Quarto
A successor to LaTeX?

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Overview

Quarto® is an open-source scientific and technical publishing system built on Pandoc.

▶ Author with pandoc markdown, including equations, citations, crossrefs, figure panels, callouts, advanced layout, and more.

▶ Publish high-quality articles, reports, presentations, websites, blogs, and books in HTML, PDF , MS Word, Powerpoint, ePub, and more.

▶ Support for interactive documents (Jupyter, Shiny, Observable)

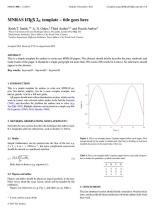▶ Quarto is the successor to Bookdown/Blogdown

Advantages over LaTeX

- ▶ Create dynamic content with Python, R, Julia, and Observable.
- ▶ Interactive widgets (Shiny, Jupyter widgets, Observable JS)
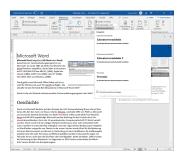- ▶ Support for many more output formats and even whole websites and blogs

Disadvantages over LaTeX

▶ Pandoc markdown is not a (Turing-) complete programming language

▶ LaTeX is "the specialist" for print output

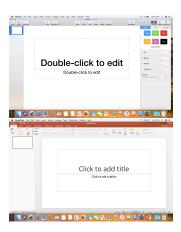▶ LaTeX is established since 40 years

Disadvantages over Word/Powerpoint/Keynote

- No realtime layout changes (fonts, colors, etc.)
- No realtime positioning of images
- No advanced animations
- Less advanced spell/grammer checker
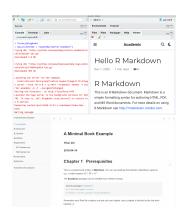- Slower creation of image-heavy documents

Advantages over Word/Powerpoint/Keynote

- ▶ Free, no vendor lock-in
- ▶ Diffable, gitable, reproducible
- ▶ LaTeX equations, code highlighting
- ▶ Much better HTML output
- ▶ Faster creation of text-heavy documents

Advantages over Book/Blogdown

▶ More themes/layouts
▶ Many more output options
(e.g. presentations)
▶ No dependency on R/RStudio and
Hugo
▶ One tool for everything and better
integration with pandoc
▶ Open source licence GPL v2

- Quarto Gallery
- Live demo

Summary

- Quarto can
  - autogenerate plots and widgets from embedded code snippets
  - cross referencing (also between different websites)
  - footnotes, sidenotes
  - bibliography
  - appendix
  - DOI, Google Scholar
  - …
- Quarto can create HTML, Word, Powerpoint, ePub, Wikis, RTF, Jupyter, InDesign, Websites, Blogs, Books…
- Quarto is not a successor of LaTeX
- Quarto is a LaTeX generator

The End