

Install R, RStudio, and Quarto (PC) — Interactive Checklist Form

Objective

This guide explains, step by step, how to install:

- R
- RStudio
- Quarto
- A simple test project to confirm everything is working

Review Information

Name

Date

Overall Comments

Save for Review

Export for Review

Before You Start

You need:

- A Windows PC
- Internet access
- Permission to install software

It is a good idea to close unnecessary programs before starting.

Completed

Step 1 — Download R for Windows

1. Open your web browser.
2. Go to <https://cran.r-project.org>.
3. Click **Download R for Windows**.
4. Download the latest **.exe** installer.
5. Wait for the file to finish downloading.

Completed

Step 2 — Install R on Windows

1. Open the downloaded R installer.
2. Click **Next** through the installation steps.
3. Click **Install**.
4. Wait for installation to complete.
5. Click **Finish** when done.

Completed

Step 3 — Verify R Installation

1. Open **Command Prompt**.
2. Type:

```
R --version
```

3. Press **Enter**.

You should see something like:

```
R version 4.x.x
```

4. You can also test later inside **RStudio** by typing:

```
version
```

Completed

Step 4 — If R Does Not Work

If R is not found:

1. Close Command Prompt.
2. Install R again from CRAN.
3. Open a new Command Prompt window.
4. Test again with:

```
R --version
```

Completed

Step 5 — Download RStudio for Windows

1. Open your web browser.
2. Go to <https://posit.co/download/rstudio-desktop/>.
3. Download the **RStudio Desktop** installer for Windows.
4. Wait for the file to download.

Completed

Step 6 — Install RStudio on Windows

1. Open the downloaded RStudio installer.
2. Click **Next** through the installation steps.
3. Click **Install**.
4. Wait for installation to complete.
5. Click **Finish**.

Completed

Step 7 — Download Quarto for Windows

1. Open your web browser.
2. Go to <https://quarto.org/docs/get-started/>.
3. Download the Quarto installer for Windows.
4. Wait for the **.exe** file to download.

Completed

Step 8 — Install Quarto on Windows

1. Open the downloaded Quarto installer.
2. Click **Next** through the installation steps.
3. Click **Install**.
4. Wait for installation to complete.
5. Click **Finish**.

Completed

Step 9 — Verify Quarto Installation

1. Open **Command Prompt**.
2. Type:

```
quarto --version
```

3. Press **Enter**.

You should see something like:

```
1.x.x
```

4. If the command is not found, close Command Prompt, reopen it, and test again.

Completed

Step 10 — Open RStudio and Confirm It Starts

1. Open **RStudio**.
2. Wait for the program to finish loading.
3. Confirm that the Console panel appears.
4. In the Console, type:

```
version
```

5. Press **Enter**.

Completed

Step 11 — Create a Working Folder

1. In File Explorer, create or choose a folder for your work.

Example:

```
C:\Users\YourName\Documents\R-Projects
```

2. Open **RStudio**.
3. Use **File > New Project** or **File > Open File...** later when needed.

Completed

Step 12 — Create a Test Quarto File

1. In RStudio, click:

```
File > New File > Quarto Document
```

2. Choose **HTML**.
3. Save the file as:

```
test-quarto-pc.qmd
```

4. Replace the content with:

```
---  
title: "My First Quarto Report"  
format: html  
---  
  
# Hello Yahya  
  
R, RStudio, and Quarto are working on Windows.
```

Completed

Step 13 — Render the Test File

1. In RStudio, open `test-quarto-pc.qmd`.
2. Click the **Render** button.
3. Wait for the HTML output to open.

Expected result:

A web page appears showing the title and the message.

Completed

Step 14 — Install Common R Packages

In the RStudio Console, type:

```
install.packages("tidyverse")
install.packages("ggplot2")
install.packages("readxl")
```

Press **Enter** after each line, or paste all lines together.

Completed

Step 15 — Check Installed Packages

In the RStudio Console, type:

```
installed.packages()[, "Package"]
```

Look for packages such as:

- tidyverse
- ggplot2
- readxl

Completed

Step 16 — Automatic Environment Check

This section displays the detected R version and Quarto version **when this QMD file is rendered successfully**.

If this section renders correctly, then R is installed and Quarto is available to render the document.

```
cat("R detected: ", R.version.string, "\n", sep = "")
```

R detected: R version 4.5.2 (2025-10-31)

```
quarto_path <- Sys.which("quarto")
if (nzchar(quarto_path)) {
  cat("Quarto executable: ", quarto_path, "\n", sep = "")
} else {
  cat("Quarto executable: Not found in PATH\n")
}
```

Quarto executable: /usr/local/bin/quarto

```
quarto_version <- tryCatch(
  system2("quarto", "--version", stdout = TRUE, stderr = TRUE),
  error = function(e) paste("Could not run quarto --version:", conditionMessage(e))
)
cat("Quarto version check:\n")
```

Quarto version check:

```
cat(paste(quarto_version, collapse = "\n"))
```

1.7.30

Completed

Step 17 — Useful Windows Notes

- On Windows, you can use **Command Prompt** to test both `R --version` and `quarto --version`.
- If RStudio does not immediately see the tools, restart RStudio.
- If Command Prompt does not see the new installation, close and reopen Command Prompt.
- Quarto is often installed system-wide and works automatically with RStudio.

Completed

Troubleshooting

Problem 1 — R not recognized

Fix:

- Reinstall R from CRAN
- Open a new Command Prompt window
- Test again with `R --version`

Problem 2 — quarto not recognized

Fix:

- Reinstall Quarto from quarto.org
- Close and reopen Command Prompt
- Test again with `quarto --version`

Problem 3 — RStudio opens but cannot render

Fix:

- Confirm Quarto is installed
- Restart RStudio
- Open the QMD file again
- Try **Render** one more time

Problem 4 — Package installation fails

Try again in the RStudio Console with:

```
install.packages("tidyverse")
```

Then repeat for the other packages.

Completed

Summary

You have now completed the following:

- Installed R on Windows
- Installed RStudio
- Installed Quarto
- Verified R and Quarto
- Created and rendered a test QMD file
- Installed common R packages

Completed

Next Suggested Step

Create a second Quarto file and add:

- One heading
- One paragraph
- One R code chunk
- One simple plot

Then render it to HTML.

Completed