

Welcome!

Get started while we wait:

- + Go to www.github.com
- + Click "Sign Up"
- + Follow the instructions to create a new GitHub account

Welcome to GitHub!
Let's begin the adventure

Enter your email*

✓ katecooper62@gmail.com

Create a password*

✓ ••••••••

Enter a username*

✓ katecooper123456

Would you like to receive product updates and announcements via email?

Type "y" for yes or "n" for no

→ y

Continue

By creating an account, you agree to the [Terms of Service](#). For more information about GitHub's privacy practices, see the [GitHub Privacy Statement](#). We'll occasionally send you account-related emails.

Making a Code Portfolio on GitHub

Workshop: MINK WIC 2023

Dr. Kate Cooper

Associate Professor

University of Nebraska at Omaha



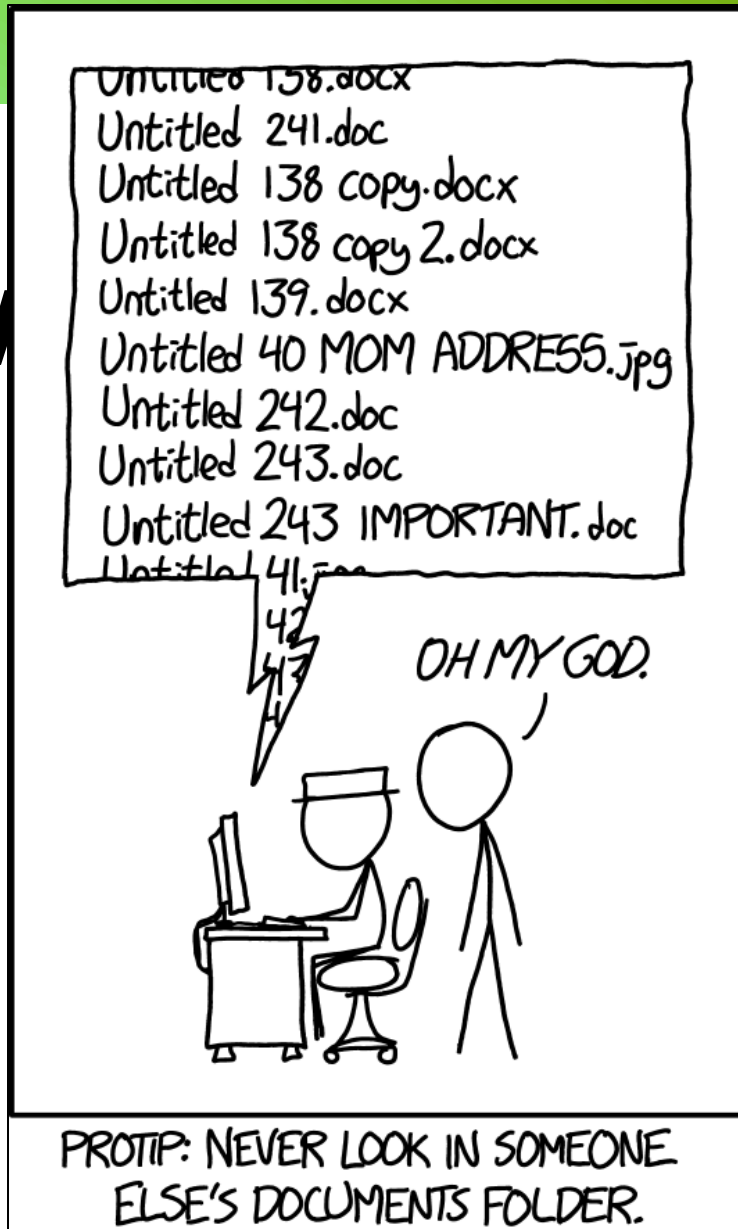
Objectives:

1. Understand what GitHub is and what its used for
2. Identify components of an effective GitHub repository
3. Create (fork) a simple GitHub repository from a template
4. Write a simple Markdown file
5. Write and annotate a simple Python script

What is GitHub?

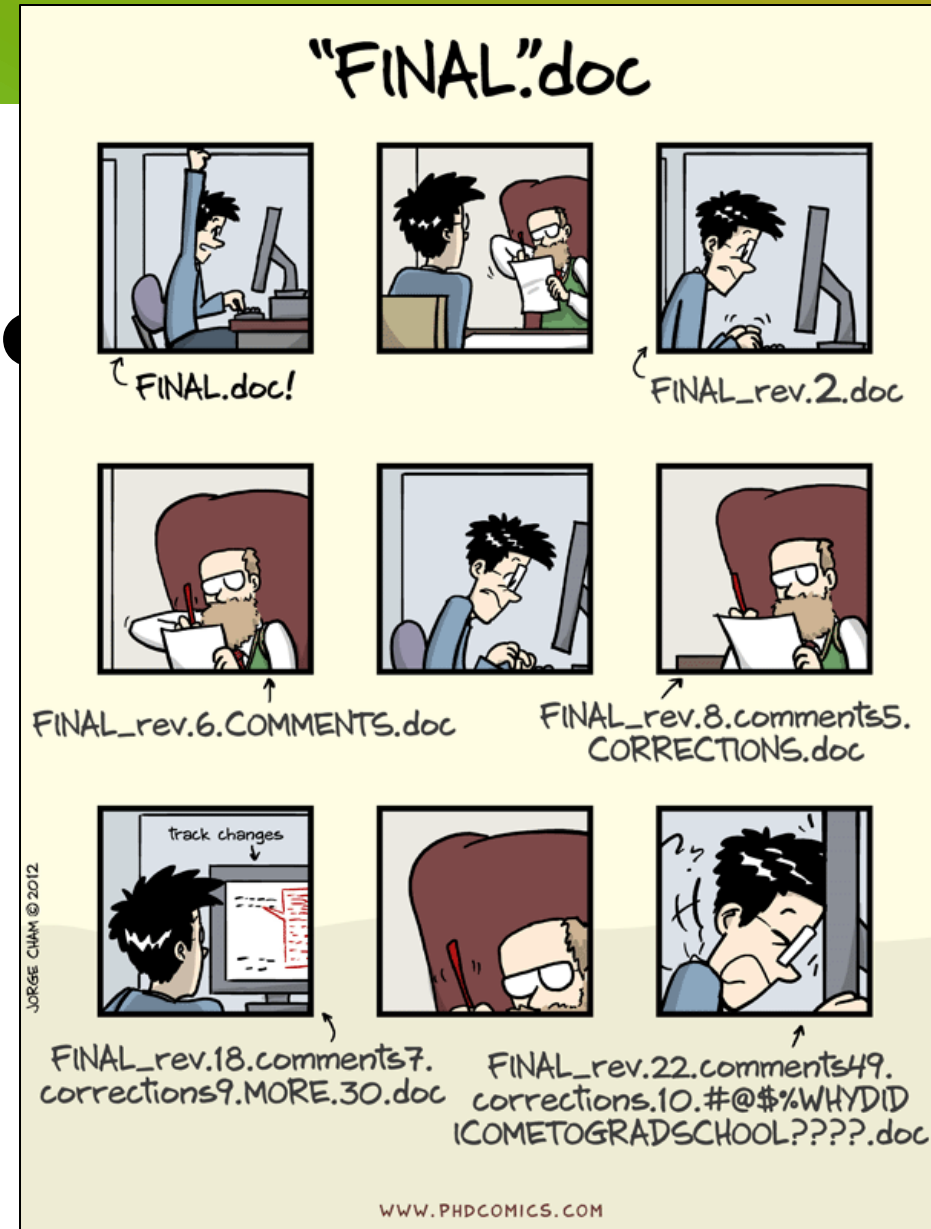
- + An online tool that is used to store, develop, and manage code
- + Uses **Git** (software version control) as a foundation
- + A good place to create and store a coding portfolio for others to see examples of your coding work
- + A place for collaboration

W



XKCD #1451 "Documents"

C



PhD Comics #1531

Why should I have a GitHub account?

Author



Thomas Dohmke

January 25, 2023



In 2019, we set a goal to [have 100 million developers using GitHub by 2025](#)—because we know when more developers come together in a single place, incredible things happen.



Today, I'm excited to share that there are now officially more than 100 million developers using GitHub to build, maintain, and contribute to software projects.



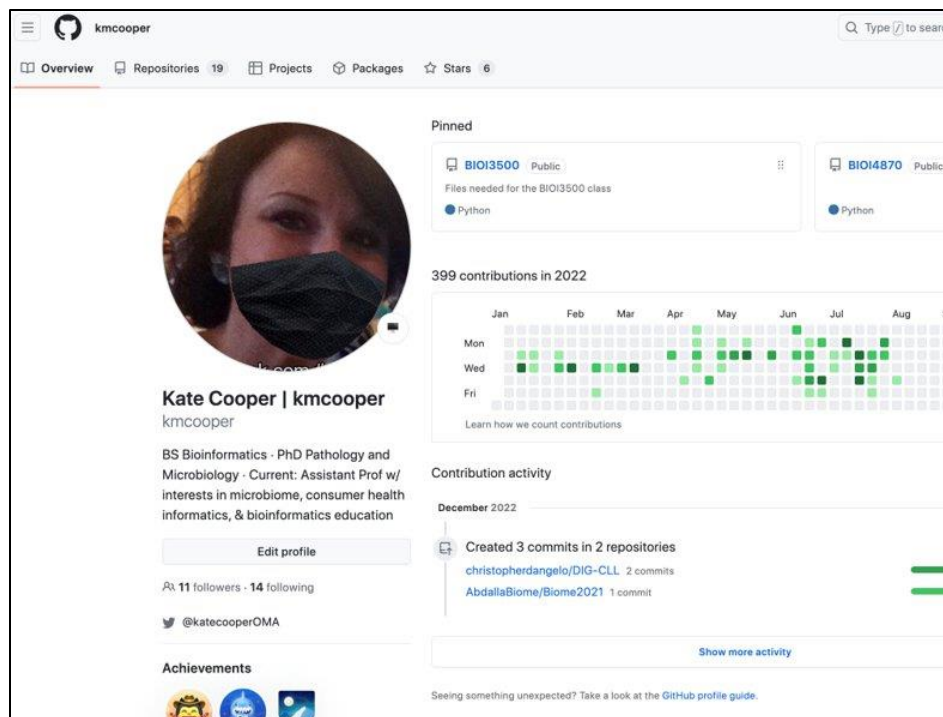
This not only puts us two years ahead of schedule, but represents a huge responsibility for us at GitHub to continue putting developers first.

The GitHub Insider Newsletter

Discover tips, technical guides, and best practices in our monthly newsletter for developers.

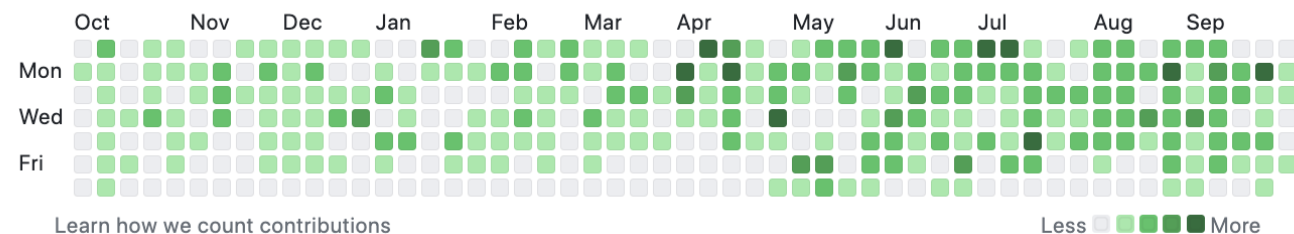
Subscribe

Why should I have a GitHub account?



The screenshot shows the GitHub profile of kmcooper. The profile includes a circular profile picture of a woman wearing a black face mask. Below the picture, the name "Kate Cooper | kmcooper" is displayed, followed by the username "kmcooper". A bio states: "BS Bioinformatics - PhD Pathology and Microbiology - Current: Assistant Prof w/ interests in microbiome, consumer health informatics, & bioinformatics education". There are buttons for "Edit profile" and "Follow". The profile shows 11 followers and 14 following. The Twitter handle "@katecooperOMA" is listed. Under the "Achievements" section, there are three icons: a gold star, a blue "Open Source" badge, and a blue "Top 1%" badge. The main content area shows a pinned repository "BIOI3500" (Public) with a description "Files needed for the BIOI3500 class" and a language tag "Python". Below this, a contribution heatmap for 2022 shows 399 contributions. The heatmap is a grid with columns for months (Jan-Dec) and rows for days of the week (Mon-Fri). Green squares indicate contributions, with a legend at the bottom showing "Less" (light green) and "More" (dark green). Below the heatmap, the "Contribution activity" section shows a timeline for December 2022, listing "Created 3 commits in 2 repositories" with links to "christopherdangelo/DIG-CLL" (2 commits) and "AbdallaBiome/Biome2021" (1 commit). A "Show more activity" button is at the bottom.

860 contributions in the last year



"we will make the data and **code available upon request**"



What exactly is supposed to happen when a paper (that's been out for a while) says "**code available upon request**" and you **request** it and they say "no"?

"Data and **code available upon reasonable request**" = 🚩 flag for reproducibility; lack of support by authors to reproduce findings appears anti-correlated with reproducibility

"**[data/code] available upon request**" is instant reject with no further review from me. And I'm generally reviewer #1, trying to review the study that was done, not the study I wanted. Unacceptable in bio/lifesci in 2020.

Data & code available upon request. We will respond two years later telling you that we don't know who or where the person responsible for the **data** is, or whether they existed at all. We reserve the right to project so much confusion that you'll never want to contact us again.

"Source **code available upon request**" <= Why does anyone do this?

If the "**code is available upon request** from the authors", it is not **available**.

You know what, it's 2021 -and articles with "**code is available upon request** from the author" don't cut it anymore. Publishing working **code** in a notebook with the article is much more clear, robust and useful than sloppily transcribing into poorly remembered mathematical notation

the biggest lie in science is "data and **code available upon request**"

This paper seems really cool!! Hope authors can fix these *major flaws*, though:

"Custom R **code is available upon request** from the corresponding author."

"Processed data is **available upon request** from the corresponding author."

What should I put on my GitHub?

- + **Good:** Code that you wrote!
- + **Better:** Code that you wrote with comments and good formatting
- + **Best:** Code that you wrote with comments, good formatting, and documentation/annotation

Welcome!

Get started while we wait:

- + Go to www.github.com
- + Click "Sign Up"
- + Follow the instructions to create a new GitHub account

Welcome to GitHub!
Let's begin the adventure

Enter your email*

✓ katecooper62@gmail.com

Create a password*

✓ ••••••••

Enter a username*

✓ katecooper123456

Would you like to receive product updates and
announcements via email?

Type "y" for yes or "n" for no

→ y

Continue

By creating an account, you agree to the [Terms of Service](#). For more information about GitHub's privacy practices, see the [GitHub Privacy Statement](#). We'll occasionally send you account-related emails.

Your Dashboard

Dashboard

kmcooper ▾

Top Repositories

Find a repository...

kmcooper/nova_x_off

christopherdangelo/DIG-CLL

clayton-lab/wiki

AbdallaBiome/Biome2021

kmcooper/helloworld

kmcooper/BMI-8540

markvicka/NU_Collaboration_Wearable_Device

Show more

Recent activity

When you take actions across GitHub, we'll provide links to that activity here.

Your teams

Find a team...

smrLab/nu-wearable-device

clayton-lab/edit-team

Home

Send feedback

Filter 8

jannah created a repository

last week

jannah/FastAPI-demo

Playing around with FastAPI (Python) + Firestore (Google NoSQL) + Cloud Run (Google container deploy)

Python

Star ▾

openfoodfacts/openfoodfacts-server released

last week

v2.20.0

2.20.0 (2023-10-10)

Features

- add knowledge content to additive knowledge panels (#9103) (7bb6af2)
- Added display message for normal users for protected images (#8854) (f7931a9)
- Use 'GS1 Barcode Syn...

Read more

Learning Pathways

Learn from the best

Unlock the full power of GitHub! Gain expertise and insights from top organizations through guided tutorials, boosting productivity, enhancing security, and enabling seamless collaboration.

Start learning

Latest changes

17 hours ago

Migrate tag protections to repository rules

Yesterday

Rate limits for /rate_limit REST API endpoint

Yesterday

New Default: Underlined Links for Improved Accessibility

2 days ago

Webhook delivery logs will only be retained for 3 days

View changelog →


Explore repositories

redhat-documentation / supplementary-style-guide

Star


**Once logged in to GitHub,
please go to this site:**

<https://tinyurl.com/minkwic23github>

 kmcooper / MINKWIC2023

Type to search

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

 **MINKWIC2023** Public

[Pin](#) [Unwatch 1](#) [Fork 0](#) [Star 0](#)

[main](#) [1 branch](#) [0 tags](#) [Go to file](#) [Add file](#) [Code](#) [About](#)

Click this button

[Watch 14](#) [Fork 67](#) [Star 226](#)

This is a demo code repository for MINK WIC 2023 attendees to use to build their first GitHub repo.

Overview

No releases published

[Create a new release](#)

Create a new fork

A *fork* is a copy of a repository. Forking a repository allows you to freely experiment with changes without affecting the original project.

Required fields are marked with an asterisk ().*

Owner *

Choose an owner ▼

Repository name *

/ MINKWIC2023

By default, forks are named the same as their upstream repository. You can customize the name to distinguish it further.

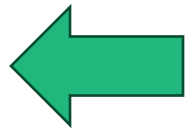
Description (optional)

A demo code repository for MINK WIC 2023 attendees to use to build their first GitHub repo.

☒ Copy the `main` branch only

Contribute back to kmcooper/MINKWIC2023 by adding your own branch. [Learn more.](#)

Create fork



Markdown Language (.md files)

- + Markdown is "a lightweight markup language for creating formatted text using a plain-text editor" [[Wikipedia](#)]
- + Tell GitHub to use Markdown by ending your filename with .md
- + Let's make a new Markdown file!

Markdown

Cheat Sheet

Element	Markdown Syntax
Heading	<pre># H1 ## H2 ### H3</pre>
Bold	<pre>**bold text**</pre>
Italic	<pre><i>*italicized text*</i></pre>
Blockquote	<pre>> blockquote</pre>
Ordered List	<pre>1. First item 2. Second item 3. Third item</pre>
Unordered List	<pre>- First item - Second item - Third item</pre>
Code	<pre>`code`</pre>
Horizontal Rule	<pre>---</pre>
Link	<pre>[title](https://www.example.com)</pre>
Image	<pre>![alt text](image.jpg)</pre>

Can you replicate my Markdown file?

This line is an H1 Heading [↗](#)

Here is some bold text

"This is a quote." - Kate Cooper

Here is a To Do list:

1. Fork your repo
2. Upload your code
3. Debug your code

This line is an H2 Heading [↗](#)

Here is some italic text

Here is some plain text followed by the simplest Python program:


```
print(Hello world!);
```

This line is an H3 Heading [↗](#)

Here is some bold + italic text

Here is a grocery list:

- Apples
- Bananas
- Bread
- Milk

Thank you!
Questions? Comments?
kmcooper@unomaha.edu
@KateCooperOMA 

Aggregation of **tutorials, workshops, case-studies**, and **more** is needed both for computing trainees and educators as a means to **enhance learning** and **bolster research**, and provides a foundation for community database that might support enhancement of trainee knowledge.

We are developing **free, self-paced modules** to teach computing trainees about reproducibility - sign up for more information if you are interested!

