

Quarto Tutorial: Part 1



What is Quarto?

[Quarto](#) is a framework for creating “computational documents” - documents that contain text AND code that can be rendered into different formats (e.g., PDF, Word, html, [etc.](#)).

Quarto is considered the “next generation” of R Markdown. The main difference is that that Quarto does not depend on R. It is “multilingual”, which means it can be used with R, Python, Javascript, and Julia (and potentially other languages as they are developed). This is meant to improve the process of collaborating on scientific and technical documents.

There are some other differences / features like the Visual editor.

R Markdown will continue to be supported, but new features will mostly only be added to Quarto. Most R Markdown files (and Jupyter notebooks) can be rendered with Quarto without modification.

Why do we care?

Reproducible Reports!

- Keep code and text together - you don’t have to hunt down code used to make a particular figure.
- Don’t have to generate tables and figures and then copy / paste them into Word.
- Easy to update tables / figures with new data.
- Can use the same file for different years and / or locations.
 - Example: [Water Quality Reports](#)

What's in a .qmd?

- YAML header
 - NOT R code.
 - **Very** sensitive to indentation.
 - Quarto - auto-complete!
- Code chunks
 - Executable code.
 - Can include code, only show results, or “fold” code so readers can choose whether to look at it.
 - Other chunk options (figure size, label, etc.).
- Text
 - Headings, captions, report text, analysis...
 - Can format with markdown syntax or using the visual editor.
- In-line code
- Images

Example

We are going to use the [palmerpenguins](#) data set to explore making reports with Quarto.

This data set contains size measurements for 344 penguins from three species observed on three islands in the Palmer Archipelago, Antarctica.

Inspired by [Tutorial: Hello, Quarto](#)

