

— Intro to Terminal

The Basics

GUI stands for

CLI stands for



A few ideas

- Navigating the file system
- Creating, copying, moving and renaming files
- Working with git
- Installing system applications (eg. homebrew, npm)
- Working with Node Package Manager
- Running local servers
- Running build scripts
- Deployment of apps (eg. heroku, netlify, github, AWS)
- Connecting to and controlling remote machines



— Intro to Git and GitHub

Our Objectives

- Explain basic git commands like init, add, commit, push, pull and clone
- Distinguish between local and remote repositories
- Create, copy, and delete repositories locally, or on GitHub
- Fork and clone remote repositories





Discussion: What is Git?



Write your best definition in teams

(I don't know is an acceptable answer)



Interesting Fact

What do Git and Linux have in common?





Discussion:

What is Git Hub?



Write your best definition in teams

(I don't know is an acceptable answer)



Why is Git Tricky to Understand

Git is tricky to understand because describing 'how' it works would require the use of strange and technical-sounding words like:

- Directed acyclic graph
- SHA-1
- blob
- tree

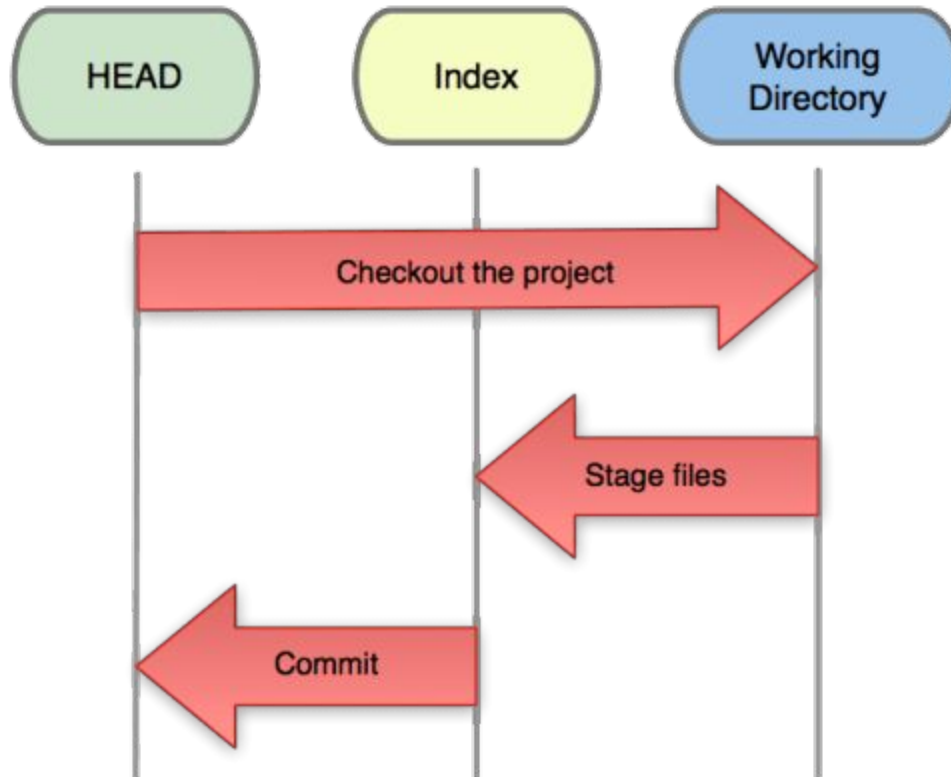


Trees?!

Even though you don't need to know how they work, it is useful to know that your local repository consists of three "trees" maintained by Git.

- Working Directory: like any other folder on your machine; just holds the actual files
- Index: acts as a staging area (an area that holds files "ready" to be versioned)
- HEAD: points to the last commit you've made (the last "version" of the code you've stored using git)





Commands

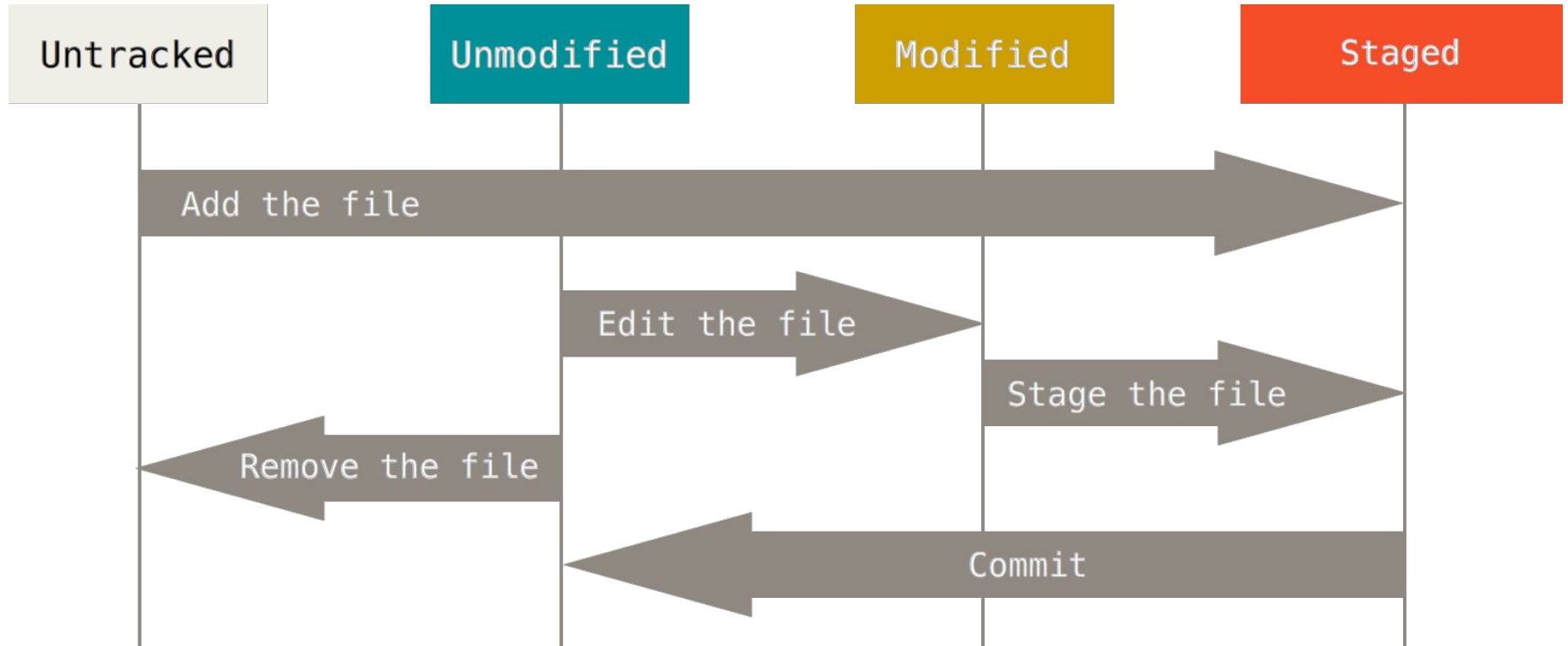
There are also a lot of commands you can use in Git. You can take a look at a list of the available commands by running:

```
$ git help -a
```

Even though there are lots of commands, on the course we will really only need about 10.

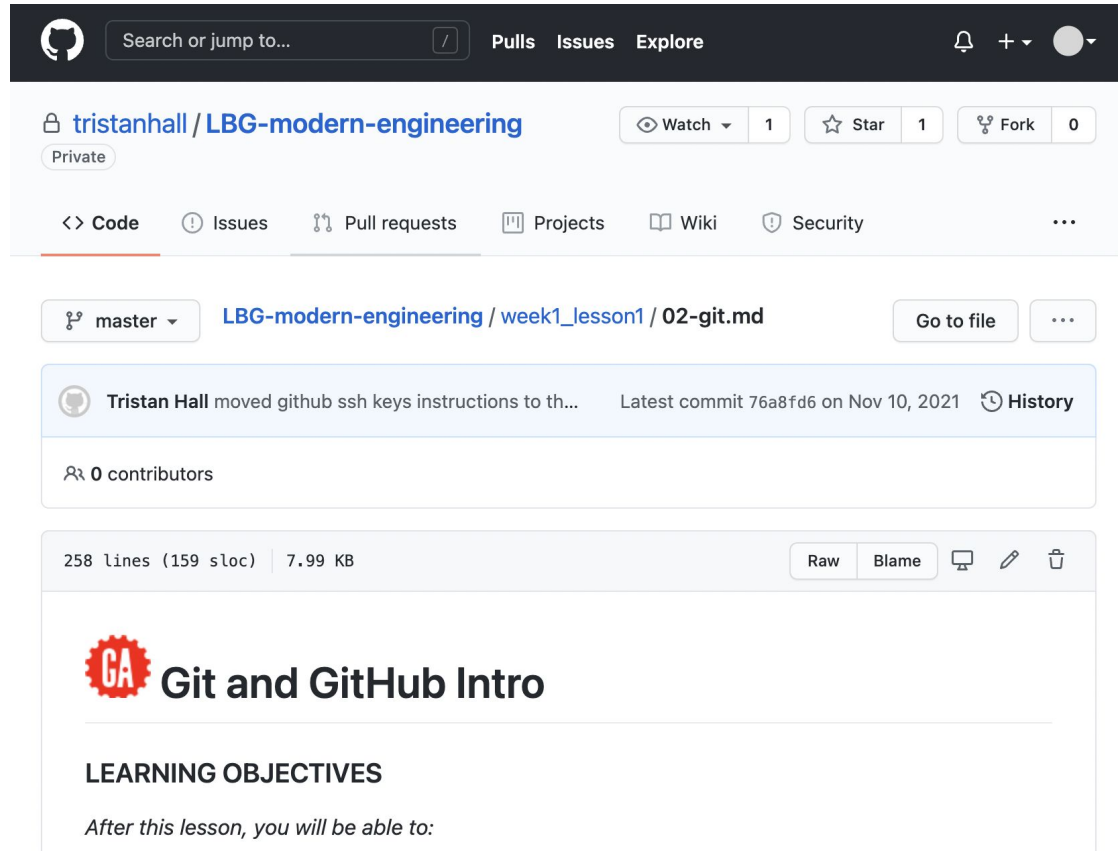


Git File Lifecycle



Lesson material

Lessons can be found in a github repository that you can follow along with or revisit throughout the course.



The screenshot shows the GitHub interface for the repository 'tristanhall / LBG-modern-engineering'. The repository is marked as 'Private'. It has 1 Watch, 1 Star, and 0 Forks. The navigation bar includes links for Code, Issues, Pull requests, Projects, Wiki, and Security. The current view is the 'Code' tab, showing the file '02-git.md' in the 'week1_lesson1' directory. The file is 7.99 KB and contains 258 lines (159 sloc). The commit history shows a recent commit by Tristan Hall. The file content includes a red 'GA' logo and the title 'Git and GitHub Intro', followed by the section 'LEARNING OBJECTIVES' and the text 'After this lesson, you will be able to:'.

tristanhall / LBG-modern-engineering

Private

Watch 1 Star 1 Fork 0

Code Issues Pull requests Projects Wiki Security

master LBG-modern-engineering / week1_lesson1 / 02-git.md Go to file

Tristan Hall moved github ssh keys instructions to th... Latest commit 76a8fd6 on Nov 10, 2021 History

0 contributors

258 lines (159 sloc) 7.99 KB Raw Blame

GA Git and GitHub Intro

LEARNING OBJECTIVES

After this lesson, you will be able to:





Guided Walk-Through: Let's get started

Follow along here:

[week1_lesson1/02-git.md](#)

