Applied LaTeX and Markdown for Researchers

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Markdown

Markdown

- Markdown is a *lightweight markup language*
  - Means that, unlike LATEXor html it is not a programming language
  - Overall, known for its simplicity and readability, both in its raw form and rendered form
- Markdown is widely used in coding-related applications, such as:
  - GitHub
  - Jupyter Notebooks/Google Colab
  - R Markdown/Quarto
  - Stack Overflow
  - Slack
  - Notion/Obsidian
  - Reddit!

Markdown Syntax

- We've already talked about some basic Markdown syntax:
    - Headers use #
    - Lists use - or 1.
    - Emphasis uses * or _
    - Links use [text](url)
- There are many more elements in Markdown, such as:
    - Images
    - Tables
    - Blockquotes
    - Code blocks
    - Footnotes
    - And more!
- You can consult the Markdown Guide for more information

Markdown flavours

- Markdown has "flavours" or "dialects" that add extra functionality
    - GitHub Flavored Markdown (GFM)
    - CommonMark
    - Pandoc Markdown
    - Markdown Extra
    - And more!
- These flavours add extra functionality, such as:
    - Tables
    - Footnotes
    - Strikethrough
    - Task lists
    - And more!
- The most common is GFM, which is what we'll be using today
    - See the GitHub Markdown Cheatsheet for more info

Compilation of Markdown

- In RMarkdown and Quarto, Markdown text is compiled through Pandoc
    - Pandoc is a universal document converter
- We do not need to understand much about the internal workings of Pandoc
- But know that Markdown can be used and compiled without any major software
    - Use VS Code (with the Markdown Preview Enhanced and Markdown All in One extensions)