

# Git, GitHub, Quarto

Megan Lewis

2024-09-18

# Plan of action

- 1st session: Git and GitHub
- Quick comfort break
- 2nd session: Quarto & GitHub Pages

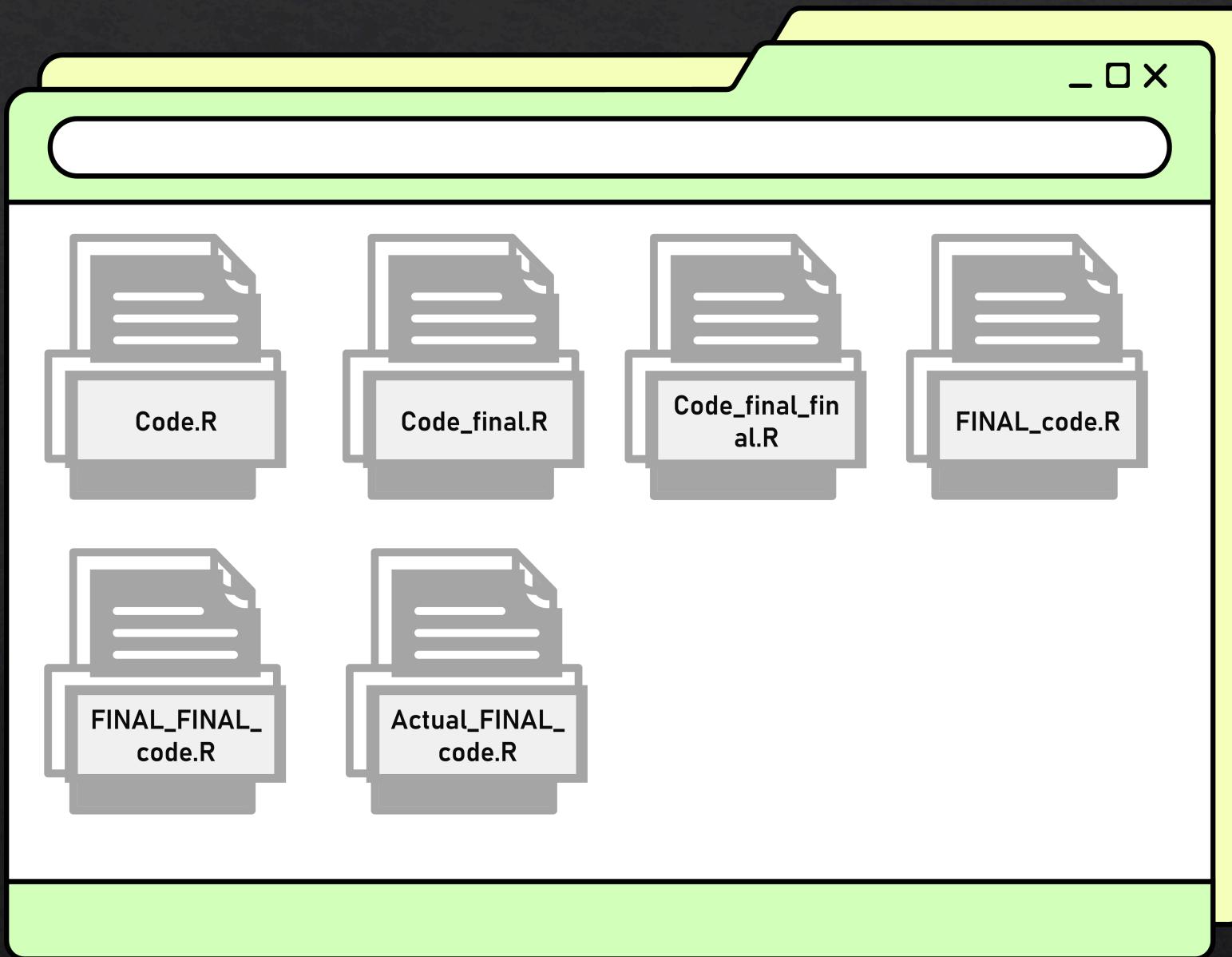
# Git and GitHub

## Objectives:

- What is Git and GitHub?
- Why use Git and GitHub?
- How to use Git and GitHub?



# What is Git?



# What is Git?



Version control



Track changes

# Why should you care about Git?



Reproducible  
practice



Reduces  
accidental  
mistakes



Collaboration

# How does Git Work?



Watches for  
changes



Changes are  
tracked



Evaluate  
changes

# Git Repository

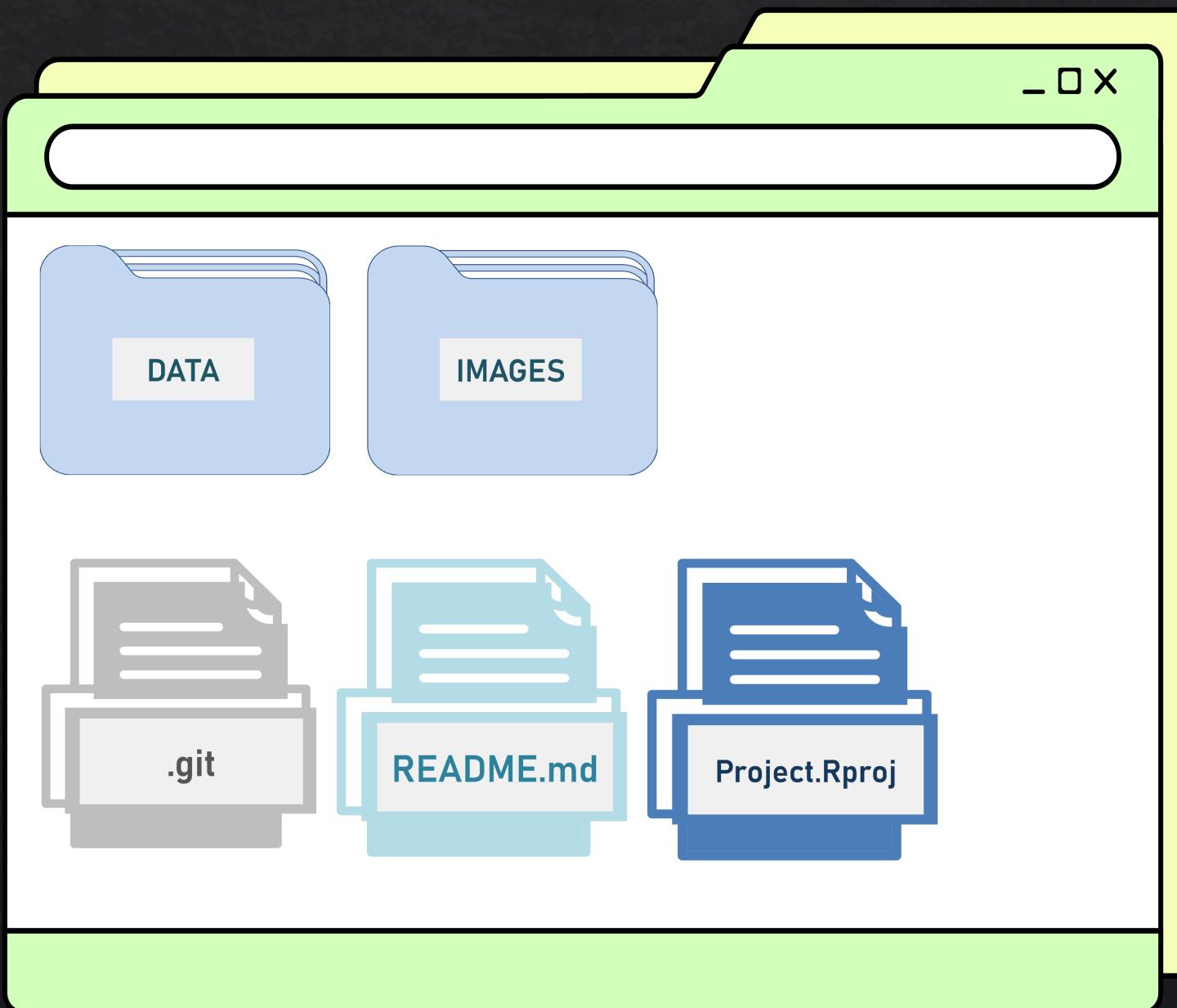
- Also referred to as a “Repo”
- A back up version of your directory
- Cloud based
- Any changes made locally need to be added to the remote repo

# Git Repository





**WARNING:**  
Do not edit  
.git file!



# Jargon

## Pull

Pulls down the current version of the repository from the remote (cloud) repository to the local repository



# Jargon

## Commit

Confirm that you're happy with the changes made and commit them



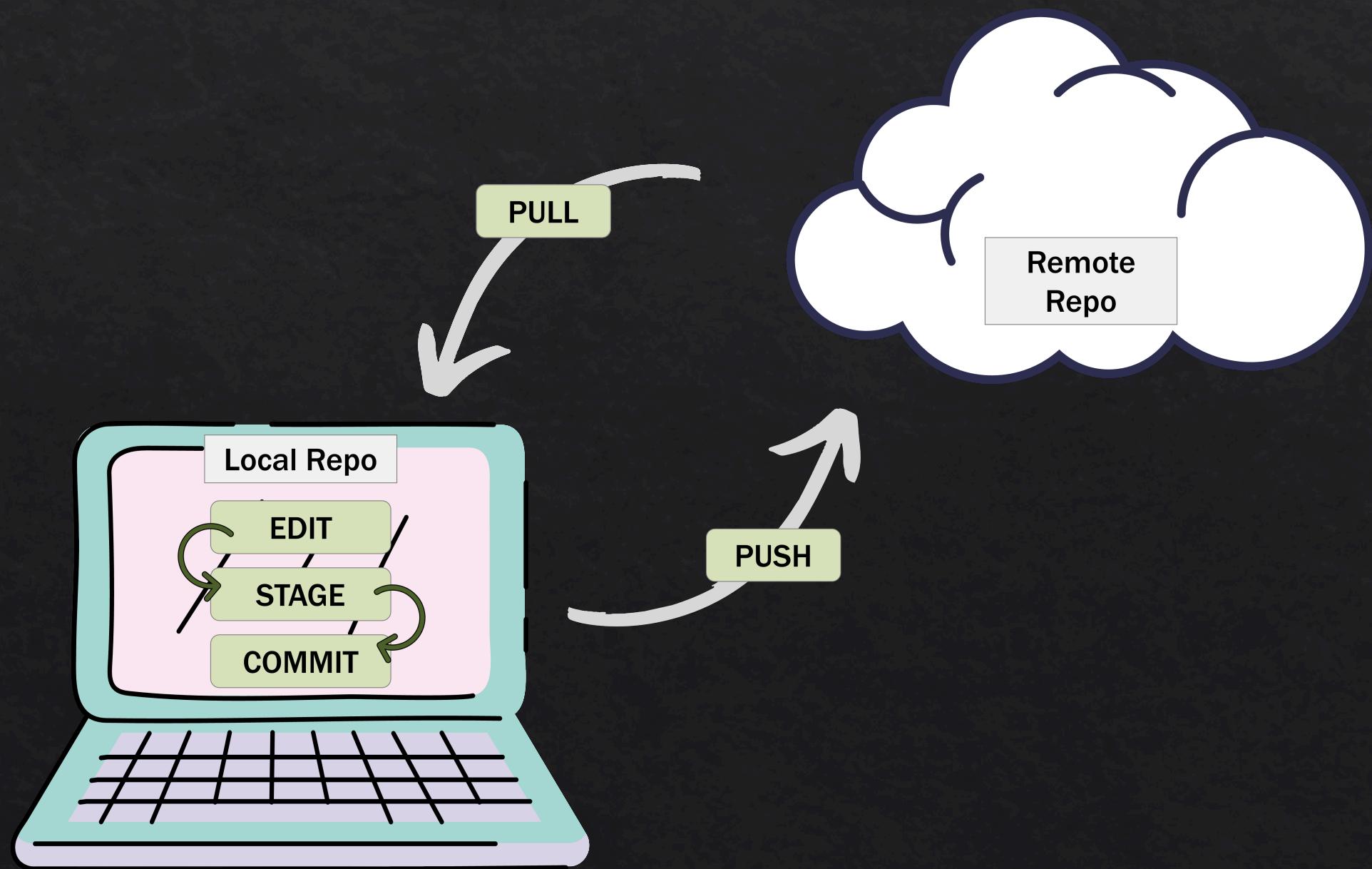
# Jargon

## Push

Push your changes from your local repo to the remote repo



# Workflow overview



# What is GitHub?



User-friendly



Social &  
admin



Popular & free

# How can you use Git or GitHub?



Git command  
line



GitHub web



GitHub  
Desktop

# GitHub README.md

- Should be descriptive
  - Allows anyone to be able to understand your project
- Some suggestions:
  - Repo title
  - Motivation for the project
  - Intended used
  - Limitations & challenges



# Demo

- GitHub Website
  - Creating your first GitHub repo
  - Making and committing changes



# Demo

- GitHub Website
  - Creating your first GitHub repo
  - Making and committing changes
- GitHub Desktop
  - Cloning a repo to your local computer
  - Pulling and pushing changes from your local computer



# Quarto and GitHub Pages

## Objectives:

- Learn basic Quarto features
- Create a static Quarto webpage to present your CV
- Learn how to publish a webpage using GitHub pages

# Markdown Language

```
1 # Quackston CV
2
3 My name is Quackston.
4 I *like* debugging stats code.
5
6 ## Skills
7
8 - Debugging expertise
9
10 ## Experience
11
12 [Hyperlink] (https://c7091.github.io/)
```

```
1 Heading 1
2
3 Normal text
4 Italics
5
6 Heading 2
7
8 Bullet point
9
10 Heading 2
11
12 Hyperlinked te
```

# Markdown to Quarto

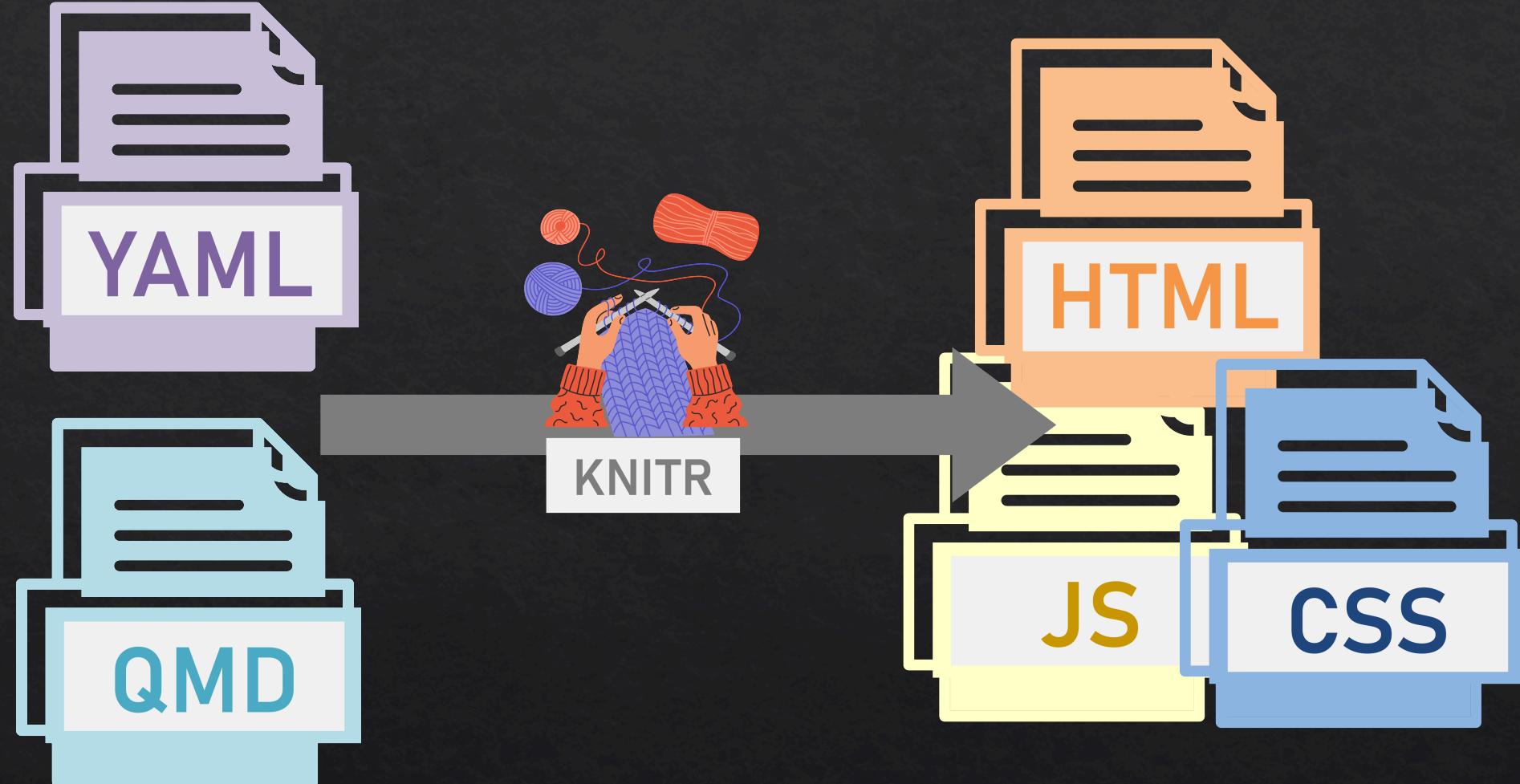


# What is Quarto?

- Newer version
- More powerful
- Easier to use



# Rendering



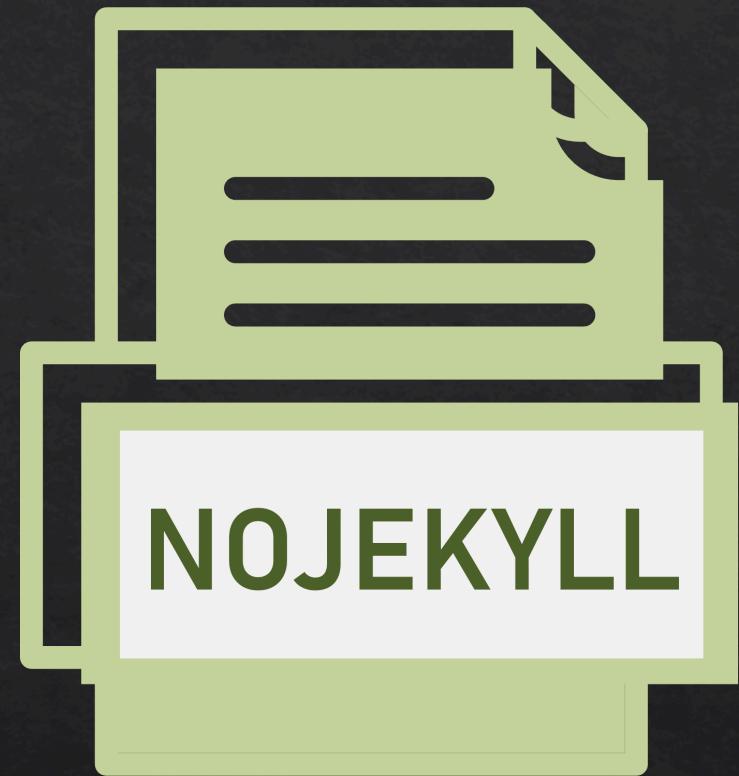
# Live demo plan!

- Create your webpage using R and R studio
- Make your github repository for you webpage
- Make your repository a github page



# Important!

```
1 ---  
2 project:  
3   type: website  
4  
5 website:  
6   title: "Quackington D. Duck"  
7 navbar:  
8   left:  
9     - href: index.qmd  
10    text: Home  
11     - href: about.qmd  
12    text: about  
13  
14 format:  
15   html:  
16     theme: cosmo  
17   output-dir: docs  
18 ---
```



# Turning your Quarto project into a GitHub repo

- Creating a local repo
- Publishing your local repo using GitHub desktop
- Pull, edit, push, repeat



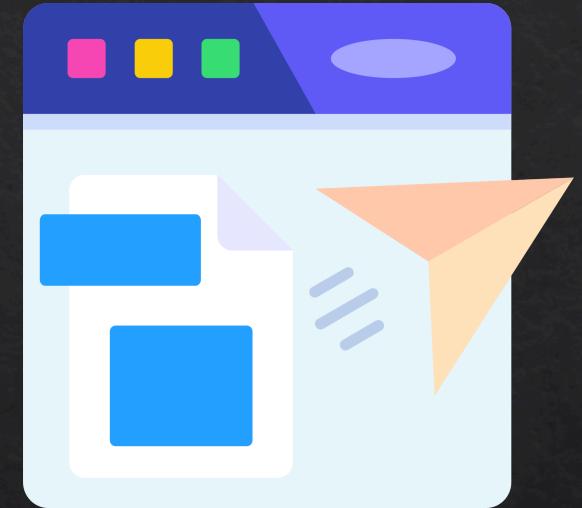
# Creating your GitHub Page



Repository  
Settings



Privacy



Build and  
deploy

# Useful links and resources

[Get Started - Quarto](#)

[Quarto Guides](#)

[Quarto markdown basics](#)

[GitHub Docs](#)

