

The machinery of the web

what you
need to write

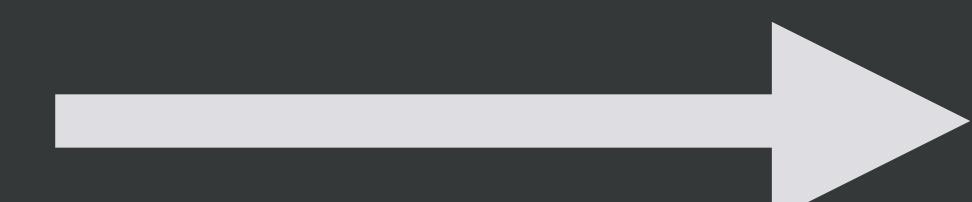
foo.doc

foo.R

foo.Rmd

foo.Qmd

foo.ipynb



what people
like to read

foo.md

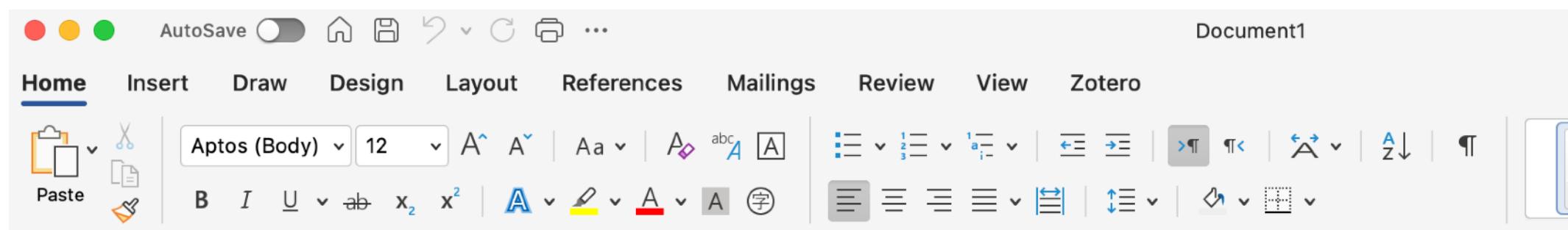
foo.html

foo.pdf

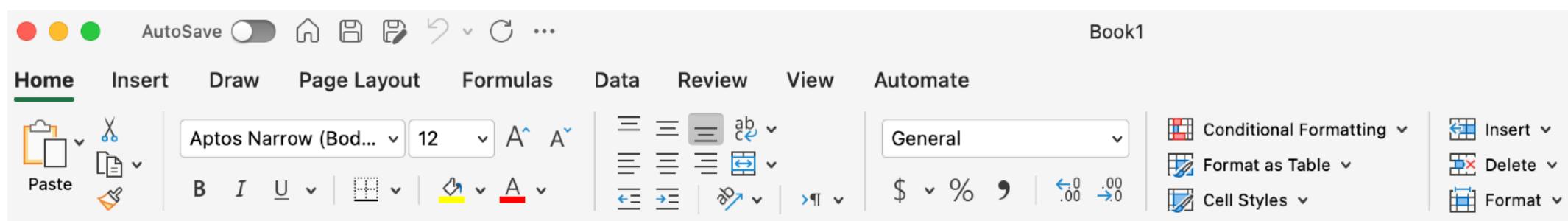
What you see is what you get (WYSIWYG)

- Probably, a lot of software you are familiar with is WYSIWYG

- Word



- Excel



- Canvas

- Want something bold? Use the bold button, and you will see it become bold

The screenshot shows a WYSIWYG editor interface on the myTulane Canvas platform. On the left is a dark sidebar with various course management links. The main area has a toolbar at the top with buttons for bold, italic, underline, etc. Below the toolbar is a text editor window containing the following text:

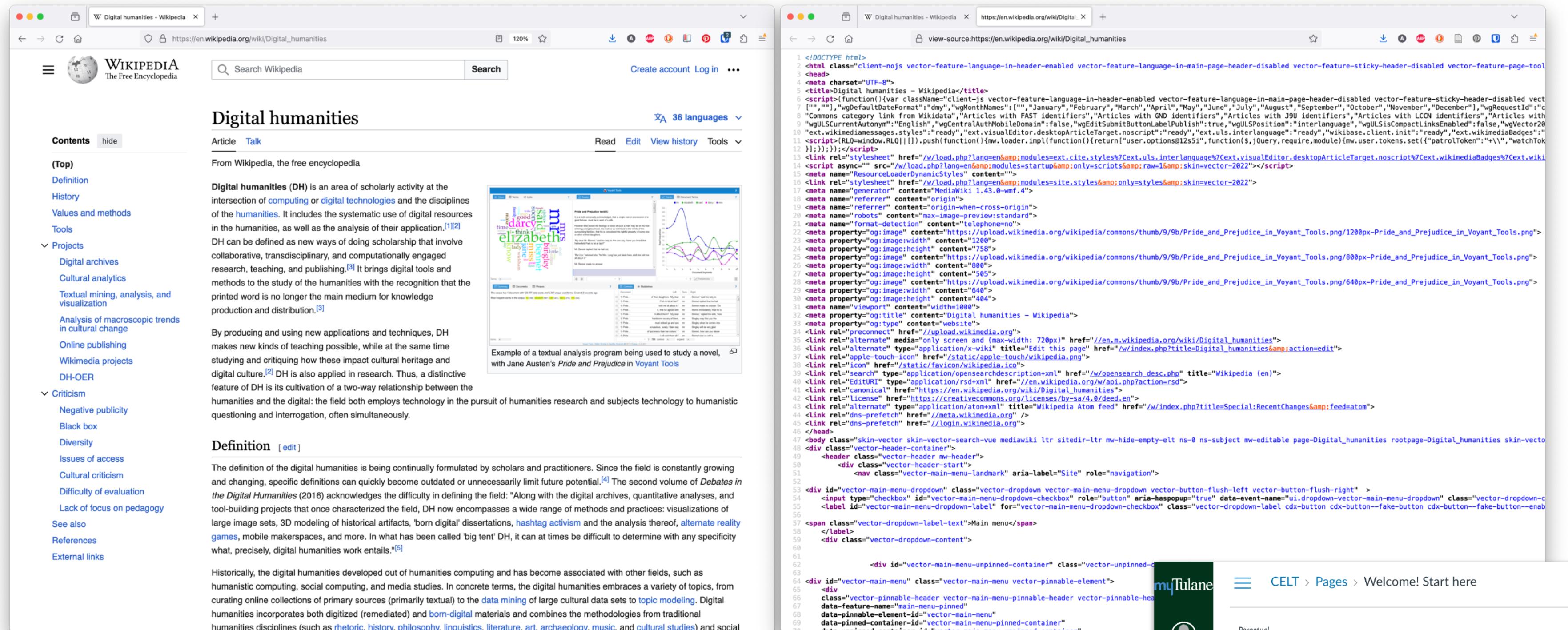
Hi folks!

Before our first day together, I'd like you to do a little pre-reading. The chapter I would like you to read is from the book [Data Feminism](#). There are a lot of ways you could choose to read the chapter.

- **Preferred:** read the chapter (and provide comments) through the Hypothesis assignment linked on this same module, or right here: [Data Feminism Chapter 1](#) If you haven't used it before, Hypothesis is a collaborative annotation platform that can be used to have pre-class discussion on readings.
- If you'd rather read the chapter on paper, [it looks like the library has a copy](#).
- The book is also freely available online, in [English](#), [Arabic](#), and [Spanish](#).

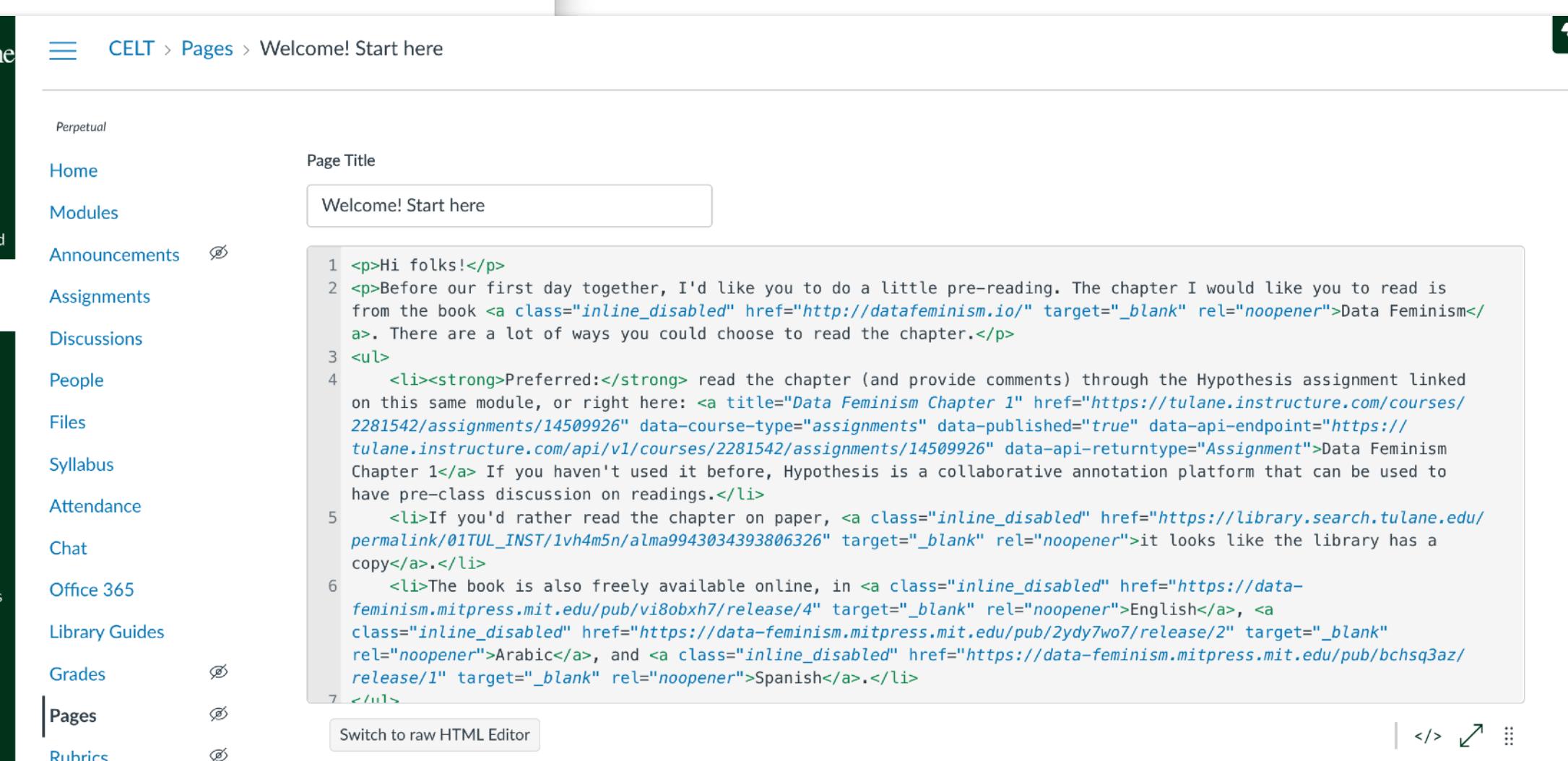
I love the book Data Feminism, because it is an approachable critical framework to data science. Although the title has the word "feminism" in it, the authors take a broad approach to that term. From the introduction,

The web is different



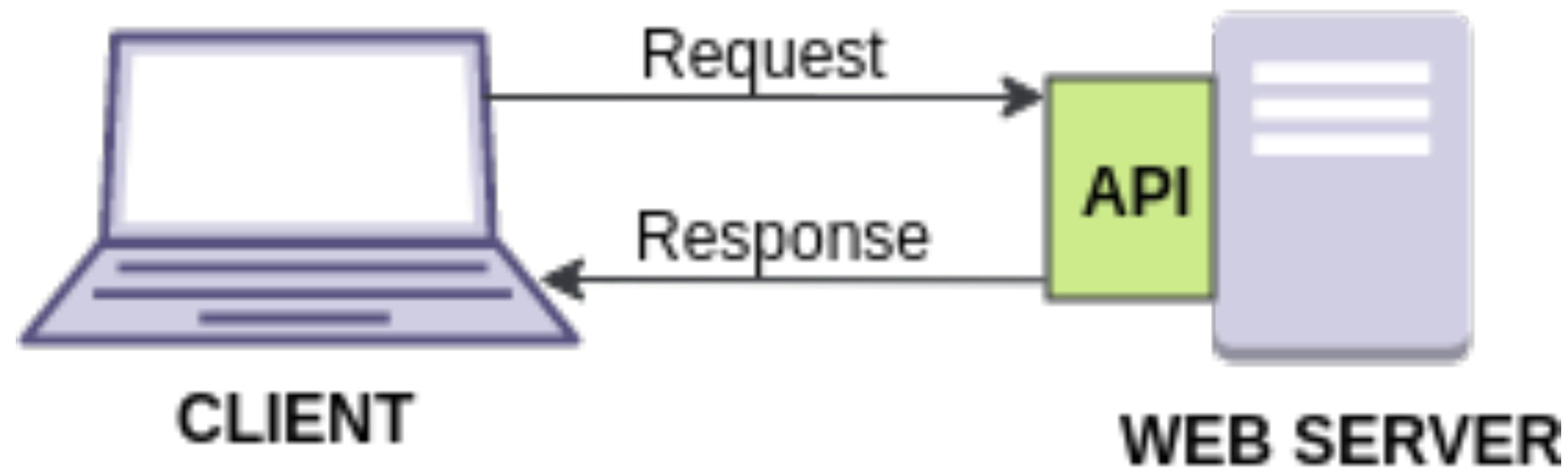
The image displays two side-by-side screenshots of a web browser window. Both windows show the same Wikipedia article titled "Digital humanities". The left window shows the rendered HTML content, which includes a sidebar with navigation links like "Contents", "Definition", "History", "Values and methods", "Tools", "Projects", "Criticism", and "See also". The main content area features a heading "Digital humanities", a sub-headline "From Wikipedia, the free encyclopedia", and a detailed text block about the field. An image of a Voyant Tools interface is embedded in the text. The right window shows the "view-source" version of the same page, displaying the raw HTML code. The code is extensive, showing various meta tags, script blocks, and the full structure of the page, including the sidebar and main content.

- What you see depends on the code that's behind it

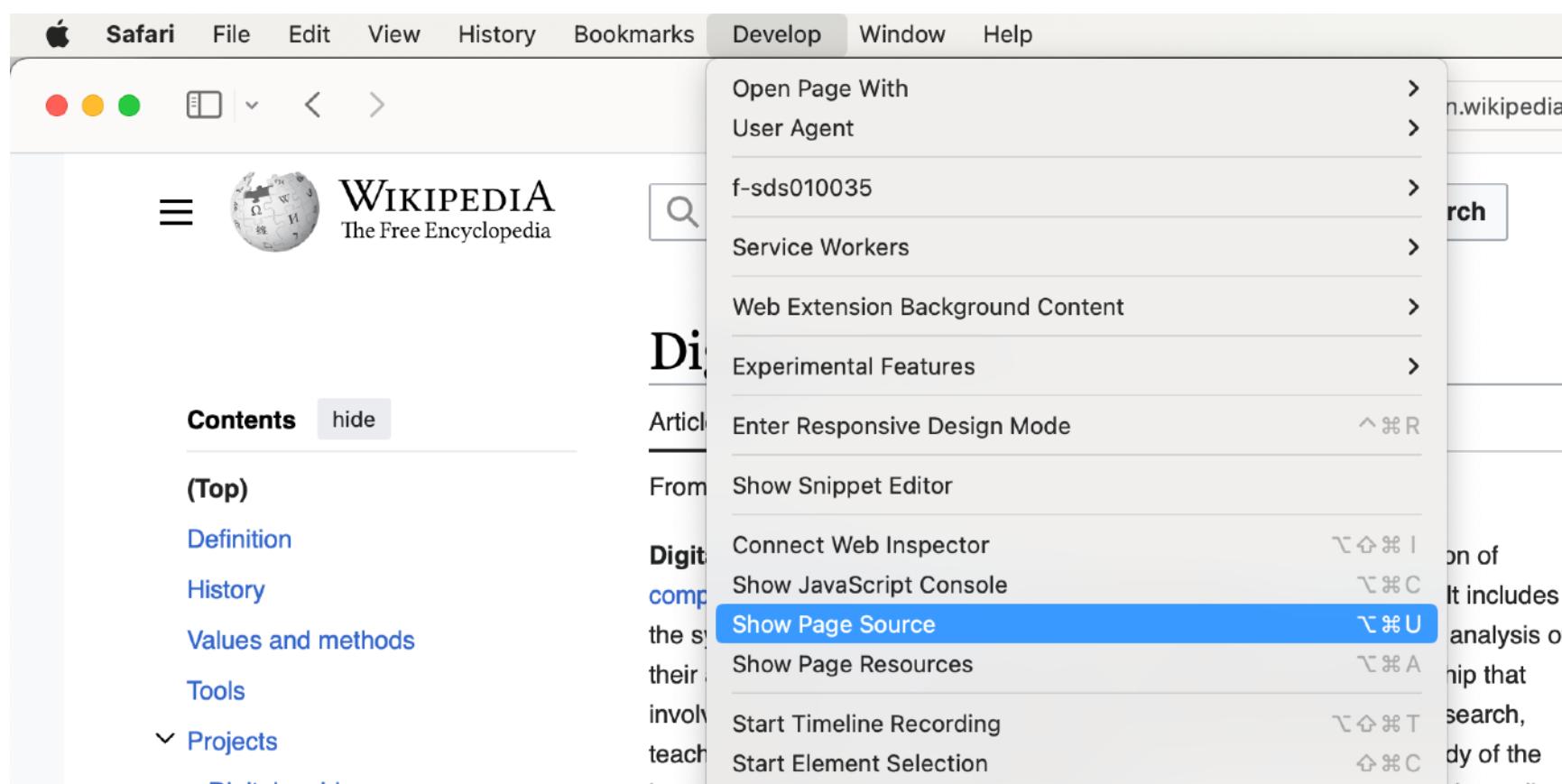
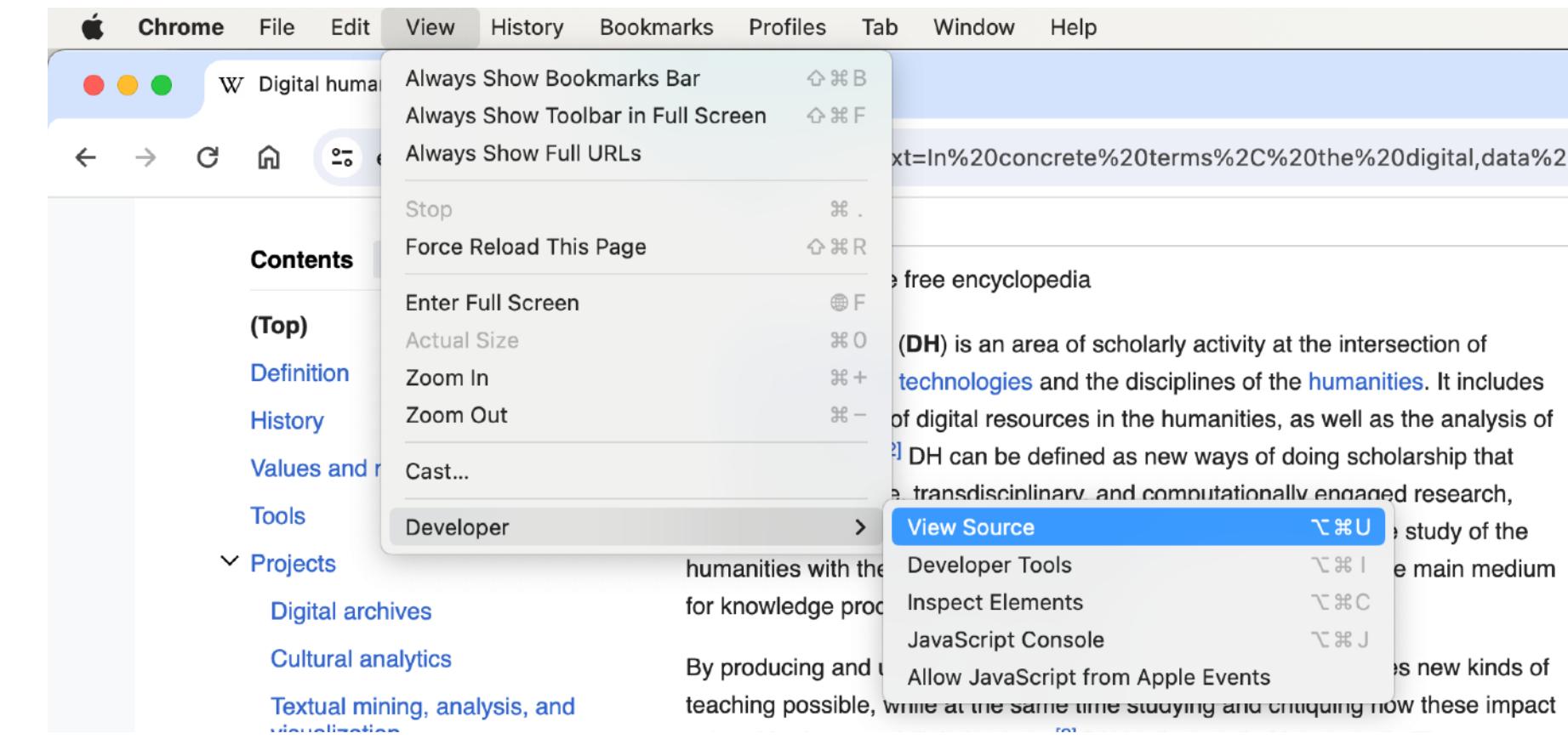
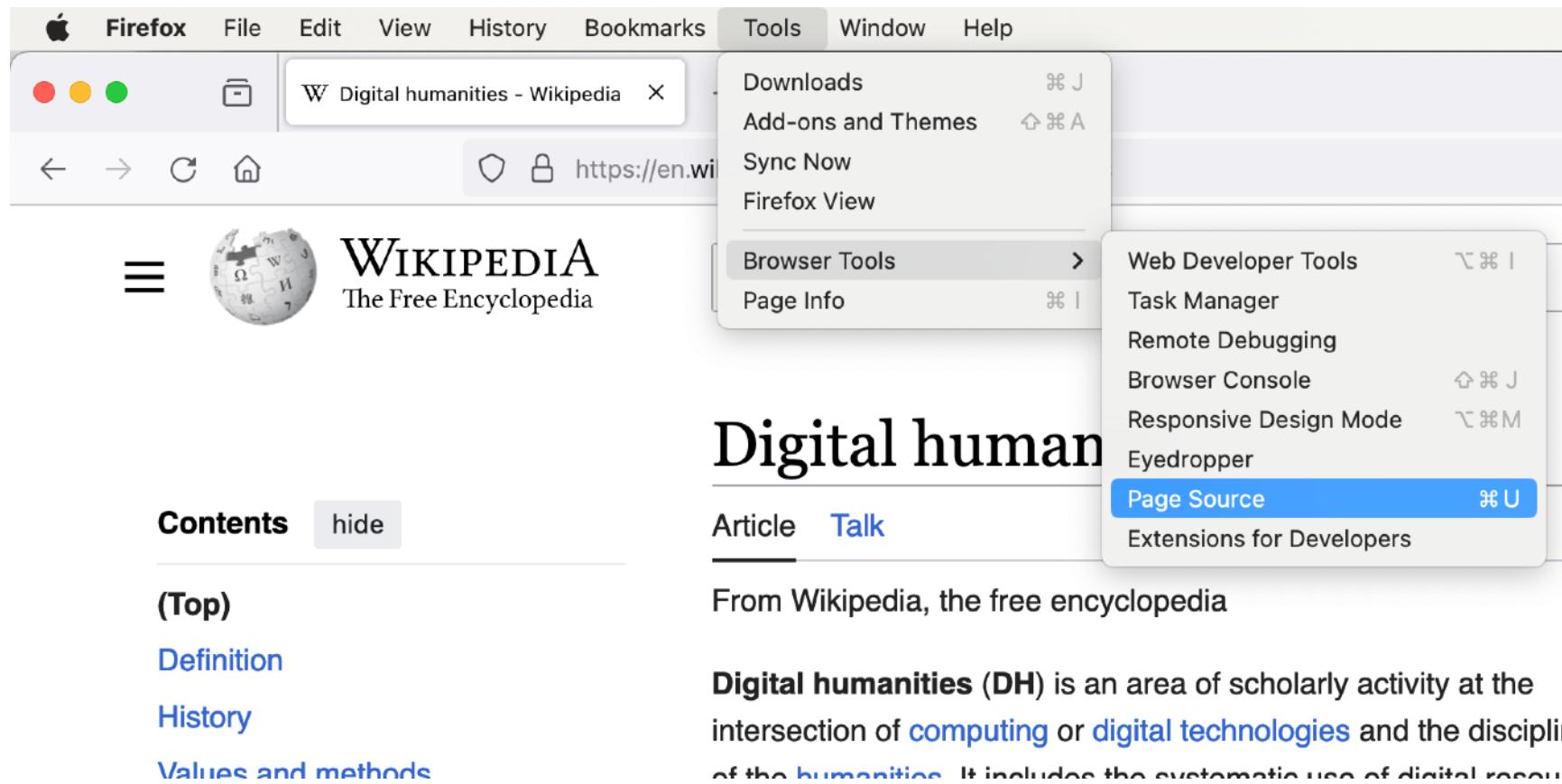


The image shows a screenshot of a web-based course management system. On the left, there is a vertical sidebar with a dark green header containing the "tulane" logo and a list of navigation links: Account, Dashboard, Announcements, Assignments, Discussions, Calendar, Inbox, History, Chat, Office 365, Library Guides, Grades, Pages, and Rubrics. The main content area has a light blue header with the text "CELT > Pages > Welcome! Start here". Below the header, there is a "Page Title" input field containing "Welcome! Start here". Underneath the title, there is a block of text and a "Switch to raw HTML Editor" button at the bottom right. The text in the main area is as follows:

```
1 <p>Hi folks!</p>
2 <p>Before our first day together, I'd like you to do a little pre-reading. The chapter I would like you to read is from the book <a class="inline_disabled" href="http://datafeminism.io/" target="_blank" rel="noopener">Data Feminism</a>. There are a lot of ways you could choose to read the chapter.</p>
3 <ul>
4   <li><strong>Preferred:</strong> read the chapter (and provide comments) through the Hypothesis assignment linked on this same module, or right here: <a title="Data Feminism Chapter 1" href="https://tulane.instructure.com/courses/2281542/assignments/14509926" data-course-type="assignments" data-published="true" data-api-endpoint="https://tulane.instructure.com/api/v1/courses/2281542/assignments/14509926" data-api-returntype="Assignment">Data Feminism Chapter 1</a> If you haven't used it before, Hypothesis is a collaborative annotation platform that can be used to have pre-class discussion on readings.</li>
5   <li>If you'd rather read the chapter on paper, <a class="inline_disabled" href="https://library.search.tulane.edu/permalink/01TUL_INST/1vh4m5n/alm9943034393806326" target="_blank" rel="noopener">it looks like the library has a copy</a>.</li>
6   <li>The book is also freely available online, in <a class="inline_disabled" href="https://data-feminism.mitpress.mit.edu/pub/i8obxh7/release/4" target="_blank" rel="noopener">English</a>, <a class="inline_disabled" href="https://data-feminism.mitpress.mit.edu/pub/2ydy7w07/release/2" target="_blank" rel="noopener">Arabic</a>, and <a class="inline_disabled" href="https://data-feminism.mitpress.mit.edu/pub/bchsq3az/release/1" target="_blank" rel="noopener">Spanish</a>.</li>
7 </ul>
```



Peek at a website's source code



Markdown can help bridge the
gap



Markdown Complete Reference

By JOHN GRUBER

Markdown: Syntax

Main Basics **Syntax** License Dingus

ARCHIVE

THE TALK SHOW

DITHERING

PROJECTS

CONTACT

COLOPHON

RSS FEED

TWITTER

SPONSORSHIP

- [Overview](#)
 - [Philosophy](#)
 - [Inline HTML](#)
 - [Automatic Escaping for Special Characters](#)
- [Block Elements](#)
 - [Paragraphs and Line Breaks](#)
 - [Headers](#)
 - [Blockquotes](#)
 - [Lists](#)
 - [Code Blocks](#)
 - [Horizontal Rules](#)
- [Span Elements](#)
 - [Links](#)
 - [Emphasis](#)
 - [Code](#)
 - [Images](#)
- [Miscellaneous](#)
 - [Backslash Escapes](#)

Text and headers

Text can be plain text or decorated as **italic** or ****bold****

Headers use **#**s

Header 1

Header 2

Header 3

```
1 ▼ # Data analysis of PSAs in Minnesota
2   Amelia McNamara
3
4 ▼ ## Loading packages and data
5
6   `r
7   library(tidyverse)
8   library(knitr)
9   psas <- read_csv("data/psas2021.csv")
10  ``
11
12 ▼ ## Analysis
```

Data analysis of PSAs in Minnesota

Amelia McNamara

Loading packages and data

```
library(tidyverse)
library(knitr)
psas <- read_csv("data/psas2021.csv")
```

Analysis

Text and headers

Text can be plain text or decorated as **italic** or ****bold****

Headers use **#**s

Header 1

Header 2

Header 3

```
1 ▼ # Data analysis of PSAs in Minnesota
2   Amelia McNamara
3
4 ▼ ## Loading packages and data
5
6   `r
7   library(tidyverse)
8   library(knitr)
9   psas <- read_csv("data/psas2021.csv")
10  ``
11
12 ▼ ## Analysis
```



Data analysis of PSAs in Minnesota
Amelia McNamara
Loading packages and data
library(tidyverse)
library(knitr)
psas <- read_csv("data/psas2021.csv")
Analysis

Links

A link can be a plain http address or can underlie a phrase:

<https://celt.tulane.edu/data-literacy-course-redesign-institute>

[Data Literacy Course (Re)Design Institute](https://celt.tulane.edu/data-literacy-course-redesign-institute)

Long URLs with, e.g. query parameters, work just as well.

Data analysis of PSAs in Minnesota

Amelia McNamara

Loading packages and data

I requested data from the [MN Department of Transportation](#)

```
1 ▼ # Data analysis of PSAs in Minnesota
2   Amelia McNamara
3
4 ▼ ## Loading packages and data
5
6 I requested data from the [MN Department of Transportation] (https://www.dot.state.mn.us/information/datapractices/submit-request.html)
```

Links

A link can be a plain http address or can underlie a phrase:

<https://celt.tulane.edu/data-literacy-course-redesign-institute>

[Data Literacy Course (Re)Design Institute](<https://celt.tulane.edu/data-literacy-course-redesign-institute>)

Long URLs with, e.g. query parameters, work just as well.

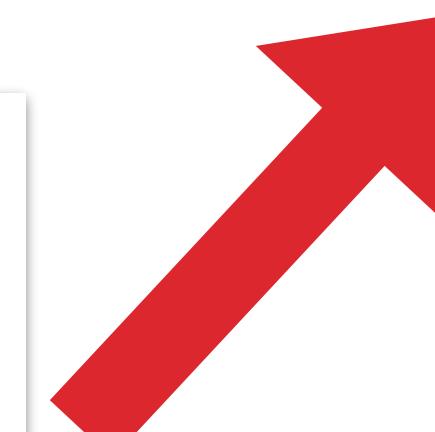
```
1 ▼ # Data analysis of PSAs in Minnesota
2   Amelia McNamara
3
4 ▼ ## Loading packages and data
5
6 I requested data from the [MN Department of Transportation] (https://www.dot.state.mn.us/information/datapractices/submit-request.html)
```

Data analysis of PSAs in Minnesota

Amelia McNamara

Loading packages and data

I requested data from the [MN Department of Transportation](https://www.dot.state.mn.us/information/datapractices/submit-request.html)



Tables

Tables are often a bit of a pain...

Dashes separate the header row from content cells, and pipes separate the columns

Colons can be used to align columns

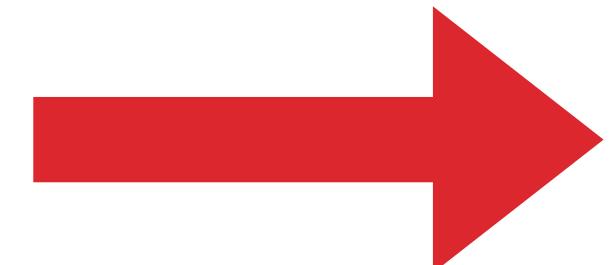
Tables

Tables are often a bit of a pain...

Dashes separate the header row from content cells, and pipes separate the columns

Colons can be used to align columns

Column A	Column B	Column C
left	center	right
aligned	aligned	aligned
text	text	text



Column A	Column B	Column C
left	center	right
aligned	aligned	aligned
text	text	text

Images

Including an image is very similar to hyperlinking

Images can be on the web:

```
![Tulane Logo] (https://communications.tulane.edu/sites/default/files/styles/manual_crop/public/images/listings/CreativeStyleIconsMainPage-07.png)
```

Or they can be locally stored, e.g. in a directory “images”

```
![Tulane logo] (images/logo.png)
```

Reference style links and images

Links

A [linked phrase][id]

At the bottom of the document: [id]: <http://example.com/> "Title"

Images

![alt text][id]

At the bottom of the document: [id]: "Title"

Useful if you'll be linking to the same target/image multiple times throughout the document

Tips

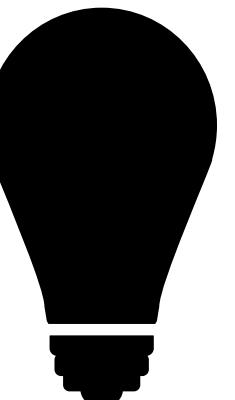
The outer pipes (|) on a Markdown table are optional.

You don't need to make the raw Markdown line up prettily.

You can use inline Markdown within tables.

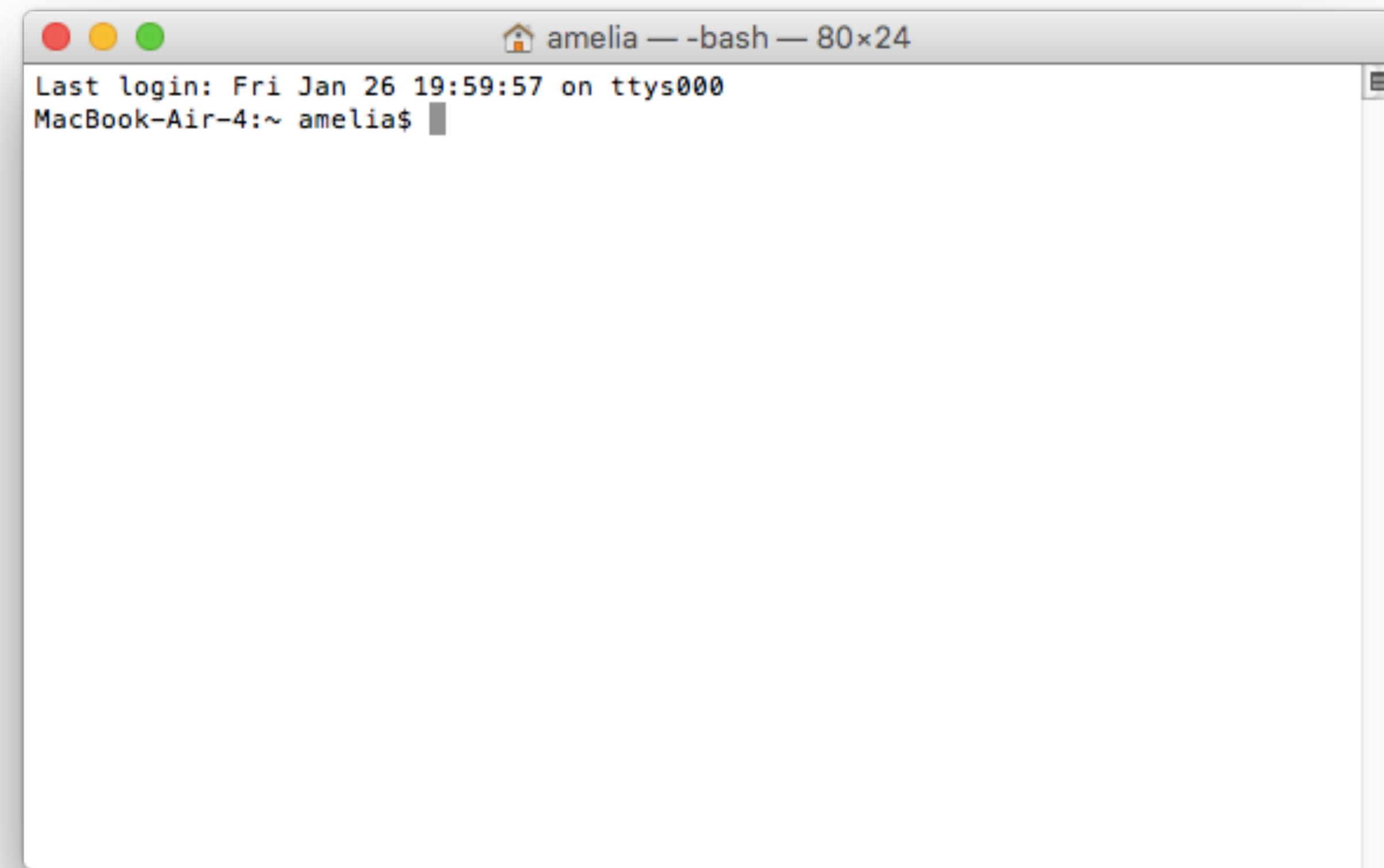
Keep your text to max ~80 characters across, especially if you use a version control system (like git)

Starting a list? Leave an empty line before the first item on your list



git and Github

git: a version control system (almost like a programming language)



Github: a site to host code (kind of like Dropbox, but better)

The screenshot shows the GitHub homepage in a web browser. The top navigation bar includes links for Pull requests, Issues, Marketplace, and Explore. A search bar is present, along with a 'New' button for repositories. On the left, a sidebar lists a repository: STAT360/hw1viz-amelia-student. The main content area features a large callout box with the heading "Learn Git and GitHub without any code!" and a subtext explaining the Hello World guide. It includes two buttons: "Read the guide" (in green) and "Start a project". Below this, another callout box encourages users to "Discover interesting projects and people to populate your personal news feed." It explains that the news feed keeps users updated on activity from watched repositories and followed people. A "Explore GitHub" button is at the bottom of this section. To the right, there's a "Welcome to the new dashboard" message and a "Discover repositories" section listing several projects: MicrosoftDocs/sql-docs, PowerShell, decred/dcrdata, and dotnet/coreclr. Each project entry includes its name, programming language, star count, and a brief description.

GitHub

GitHub, Inc. [US] | https://github.com

Search or jump to...

Pull requests Issues Marketplace Explore

Repositories New

Find a repository...

STAT360/hw1viz-amelia-student

Welcome to the new dashboard. Get closer to the stuff you care about most.

Discover repositories

MicrosoftDocs/sql-docs

Technical documentation for Microsoft SQL Server, tools such as SQL Server Management Studio (SSMS), SQL Server Data Tools (SSDT) etc.

PowerShell ★ 206

decred/dcrdata

Decred block explorer, with packages and apps for data collection and storage. Written in Go.

Go ★ 67

dotnet/coreclr

CoreCLR is the runtime for .NET Core. It includes the garbage collector, JIT compiler, primitive data types and low-level classes.

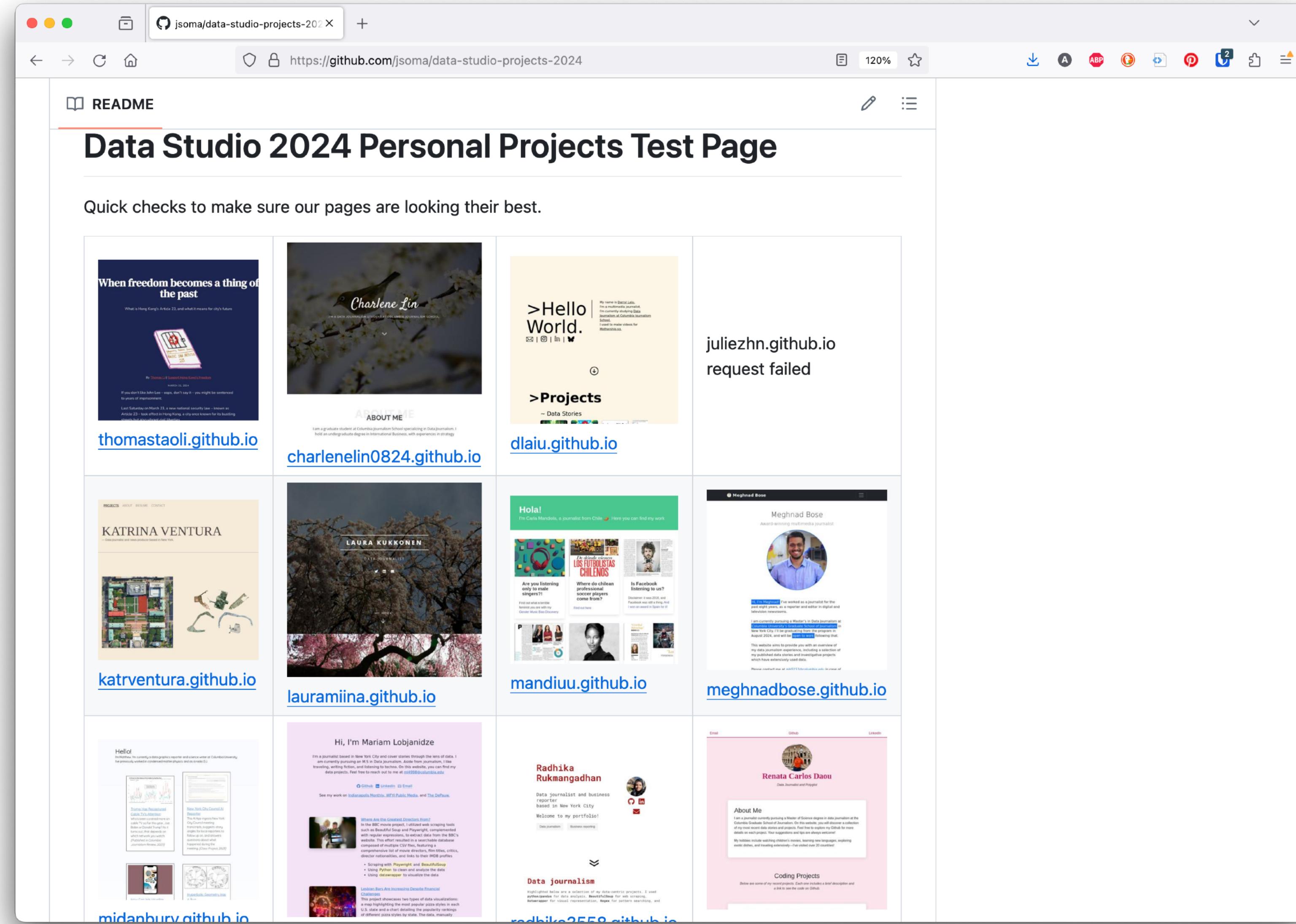
C# ★ 11k

Go to Explore →

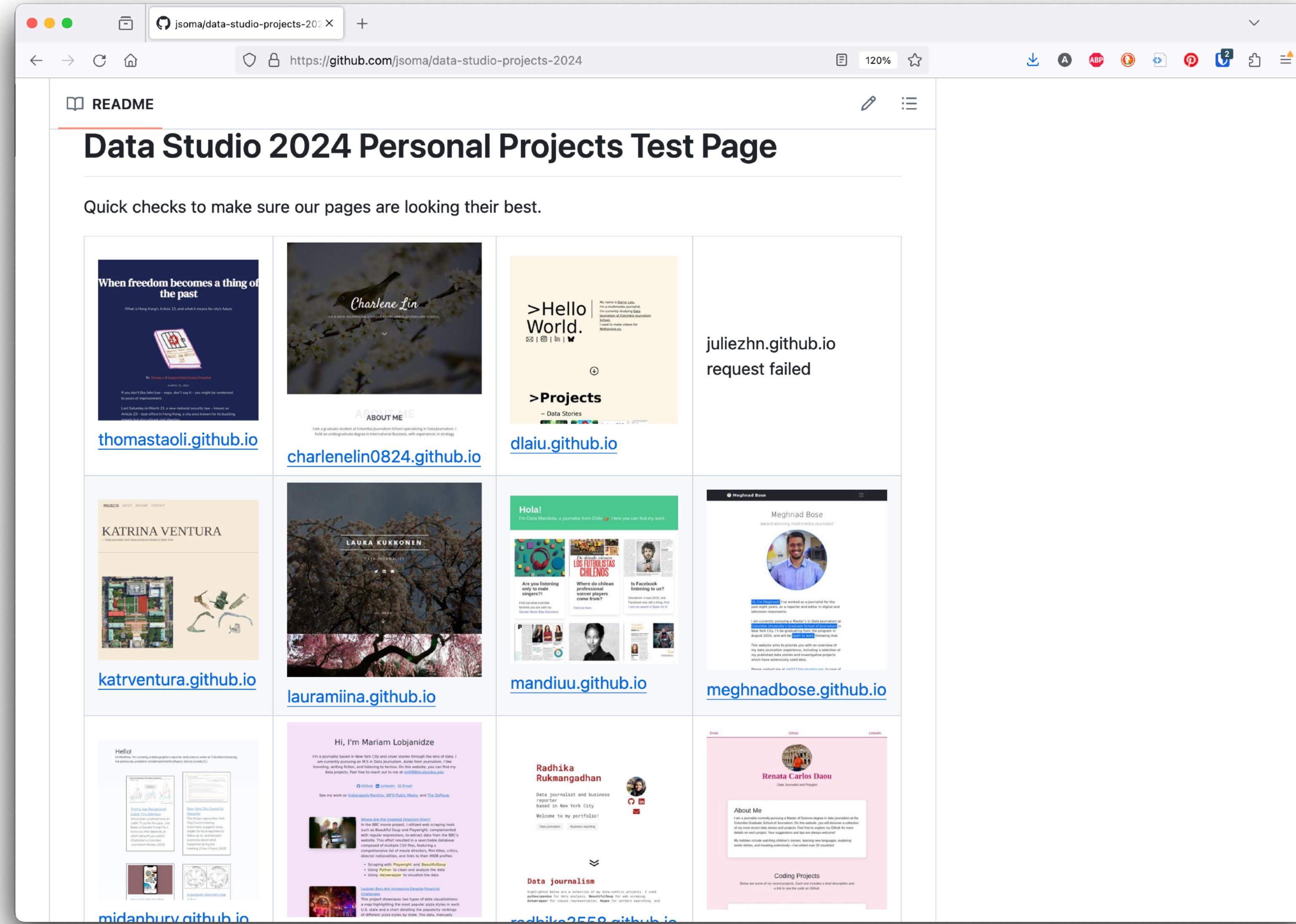
Read the guide Start a project

Explore GitHub

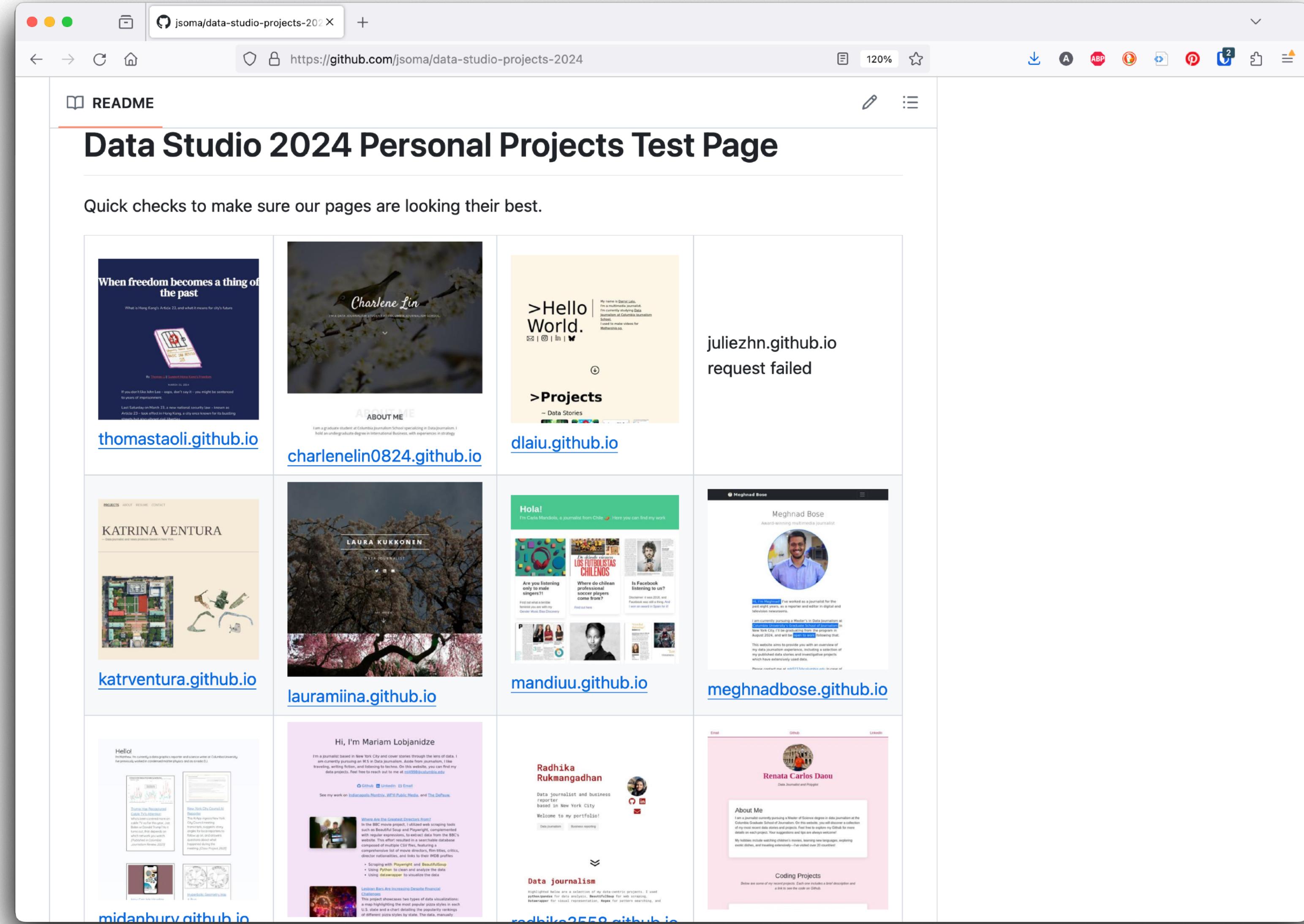
Github: a place to host a portfolio of work



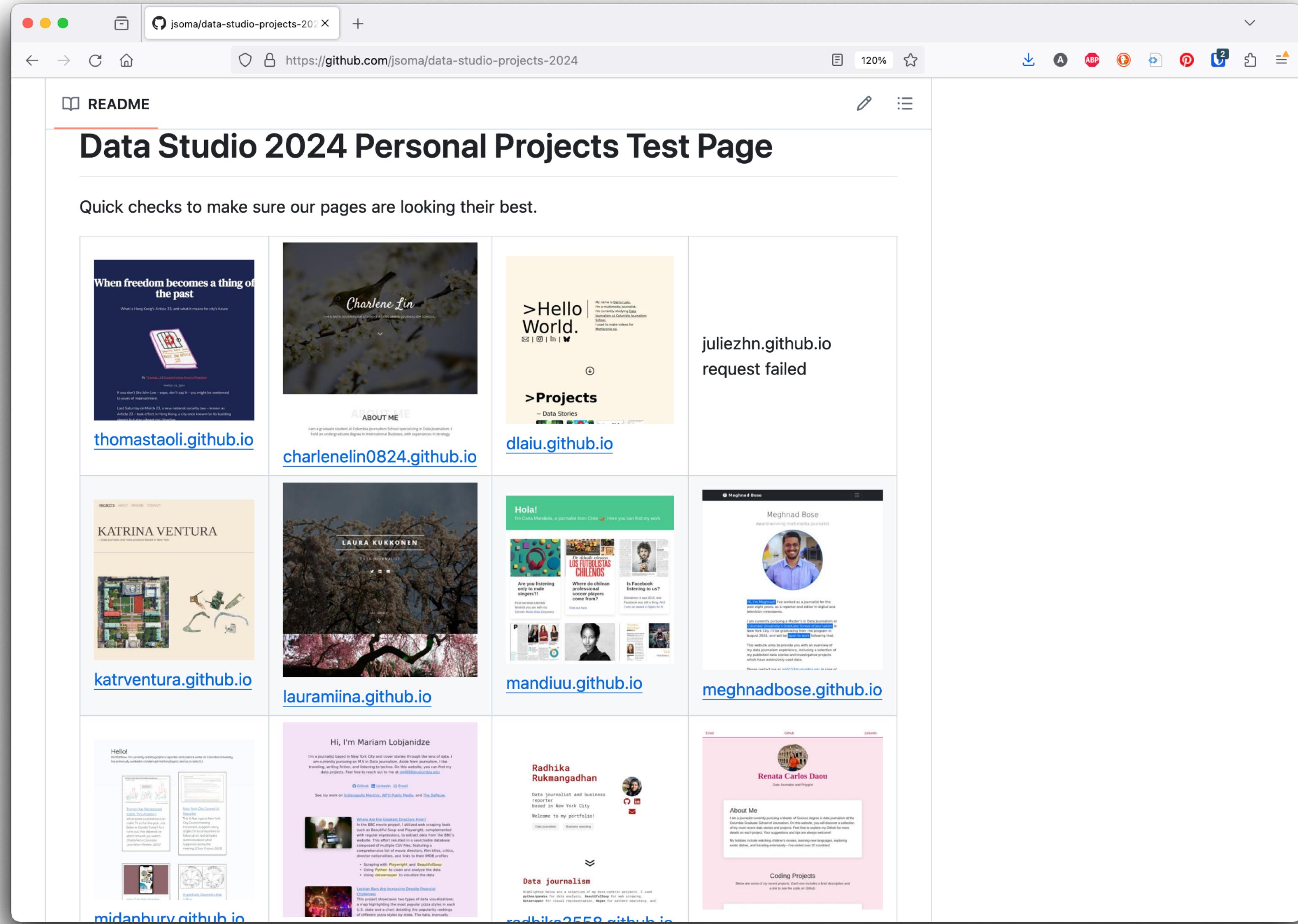
Github: a place to host a portfolio of work



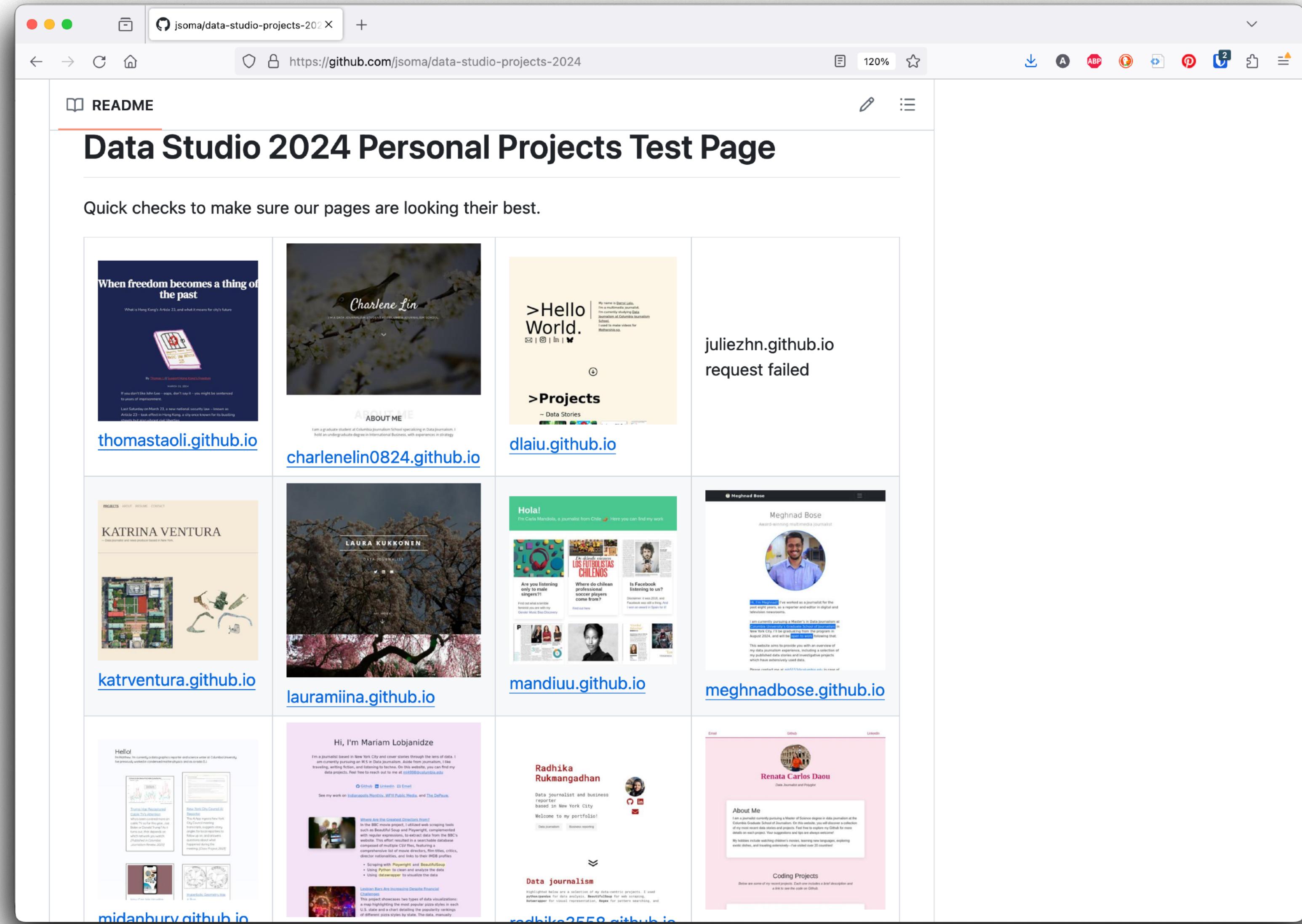
Github: a place to host a portfolio of work



Github: a place to host a portfolio of work



Github: a place to host a portfolio of work



version control

"FINAL".doc



FINAL.doc!



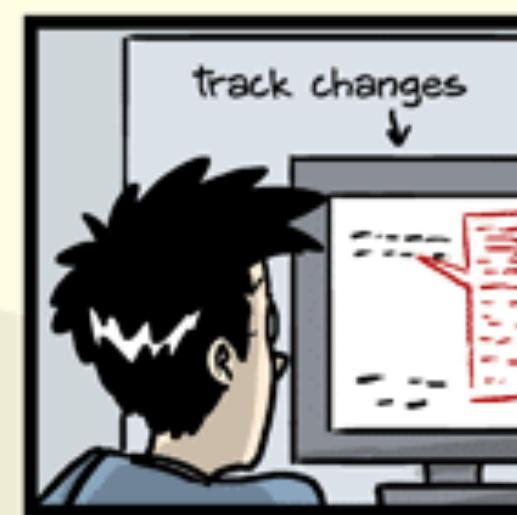
FINAL_rev.2.doc



FINAL_rev.6.COMMENTS.doc



FINAL_rev.8.comments5.
CORRECTIONS.doc



FINAL_rev.18.comments7.
corrections9.MORE.30.doc

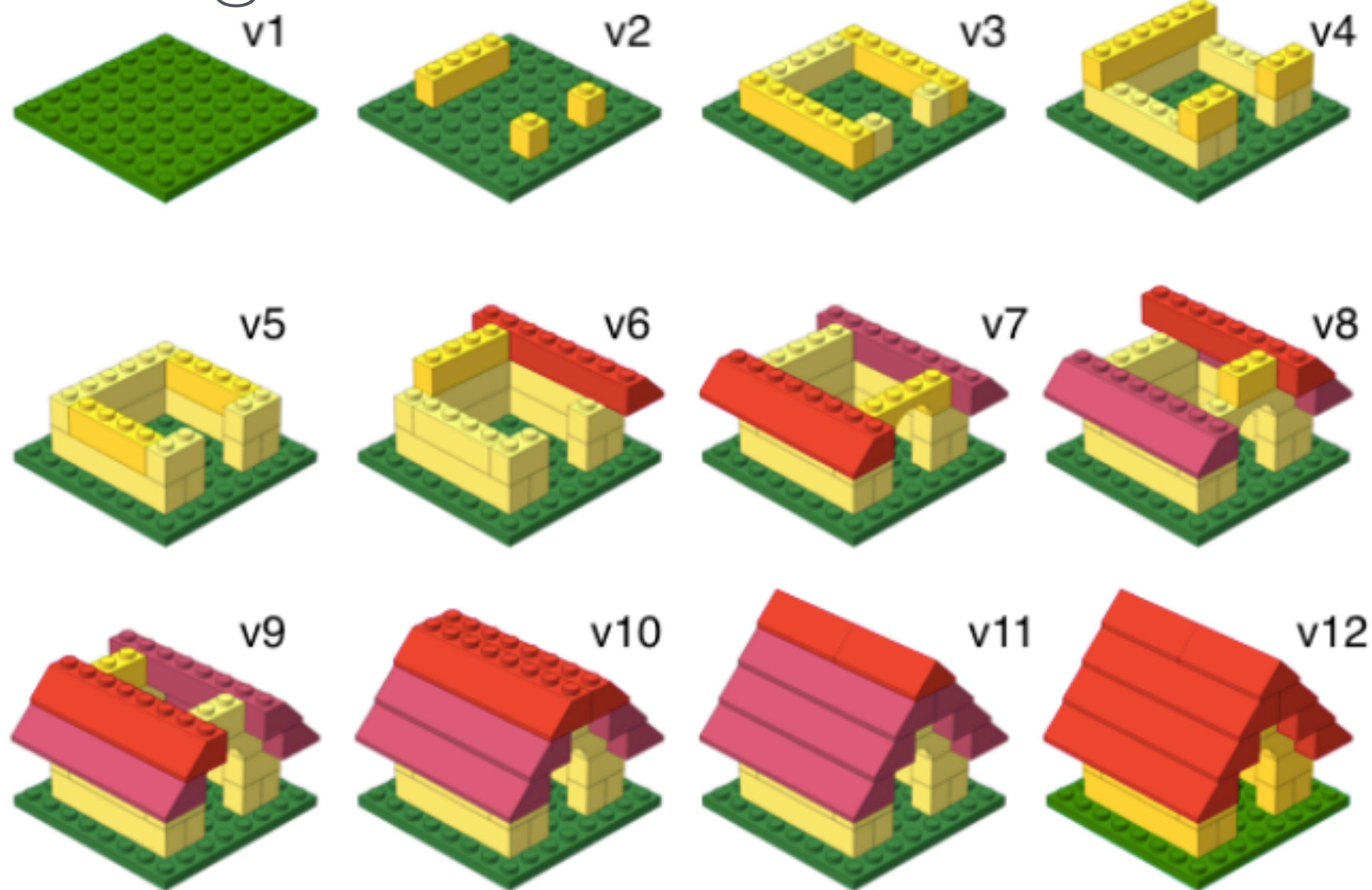


FINAL_rev.22.comments49.
corrections.10.#@\$%WHYDID
ICOMETOGRAD SCHOOL????.doc

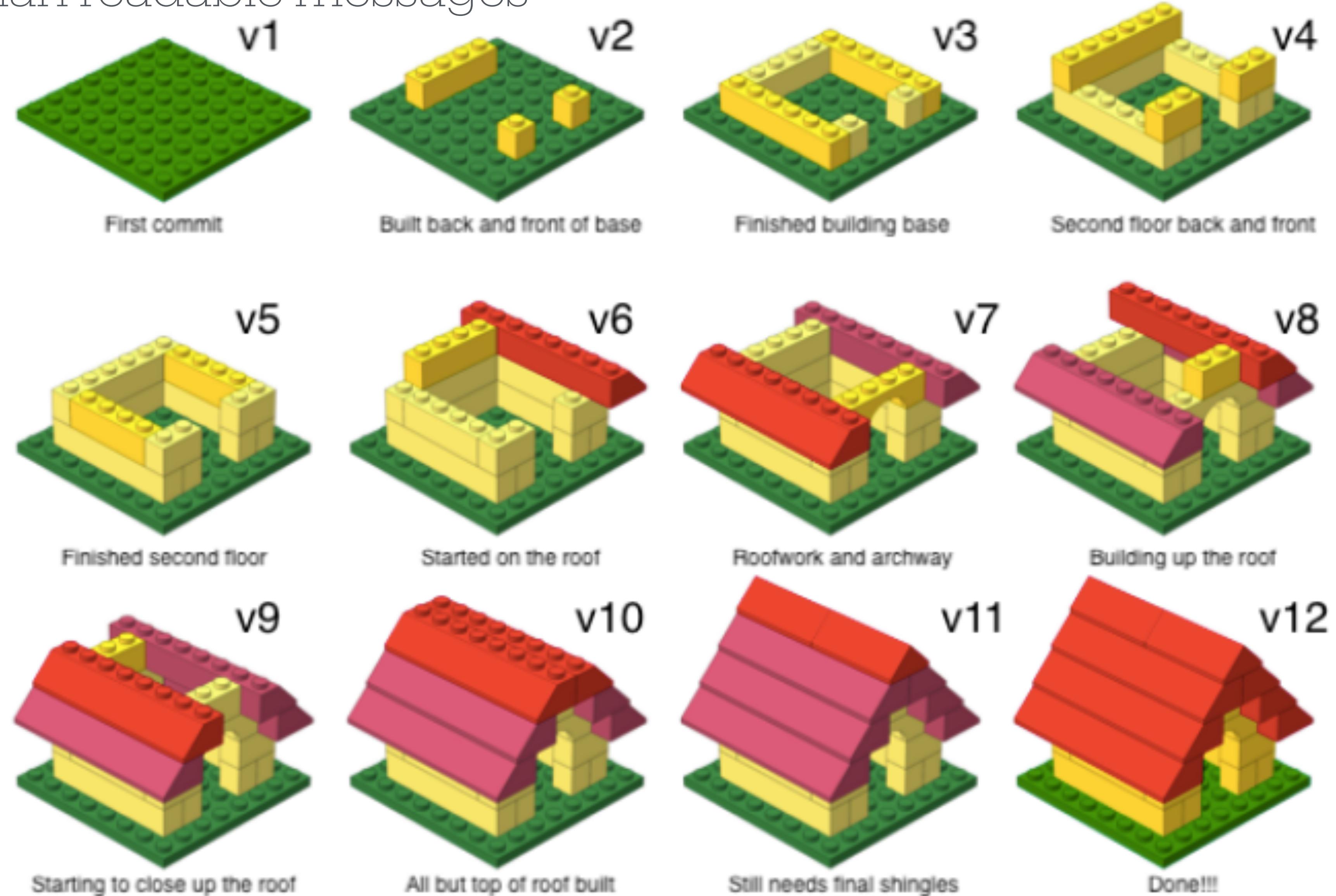


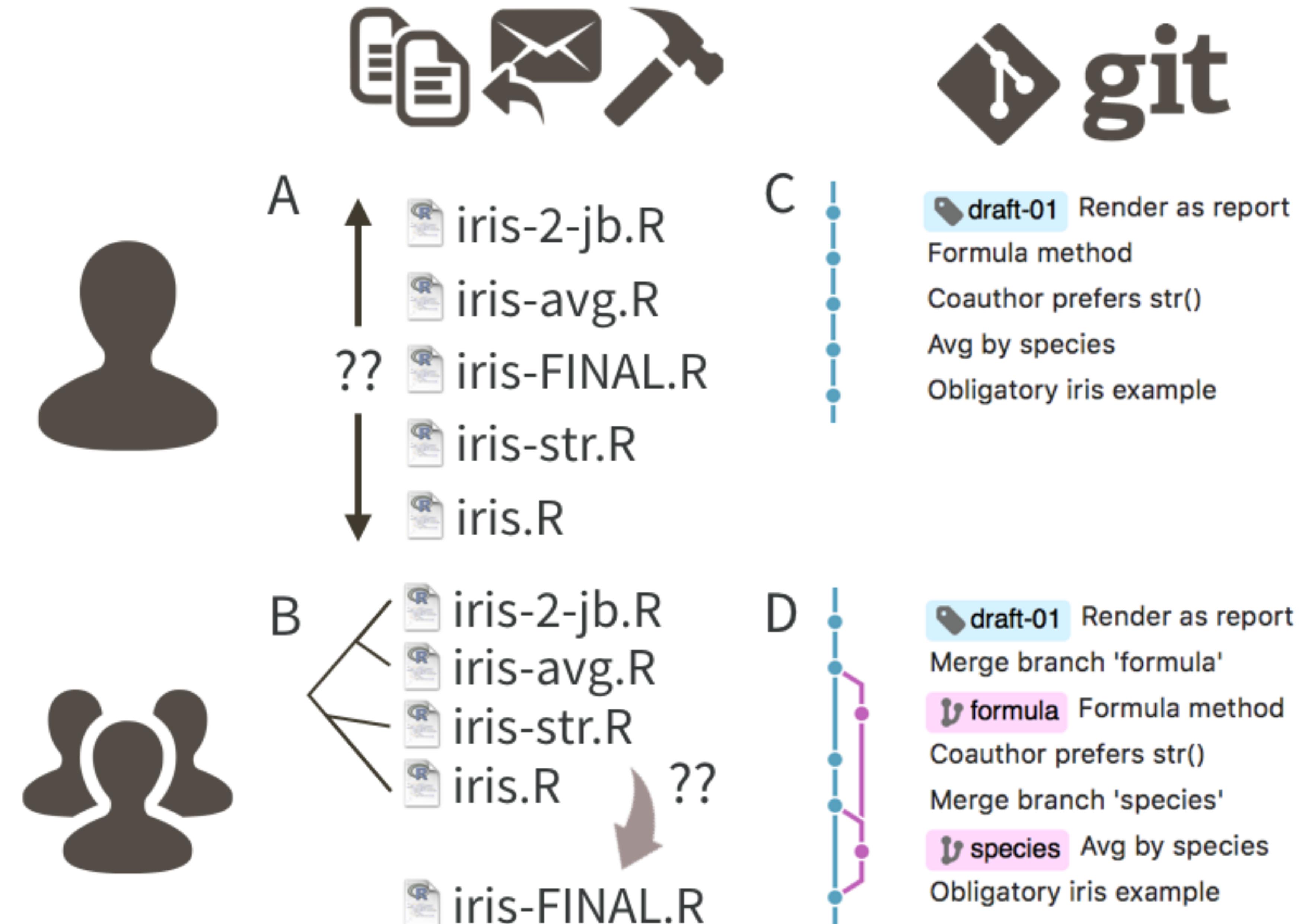
JORGE CHAM © 2012

Versioning



Versioning with human readable messages





“In every project you have at least one other collaborator;
future-you. You don’t want future-you to curse past-you.”

- Hadley Wickham

starting simple— GitHub pages

Webhosting

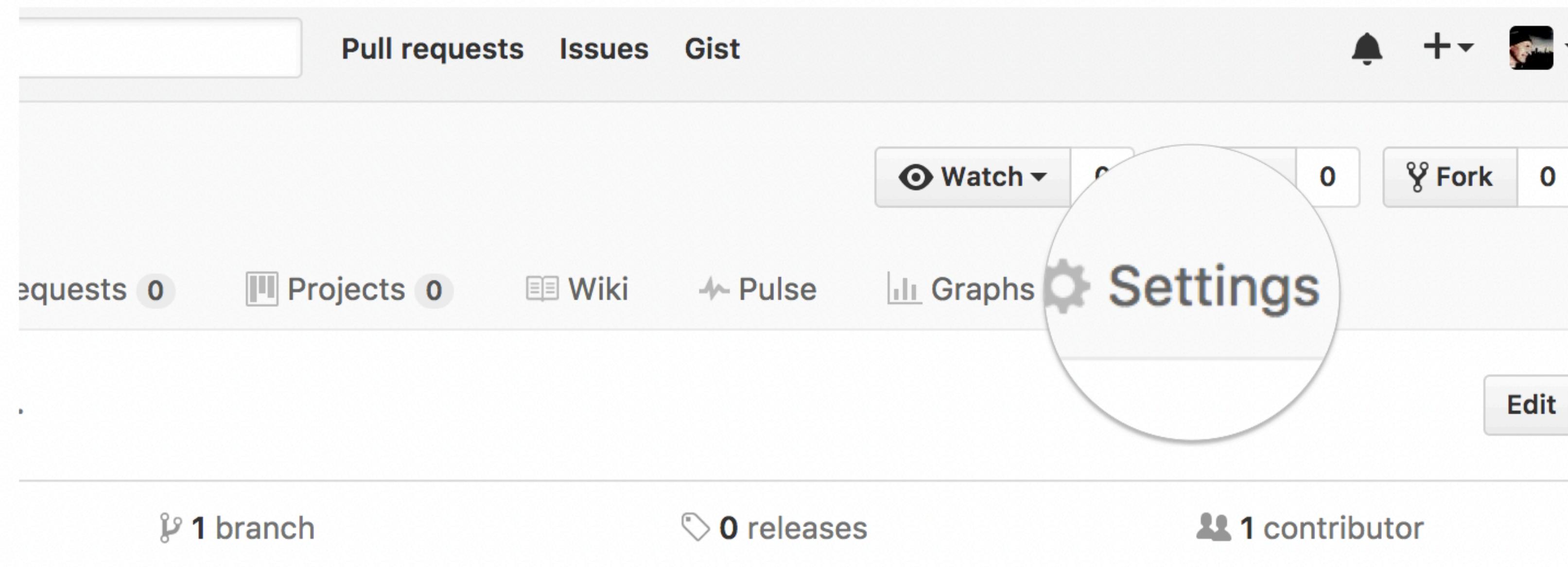
- It often costs money to host a website
 - Godaddy (https://en.wikipedia.org/wiki/List_of_controversies_involving_GoDaddy)
 - WordPress
 - BlueHost
- It is free to host your website on GitHub (Why?)
 - I have educator access
 - If you're not paying for the product, you are the product (Copilot)— Analyzing the Legal Implications of GitHub Copilot

1

Repository Settings

Head over to [GitHub.com](#) and create a new repository, or go to an existing one.

Click on the Settings tab.



2

Theme chooser

Scroll down to the **GitHub Pages** section. Press **Choose a theme**.

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Source

GitHub Pages is currently disabled. Select a source below to enable GitHub Pages for this repository. [Learn more](#).

None ▾

Save

Theme chooser

Select a theme to build your site with a Jekyll theme using the `master` branch. [Learn more](#).

Choose a theme

3

Pick a theme

Choose one of the themes from the carousel at the top.

When you're done, click **Select theme** on the right.

The screenshot shows the GitHub theme picker interface. At the top, there's a navigation bar with icons for repository, search, pull requests, issues, gist, notifications, and user profile. Below the navigation bar is a horizontal carousel of theme thumbnails. The 'Slate' theme is currently selected, indicated by a blue border around its thumbnail. Other themes visible in the carousel include Cayman (green gradient), MERLOT (beige with red ribbon), Time Machine (gray with black bars), MINIMAL (light gray with horizontal lines), and Leap Day (blue and yellow). Below the carousel are two buttons: 'Hide thumbnails' on the left and 'Select theme' on the right, both in green. A large dark overlay box covers the bottom half of the screen. Inside this box, the word 'Slate theme' is displayed in large white font. Below it, the text 'Slate is a theme for GitHub Pages.' is shown. At the bottom right of the overlay, there are download links for 'View on GitHub' (with a GitHub icon) and file formats 'tar.gz' and '.zip'. On the far left of the overlay, there's a small 'Hide thumbnails' button.

...and you're done!

Fire up a browser and go to **<http://username.github.io/repository>**.

