Building Your GitHub Portfolio

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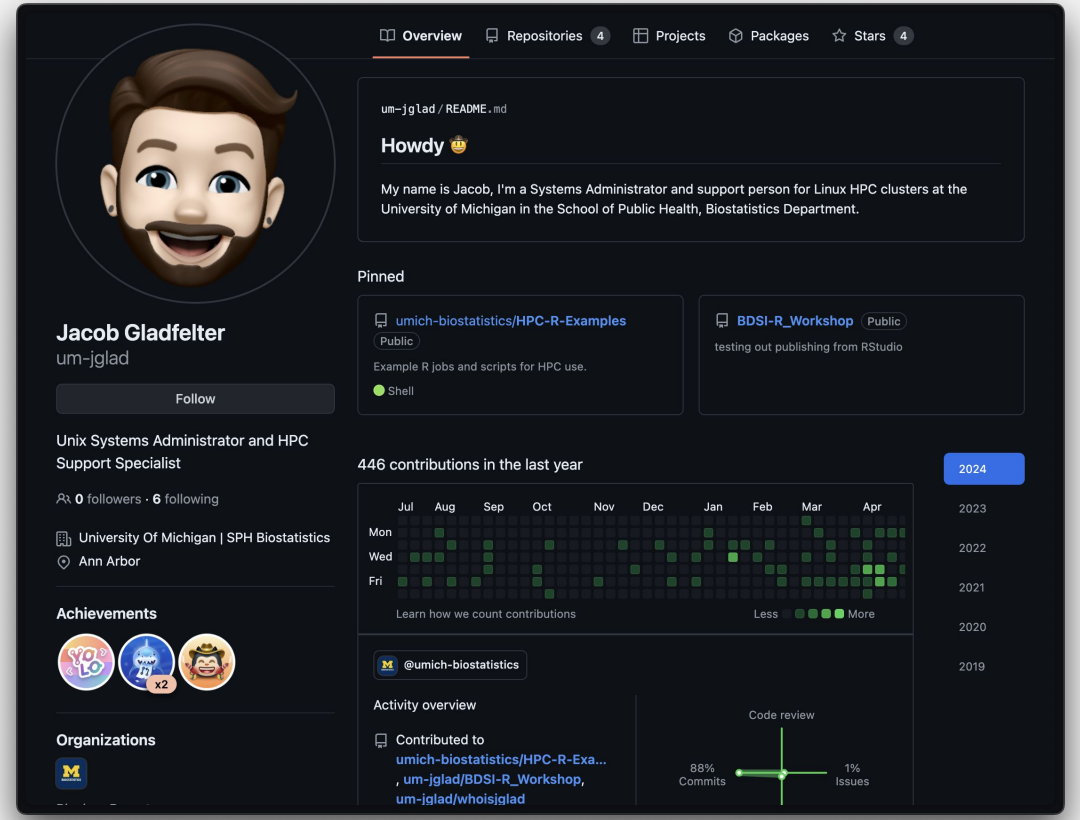
What is Github?

GitHub is a website that allows you to:

- Showcase or share your code.
- Track and manage changes to your code over time.
- Let others review your code, and make suggestions to improve it.
- Collaborate on a shared project, without the fear of overwriting or losing data.



Source: [GitHub Docs | About GitHub and Git]

Why should I care?

Good question.

Hosting your work on GitHub can be an easy way to show potential employers:

- What you can do
- The quality of your work
- Your ability to collaborate

It’s also a great way to help make your code more easily reproducible.

The Man behind the curtain: Git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UNDERSTAND GIT
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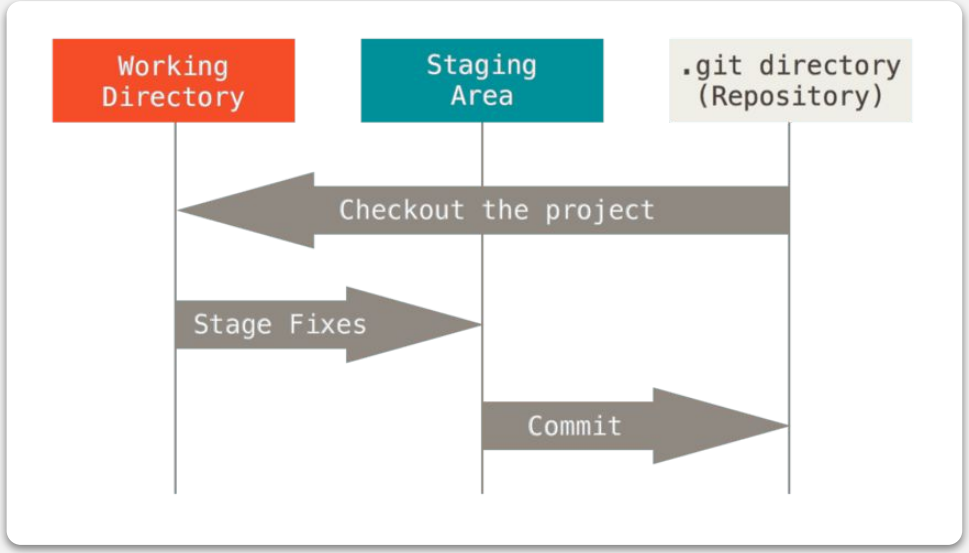
The Magic of Git

GitHub is built on Git, a **version control system** for tracking file changes.

Git is what enables all of those features listed on the first slide.

You can use Git without GitHub, but **pushing** changes to GitHub allows for easy collaboration so that others can **pull** those changes and continue to **contribute**.



Source: Getting Started - What is Git?

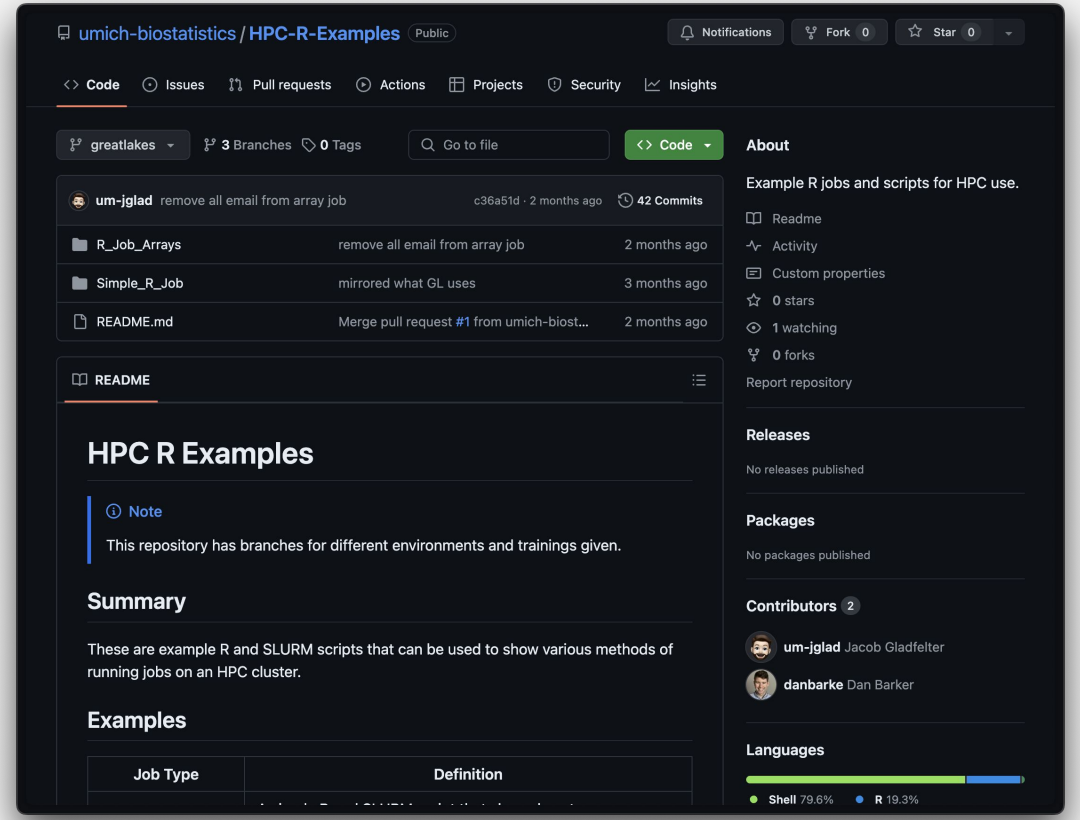
Repository (Repo)

Think of a GitHub Repository as a directory on a remote server.

This **remote repository** contains all of your code, your files, and each file's revision history.

It can be public or private, and various permissions can be set to allow others to collaborate.

ALL GOOD REPOS HAVE A README.

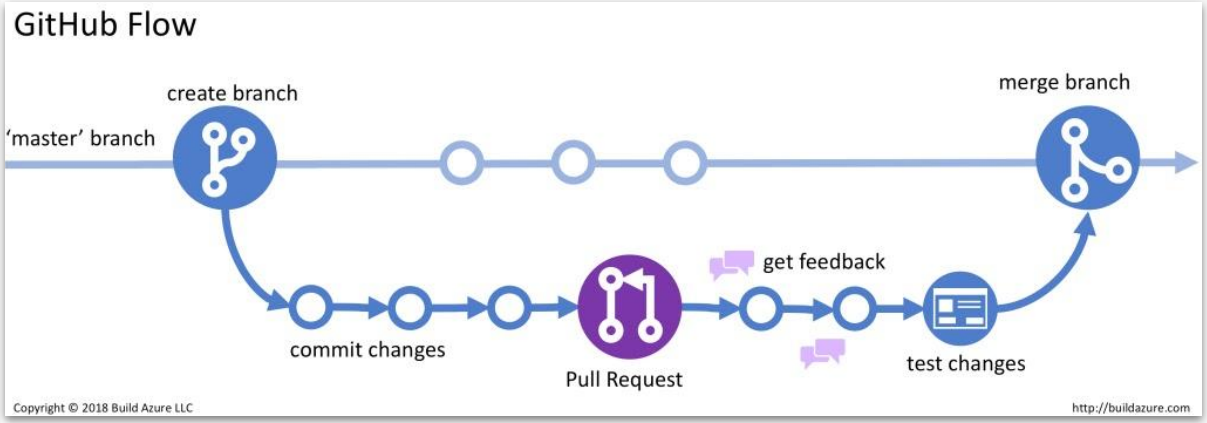


Source: [GitHub Docs | About Repositories]

GitHub Flow

The basics of using a GitHub repo can be boiled down to:

1. Creating a “Branch”
2. Making Changes
3. Creating “Pull Requests”
4. Reviewing Changes
5. “Merging”



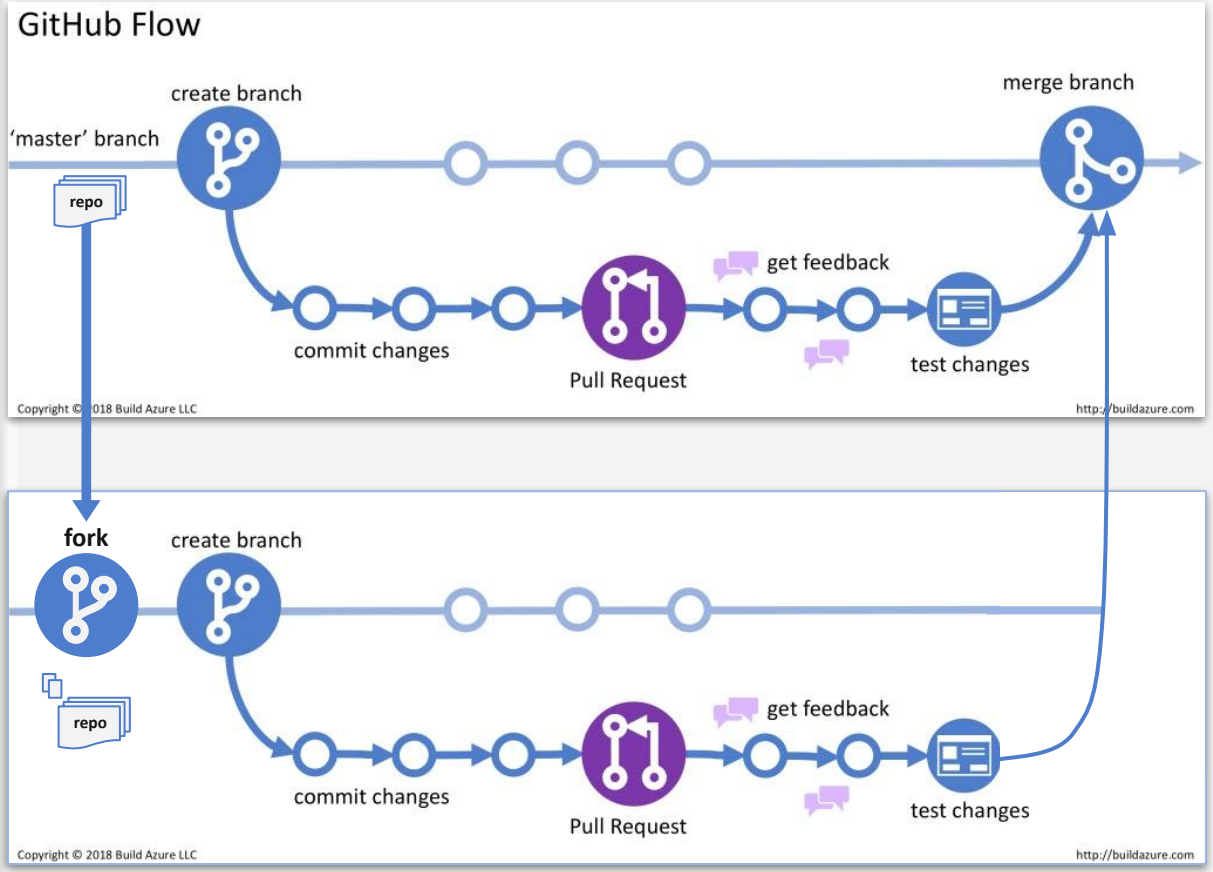
Source: [GitHub Docs | GitHub Flow]

Contributing

If you want to contribute to someone else's project where you're not already a contributor, you can create a **"fork"**.

Forking creates a copy of the repo under your name that is tied back to the original.

This allows you to make a branch, test changes, and then submit a pull request.



Creating a Presence

Make yourself, your code, and your contributions visible!

1. Sign up for an account
2. Create a Repo
3. Upload your Code
4. Update your profile
5. Profit?

Resources

Documentation

- GitHub Docs
- Git - Documentation
- GitHub Pages
- GitHub and RStudio
- rmarkdown's site generator | R Markdown: The Definitive Guide

Examples

- GitHub Profile README Examples
- coatless (James J Balamuta) · GitHub
- BDSI ggplot Example