

Intro to Git and GitHub

September 13, 2021 / 5:30 PM - 6:30 PM ET

Description

Programming with others is difficult—when was the last time you had to share a file called `project3_Final_final-3.cpp`? Git is the gold standard in the industry for source control, and when paired with GitHub, you'll be flying through development like never before; never again will you have to make 50 copies of the same file for others to edit. In this workshop, you'll get a primer on the most important tools for software engineering and make your first-ever contributions to the real world!

Learning Outcomes

This workshop is designed to walk you through the complete basics of adding and tracking your changes through Git and GitHub. Here's what you'll be able to do by the end of our hour together:

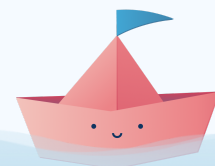
- GitHub ties together just about the entire OSS community—after getting the gist of what both these tools are, you'll be prepared to contribute to any project; be that your hackathon one or even ReactJS!
- You'll also be able to craft efficient commits, understand what branching is, and keep a clean codebase—all while seamlessly collaborating with thousands of people at the same time!

Prerequisite Knowledge

This workshop's going to be coming almost entirely from scratch, but there are a couple nice-to-have items ticked off:

- Basics of shell scripting
- Understanding how JSON works and how to write it

Ultimately, Git and GitHub are tools that you'll want to use for other software engineering projects; don't worry if you're a total beginner!



Pre-Workshop Checklist

Before the workshop, please make sure you complete the following items:

- A stable internet connection (for downloading items)
- ~20MB of free space (you'll be able to clear this out later)
- A GitHub account
- A terminal with Git installed on it (and preferably signed in with GitHub)

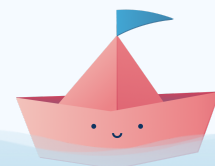
Timeline (1 hour)

Time	Module	Description
3 min	Introduction	Quick introduction to the workshop, what we'll be doing, prerequisites, and getting everyone acquainted!
10 min	Collaboration V1	Exploring a common problem in software engineering—how to pass around files efficiently and work with others.
20 min	Collaboration V2: Git	Understanding how Git works, walking through the major commands, and starting the process of repo creation!
20 min	GitHub & contributing in the real world!	You'll be cloning a real-world repository, learning the basics of how open source contributions work, and getting to know GitHub!
10 min	Interactivity & wrap-up	Finishing up with a small project that everyone will play a part in building!

Workshop Lead Contact

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Additional Resources

Hack the North Resources

[Hack the North 2021 Event Schedule](#)

Check this out to stay up-to-date on activities, workshops, and other key happenings this weekend.

Workshop-Specific Resources

[Atlassian's Git Guide](#)

A great resource to get started with Git. Atlassian walks you through just about every concept embedded in the tool; you'll be a Git Guru by the end!

[Why Git? Why GitHub?](#)

It's important to stay curious; both Git and GitHub may seem a little bit out-there as far as base tools and applications go, but understanding *why* they exist is important too!

