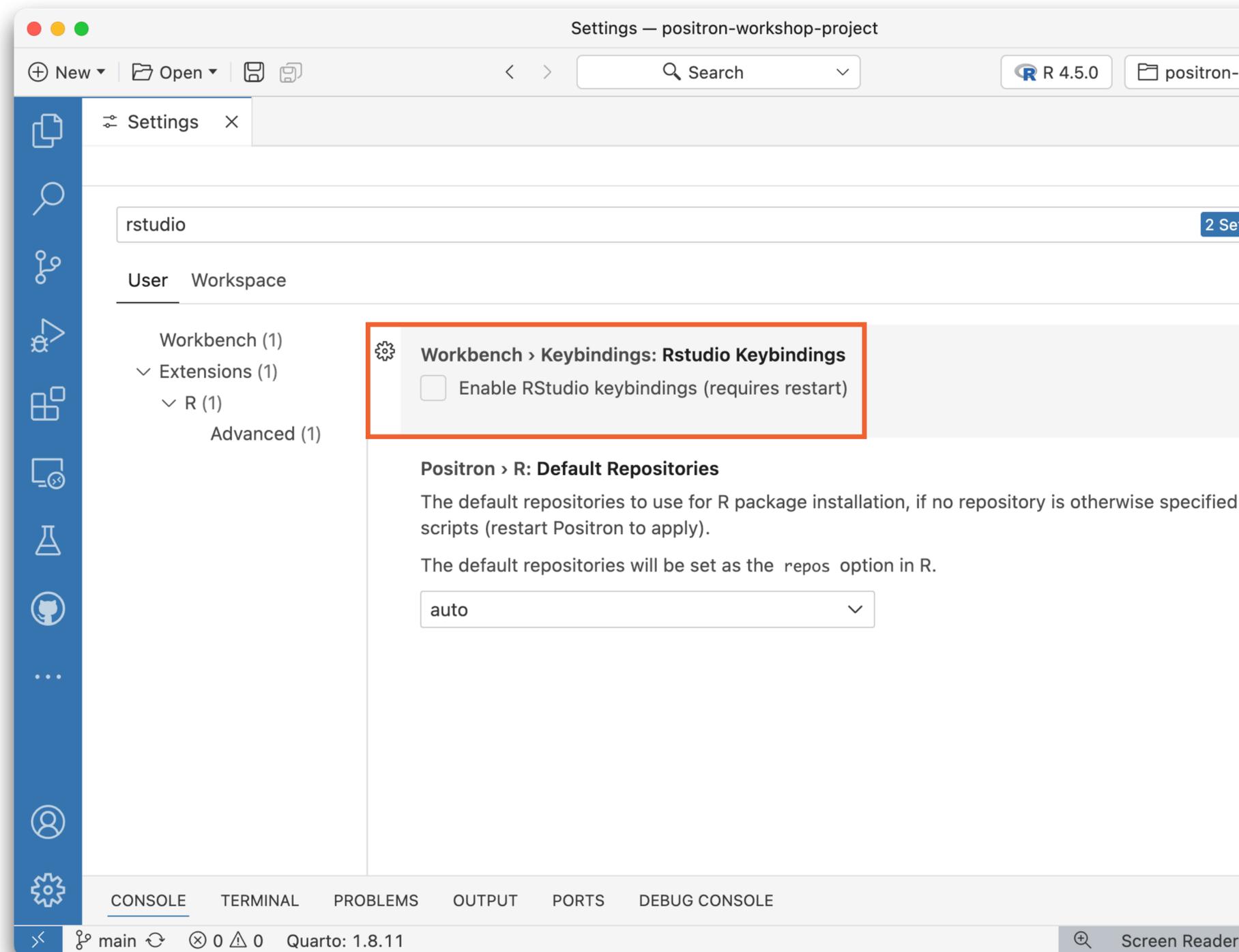
Keyboard shortcuts for Command Palette actions

You can add a keyboard shortcut or customize the existing keyboard shortcut for any action you can take from the Command Palette.



Your RStudio keybindings in Positron

- You can enable RStudio keybindings in Positron with the Enable RStudio keybindings option.
- This might overwrite some of Positron's keybindings, so you might then wish to update / remove some newly enabled RStudio keybindings.



Learn more

VS Code docs: Keyboard shortcuts for Visual Studio Code

code.visualstudio.com/docs/configure/keybindings

Layout

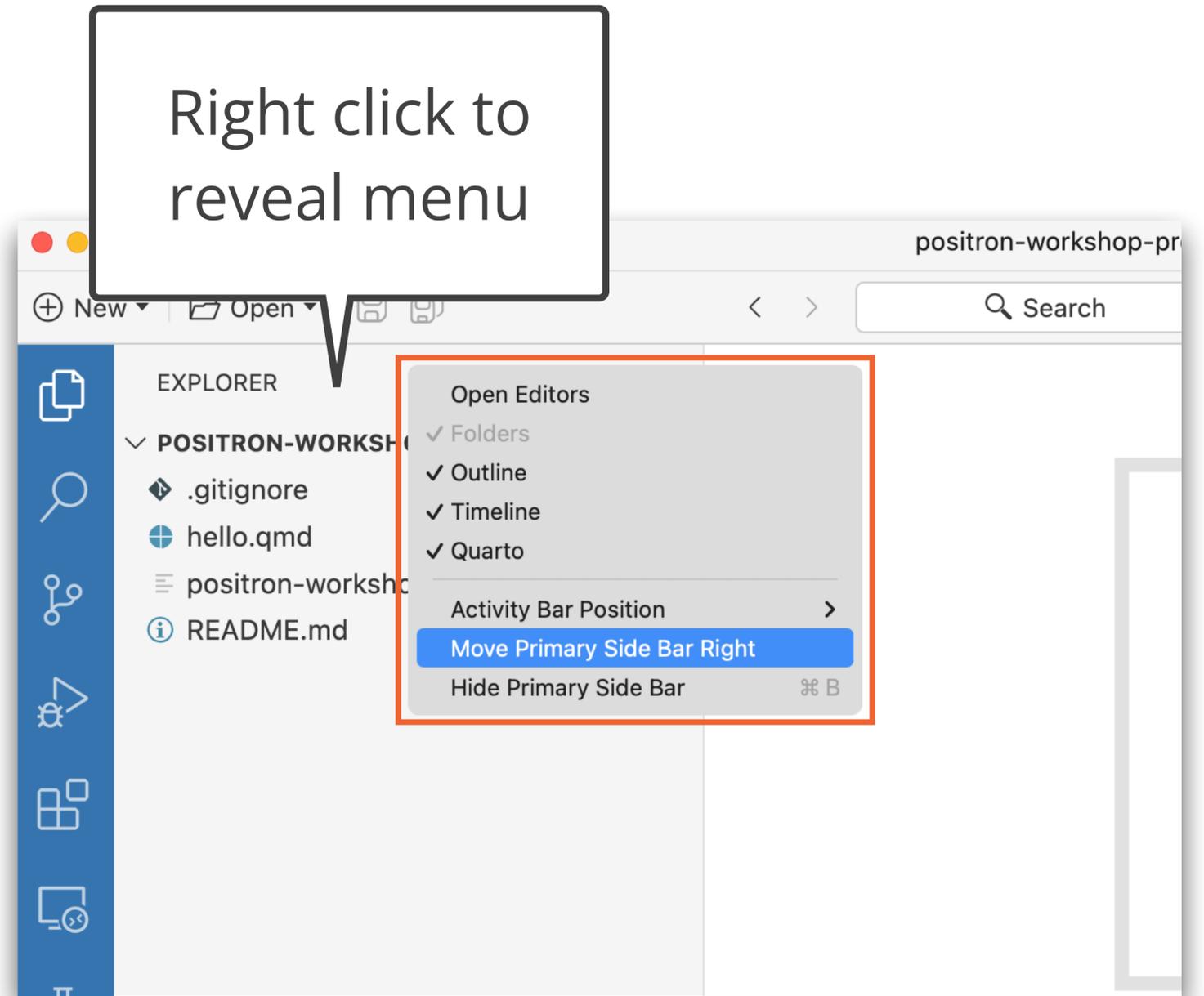
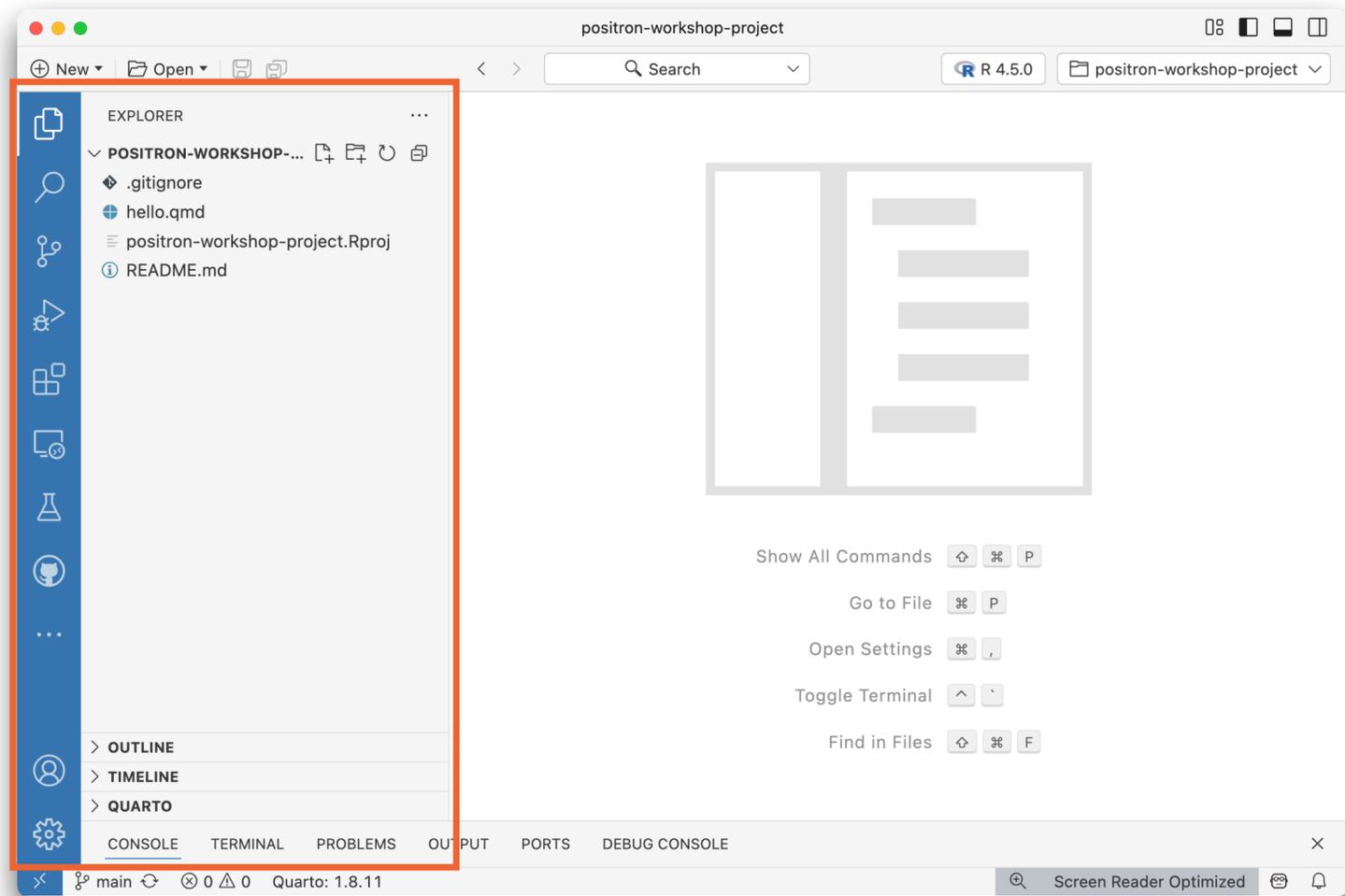
Primary side bar

- By default, the Primary Side Bar is located on the left and shows views such as the Explorer, Search, and Source Control views.
- Contents of the Primary Side Bar is controlled by what is selected in the Activity Bar.

Demo

Customizing layout

- Move the primary side bar to the right.
- Move the activity bar to the top.



positron-workshop-project

New Open Search R 4.5.0 positron-workshop-project

EXPLORER

- POSITRON-WORKSHOP-PROJECT
 - .gitignore
 - hello.qmd
 - positron-workshop-project.Rproj
 - README.md
- OUTLINE
- TIMELINE
- QUARTO

Show All Commands ⌘ P

Go to File ⌘ P

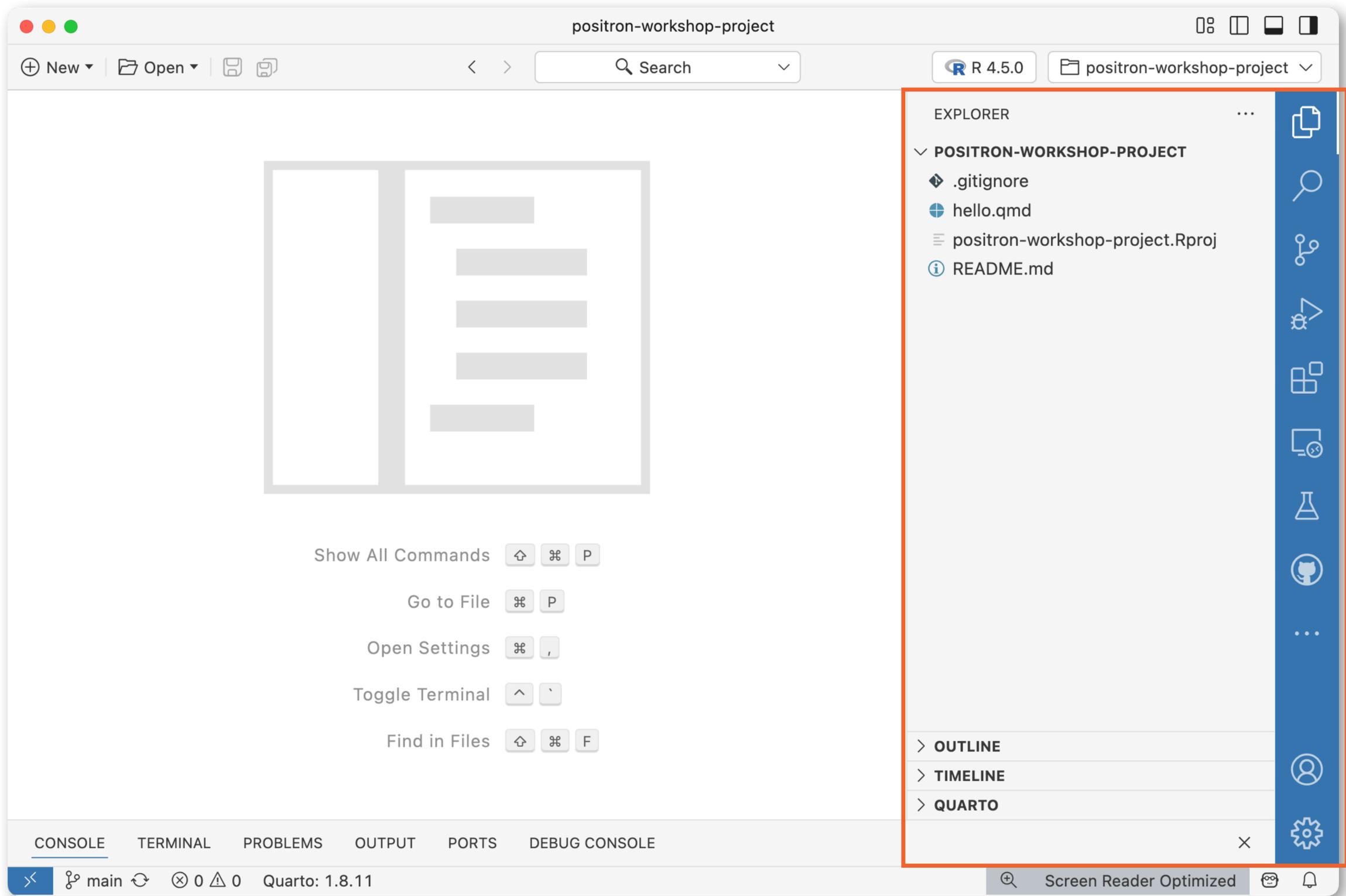
Open Settings ⌘ ,

Toggle Terminal ^ `

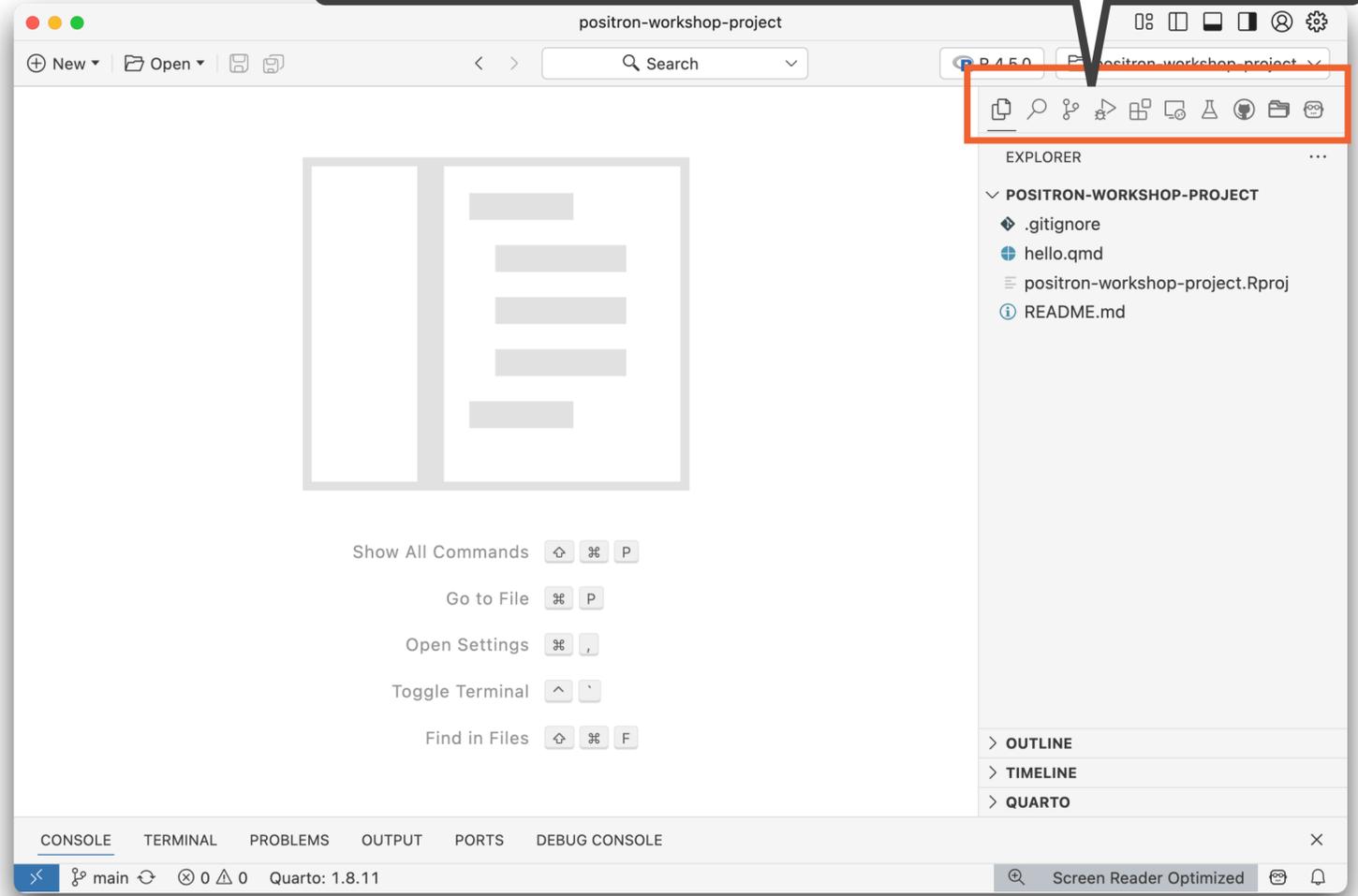
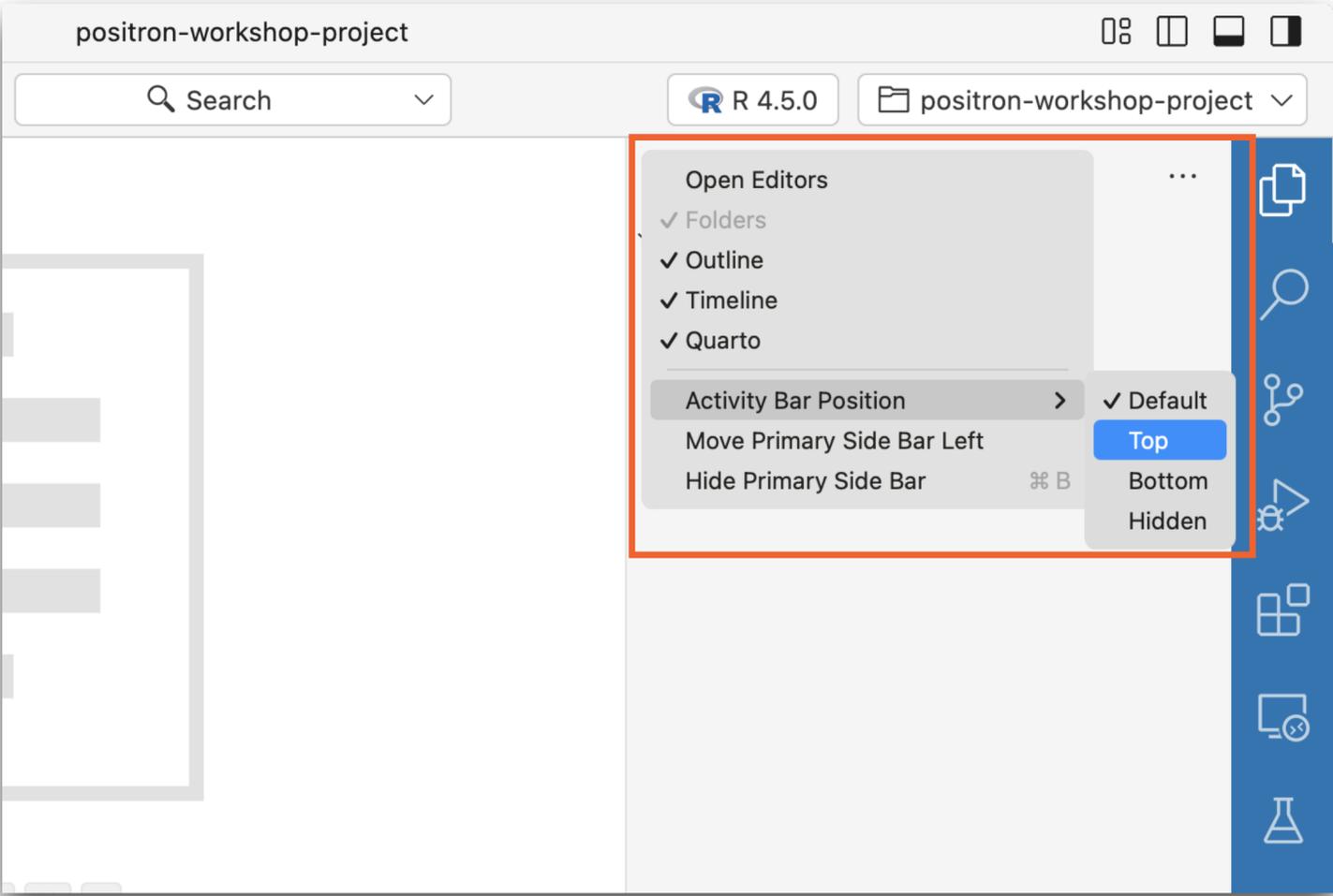
Find in Files ⌘ ⌘ F

CONSOLE TERMINAL PROBLEMS OUTPUT PORTS DEBUG CONSOLE

main 0 0 Quarto: 1.8.11 Screen Reader Optimized

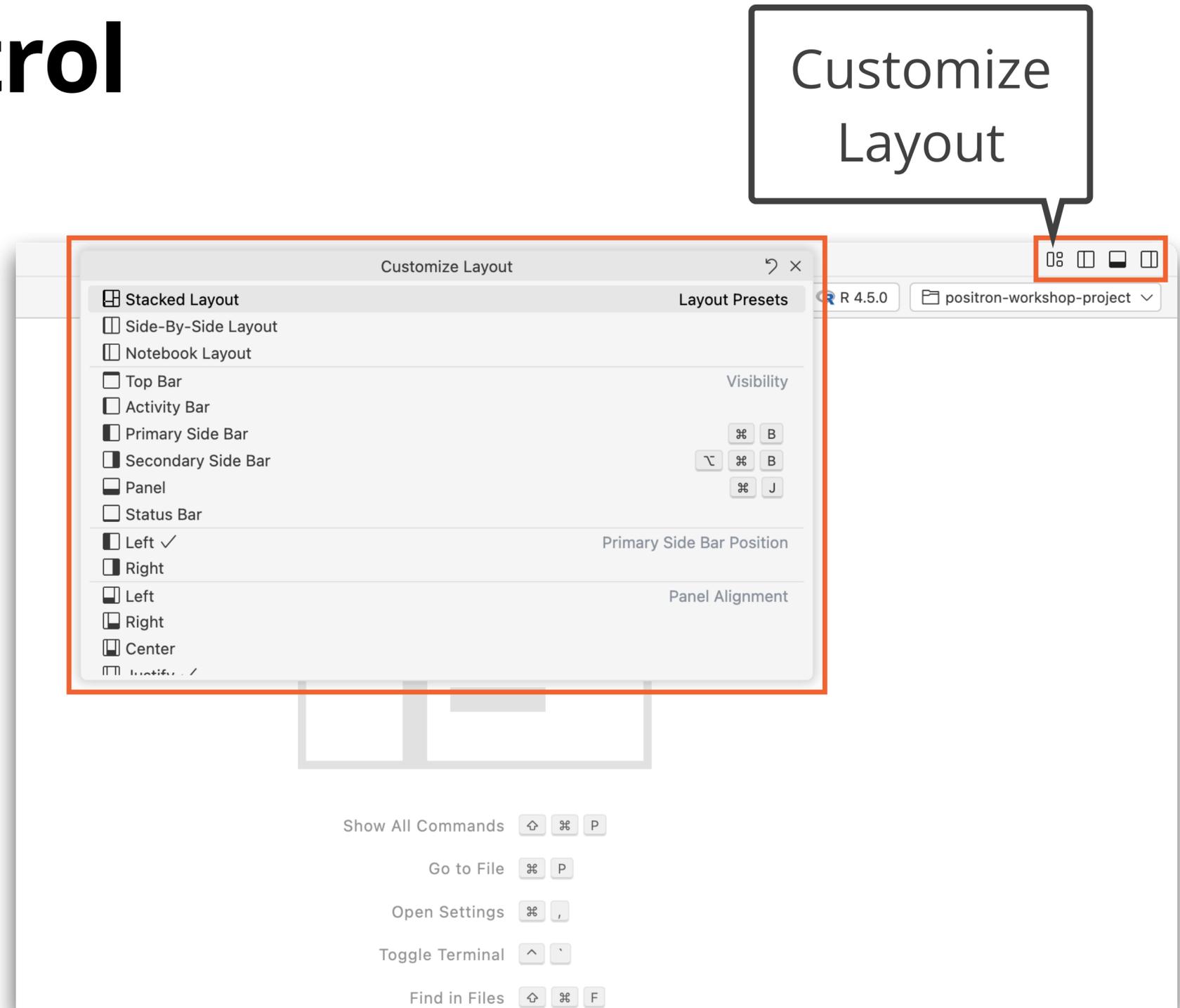


Activity Bar on top,
and not blue anymore.



Customize layout control

- The title bar has buttons to toggle the visibility of UI elements.
- The rightmost button brings up the Customize Layout dropdown that gives you finer control over the visibility and layout of various UI elements.



Learn more

VS Code docs: Custom Layout

code.visualstudio.com/docs/configure/custom-layout

Extensions

Extensions

- Extensions let you add languages, debuggers, tools, themes, etc. to Positron to support your development workflow (just like in VS Code).
- Your Positron and VS Code extensions are separate and won't interfere with each other.
- Unlike in VS Code, you install Positron extensions from [Open VSX](#).

Your turn

Install extension

- Click on the Extensions icon from the Activity Bar in Positron.
- If you haven't yet done so, search for and install the Project Manager extension.
- If you have already installed it, or if you would like to install one more extension, find and install the Solarized & Selenized extension.
- Use the Command Palette to set the theme of your Positron window to a Solarized or Selenized theme of your choice. **Hint:** Start typing *theme* in the Command Palette.

Extensions

The screenshot displays the Positron IDE interface. On the left, a vertical sidebar contains various icons, with the 'Extensions' icon (a grid of squares) highlighted by an orange box. A callout box labeled 'Extensions' points to this icon. The main workspace is divided into several sections: a top toolbar with 'New', 'Open', and search options; a central 'Welcome' screen with the Positron logo and options to 'Start' (New Notebook, New File) or 'Open' (Open..., New Folder..., New Folder from Git..., Connect to...); and a bottom 'Recent' section. On the right side, there are tabs for 'SESSION' and 'CONNECTIONS', and a console window at the bottom showing R help text. The status bar at the very bottom indicates 'main', '0 0 0', and 'Quarto: 1.8.11'.

Welcome — positron-workshop-project

⊕ New ▾ | 📁 Open ▾ | 📄 📄 | < > | 🔍 Search | R 4.5.0 | positron-workshop-project ▾

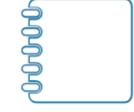
EXTENSIONS: MARKETPLACE 🔄 ...

Solarized 🔍

-  **Solarized & Selen...** 🔄 1K ⭐ 5
A Solarized and Selenized co...
santoso-wijaya [Install](#)
-  **Solarized Sunset Th...** 🔄 1K
A flat theme based on Solari...
jansim [Install](#)
-  **Better Solarized** 🔄 12K
A Better Solarized theme for ...
Ed Heltzel [Install](#)
-  **Solarized Sharp** 🔄 3K
muhammad-sammy [Install](#)
-  **Solarized High Contr...** 🔄 96
Sepia-toned, high-contrast li...
tiny [Install](#)

Positron
an IDE for data science

Start

-  New Notebook
-  New File
- 
- 

Open

-  Open...
-  New Folder...
-  New Folder from Git...
-  Connect to...

Recent

- positron-workshop ~/Desкто...

SESSION CONNECTIONS ...

R 4.5.0 filter

No variables have been created.

CONSOLE TERMINAL PROBLEMS OUTPUT PORTS DEBUG CONSOLE

CONSOLE

~/Desktop/posit/positron-workshop-project

```
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.  
  
>
```

main 🔄 0 ⚠️ 0 Quarto: 1.8.11

Screen Reader Optimized

The image shows a screenshot of the Visual Studio Code (VS Code) interface. The main window displays the 'EXTENSIONS: MARKETPLACE' view, where the 'Solarized' theme is selected. A search bar at the top of the marketplace shows '>theme'. A dropdown menu is open, listing several theme-related preferences: 'Preferences: Color Theme', 'Preferences: Browse Color Themes in Marketplace', 'Preferences: File Icon Theme', 'Preferences: Product Icon Theme', and 'Preferences: Toggle between Light/Dark Themes'. The 'Color Theme' preference is highlighted. Below the search bar, the 'Solarized and Selenized for VS Code' extension by santoso-wijaya is displayed. The extension's details page shows a 5-star rating and an 'Install' button. The 'CONSOLE' view at the bottom shows the R prompt with the following text: '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. >'. The status bar at the bottom indicates 'main', '0 0 0', and 'Quarto: 1.8.11'. The system tray at the bottom right shows 'Screen Reader Optimized' and a notification icon.

The image shows a screenshot of the Visual Studio Code (VS Code) interface. The main window displays the marketplace page for the "Solarized and Selenized for VS Code" extension by santoso-wijaya. The extension details include its identifier, version (0.3.18), and publication date. A dropdown menu is open, showing a list of color themes categorized into light, dark, and high contrast themes. The "Solarized Dark" theme is highlighted with a red border. The background shows the R console output, which includes instructions for using the R environment.

EXTENSIONS: MARKETPLACE

- Solarized
- Solarized & Selenized**
A Solarized and Selenized color theme for VS Code
santoso-wijaya
- Solarized Sunset Theme**
A flat theme based on Solarized
jansim
- Better Solarized**
A Better Solarized theme for VS Code
Ed Heltzel
- Solarized Sharp**
muhammad-sammy
- Solarized High Contrast**
Sepia-toned, high-contrast light theme
tiny

Select Color Theme (detect system color mode disabled)

- + Browse Additional Color Themes...
- light themes**
- Positron Light Default Positron Light
- Selenized Light Selene Selenized Light
- Solarized Light Helios Solarized Light
- Positron Dark Default Positron Dark
- Selenized Dark Selene Selenized Dark
- Solarized Dark Helios Solarized Dark**
- Tomorrow Night Blue
- dark themes**
- Light High Contrast Default High Contrast Light
- Dark High Contrast Default High Contrast
- high contrast themes**

Solarized and Selenized for VS Code

Marketplace

- Identifier santoso-wijaya.helios-selene
- Version 0.3.18
- Publish... 2024-07-08, 22:02:59

CONSOLE

```
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.  
>
```

main 0 0 Quarto: 1.8.11 Screen Reader Optimized

Extension: Solarized & Selenized — positron-workshop-project

SEARCH Search R 4.5.0 positron-workshop-project

EXTENSIONS: MARKETPLACE

Solarized

- Solarized & Selenized**
A Solarized and Selenized co...
santoso-wijaya
- Solarized Sunset Th...** 1K
A flat theme based on Solari...
jansim
- Better Solarized** 12K
A Better Solarized theme for ...
Ed Heltzel
- Solarized Sharp** 3K
muhammad-sammy
- Solarized High Contr...** 96
Sepia-toned, high-contrast li...
tiny

Solarized & Selenized

santoso-wijaya | 1,269 | ★★★★★ (1)

A Solarized and Selenized color themes com...

[Set Color Theme](#) [Disable](#) [Uninstall](#) A

DETAILS FEATURES CHANGELOG

Solarized and Selenized for VS Code

Solarized is a sixteen color palette (eight

Marketplace

Identifier	santoso-wijaya.helios-selene
Version	0.3.18
Publish...	2024-07-08, 22:02:59

CONSOLE

```
~/Desktop/posit/positron-workshop-project

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.

>
```

main 0 0 Quarto: 1.8.11 Screen Reader Optimized

Solarized
Dark
theme

Built-in extensions

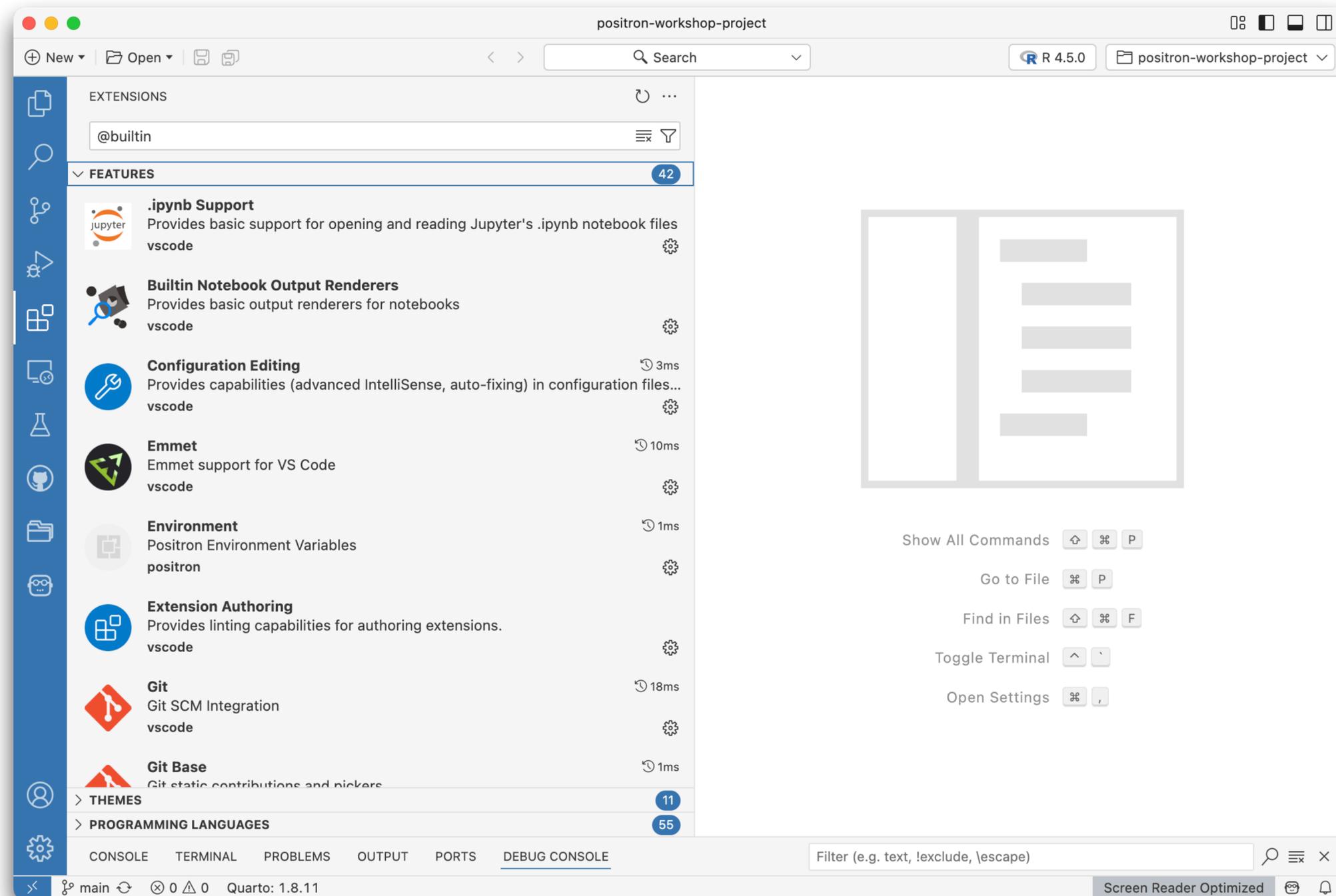
- Built-in extensions (e.g., R, Positron Python, and Markdown Language Basics) are installed with Positron.
- They can only be updated by updating Positron.
- They can be seen in the extensions view with [@builtin](#).

Demo

Built-in extensions

- Click on the Extensions icon in the Activity Bar.
- Type `@builtin` in the Extension search bar.
- Review the built-in extensions.

Built-in extensions



Bundled extensions

- Bundled extensions (e.g., Quarto, Air, GitHub Pull Requests) are installed with Positron.
- They can be updated independently of updating Positron.

Other extensions

- Any other extensions need to be installed from Open VSX.
- Popular extensions you might consider installing are Project Manager, Shiny, Rainbow CSV, indent-rainbow, etc.
- You can also install Extension Packs; a collection of packs curated by users for specific tastes, tasks, or languages.

5_m 00_s

Your turn

Install the ugliest theme extension

- Find the ugliest theme extension you can.
- Install the extension and apply the theme.
- **Note:** You might get a warning about whether you trust the publisher of a theme you choose. Read the warning carefully. The decision is yours!

Extension: Dracula Theme Official — positron-workshop-project

Extensions: MARKETPLACE

theme

- Solarized & Selenized**
A Solarized and Selenized colo...
santoso-wijaya
- Dracula Theme Official**
The official Dracula Theme: a ...
dracula-theme **Installing**
- base9-vscode**
base9-theme **Install**
- Wildberries**
A dark theme for purple lovers
wildberries-theme **Install**
- Material Theme (But I ...**
A Apache-2 licensed fork of M...
t3dotgg **Install**
- Cobalt2 Theme O...**
Official theme by Wes Bos.
wesbos **Install**
- XD Theme**
A theme because my settings ...
jeff-hykin **Install**
- OpenSumi Default Th...**
The default OpenSumi themes
opensumi **Install**
- MSDevStudio Default...**
745

Dracula Theme Official

dracula-theme | 158,746 | ★★★★★ (2)

The official Dracula Theme: a dark theme for many editors, shells, and more. ...

Do you trust the publisher "dracula-theme"?

The extension [Dracula Theme Official](#) is published by dracula-theme. This is the first extension you're installing from this publisher.

⚙️ dracula-theme is **not verified**.

Positron has no control over the behavior of third-party extensions, including how they manage your personal data. Proceed only if you trust the publisher.

[Learn More](#) [Cancel](#) [Trust Publisher & Install](#)

Marketplace

Identifier	dracula-theme.theme-dracula
Version	2.25.1
Publish...	2020-04-06, 23:07:47
Last Released	2024-09-05, 23:29:53

Categories

Themes

Resources

Marketplace
Repository
License

```
6 constructor(props) {  
7   this.location = props.location;  
8   this.birthDate = props.birthDate;  
9   this.deathDate = props.deathDate;  
10  this.weaknesses = props.weaknesses;  
11 }  
12  
13 get age() {  
14   return this.calcAge();  
15 }  
16
```

CONSOLE TERMINAL PROBLEMS OUTPUT PORTS **DEBUG CONSOLE**

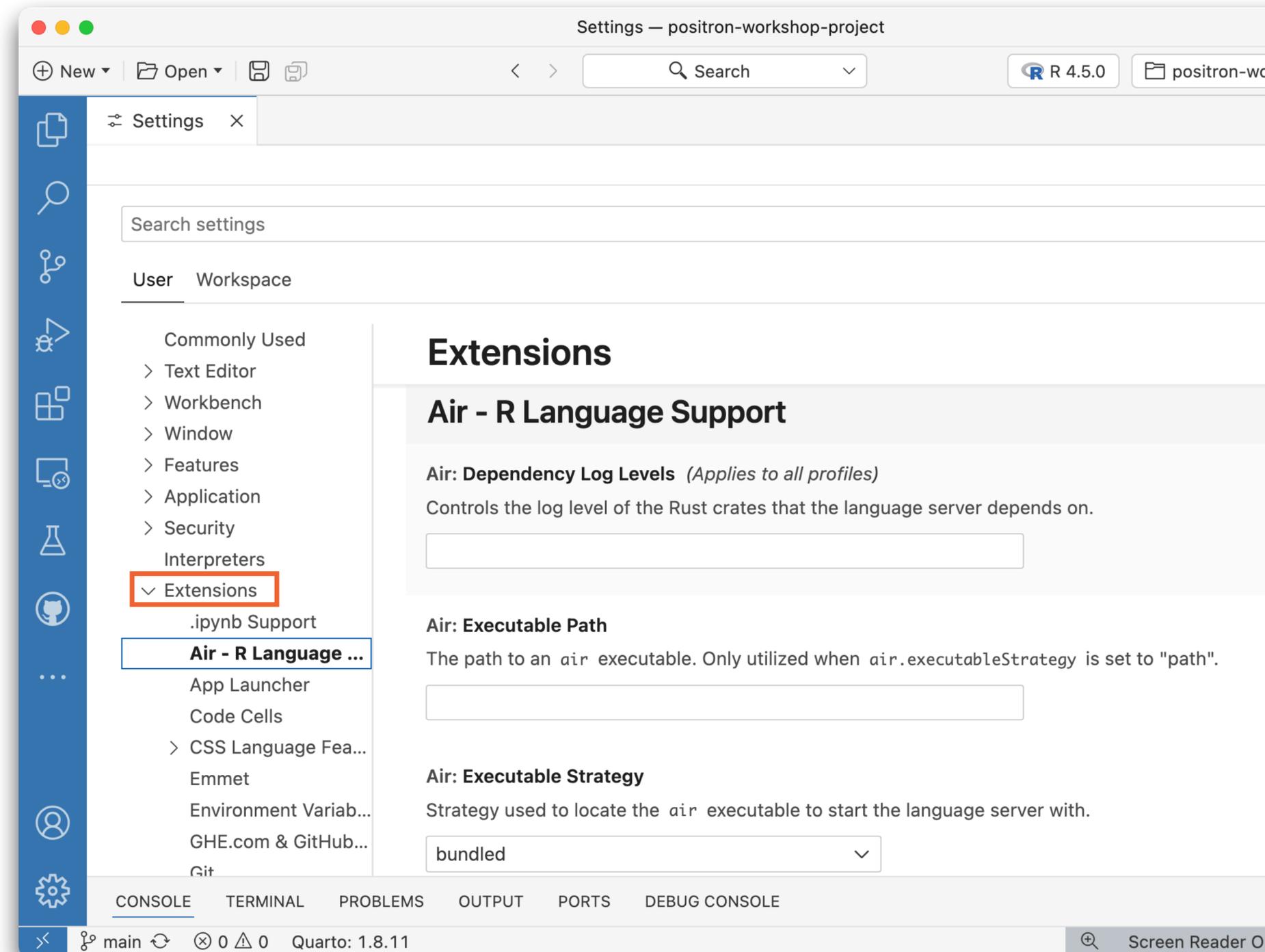
Filter (e.g. text, !exclude, \escape)

main 0 0 0 Quarto: 1.8.11

Screen Reader Optimized

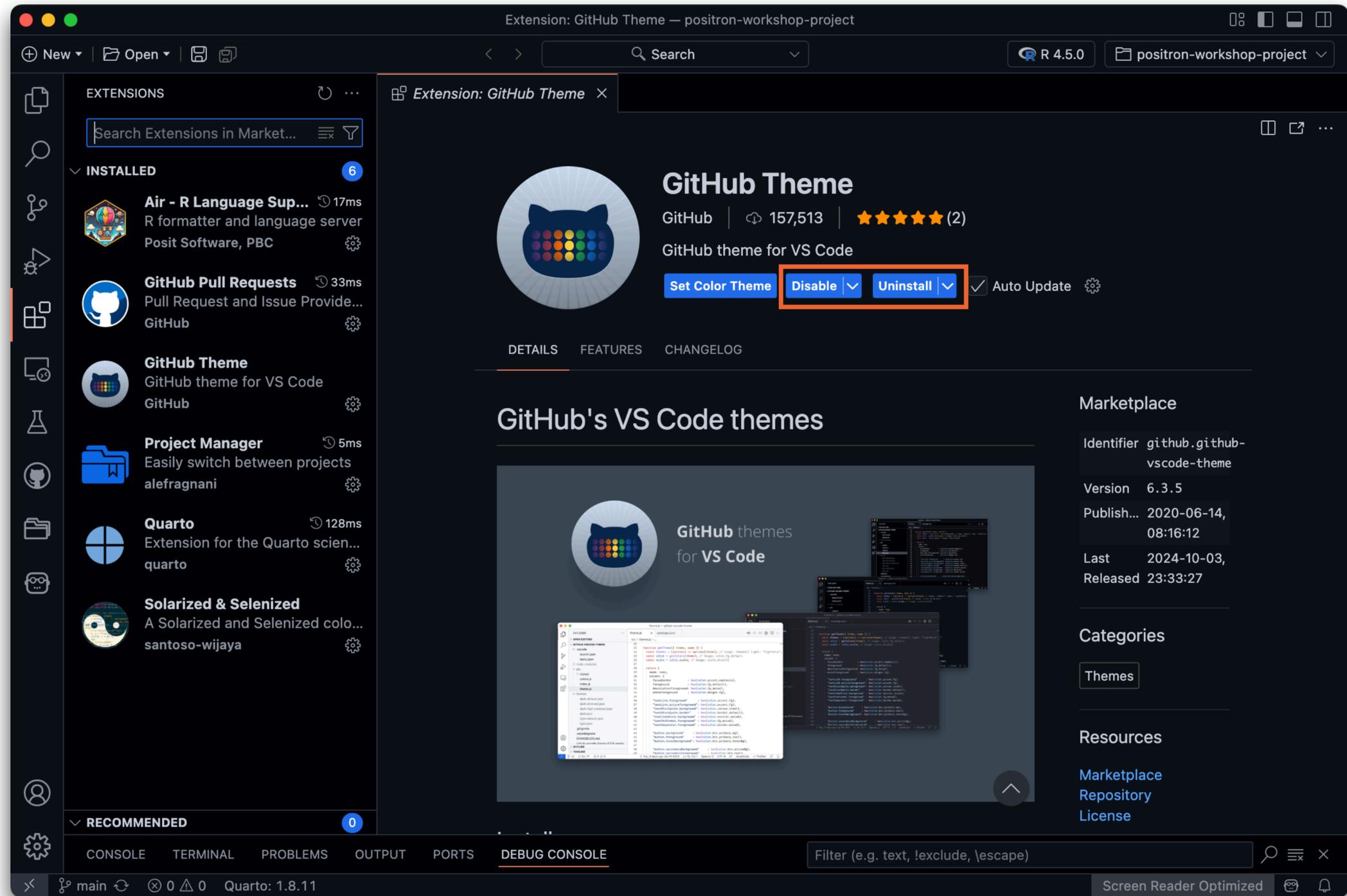
Extension settings

- Installed Positron extensions can also contribute their own settings, which you can review under the Extensions section of the Settings editor.
- These can be set at the user or workspace level as well.



A word of caution

Extensions alter the look and functionality of Positron and can conflict with each other. We recommend being selective in extensions you have enabled at any given point, and disabling or uninstalling the ones you no longer use.



Learn more

Positron docs: Extensions

positron.posit.co/extensions.html