

GitHub, Git Bash

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THE COLLEGE OF HIGHER LEARNING

Objectives

- ▶ Articulate the purpose of git and GitHub
- ▶ Learn about markdown
- ▶ Learn how to create a repo and clone a repo

What is Git and Github?



Git and Github



GitHub is a website for code storage. It makes your code (including all changes) visible and accessible from anywhere.



Git is a software tool that enables version control and collaboration

Repository

- ▶ A repository is a storage space where your project lives. It can be local to a folder on your computer, or it can be a storage space on GitHub or another online host. You can keep code files, text files, images or any kind of a file in a repository.

What is version Control?

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FINAL.doc!



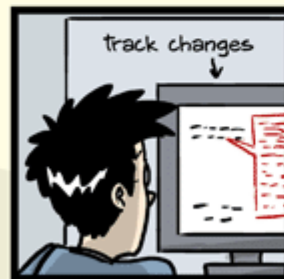
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Why Github?



1- Back up for your files



2- It gives you visual interface for navigating the repos.



3- It gives a way for other people to navigate your repos.



4- Makes repo collaborations easy.

What are the benefits of using version control?

- ▶ The ability to save and review or revert to previous versions.
- ▶ The ability to collaborate on a single project.

How Git and GitHub Support Version Control?

- ▶ Keep track of changes to your code locally using **git**.
- ▶ Test changes to code without losing the original.
- ▶ Revert back to older version of code, if needed.
- ▶ Back-up your files on the cloud ([GitHub.com](https://github.com)).
- ▶ Share your files on [GitHub.com](https://github.com) and collaborate with others.

Markdown

- ▶ Markdown is a way to style text on the web. You control the display of the document; formatting words as bold or italic, adding images, and creating lists are just a few of the things we can do with Markdown. Mostly, Markdown is just regular text with a few non-alphabetic characters thrown in, like # or *.
- ▶ Practice Markdown: <https://dillinger.io/>

Markdown

- ▶ You can use Markdown most places around GitHub:
 - README FILE on Github
 - Comments in Issues and Pull Requests
 - Files with the .md or .markdown extension

GitHub Documentation

- ▶ <https://help.github.com/en/github>

Steps



1- Create a repo



2- Clone a repo



3- Fork a repo



4- Adding a file to repository using the command line



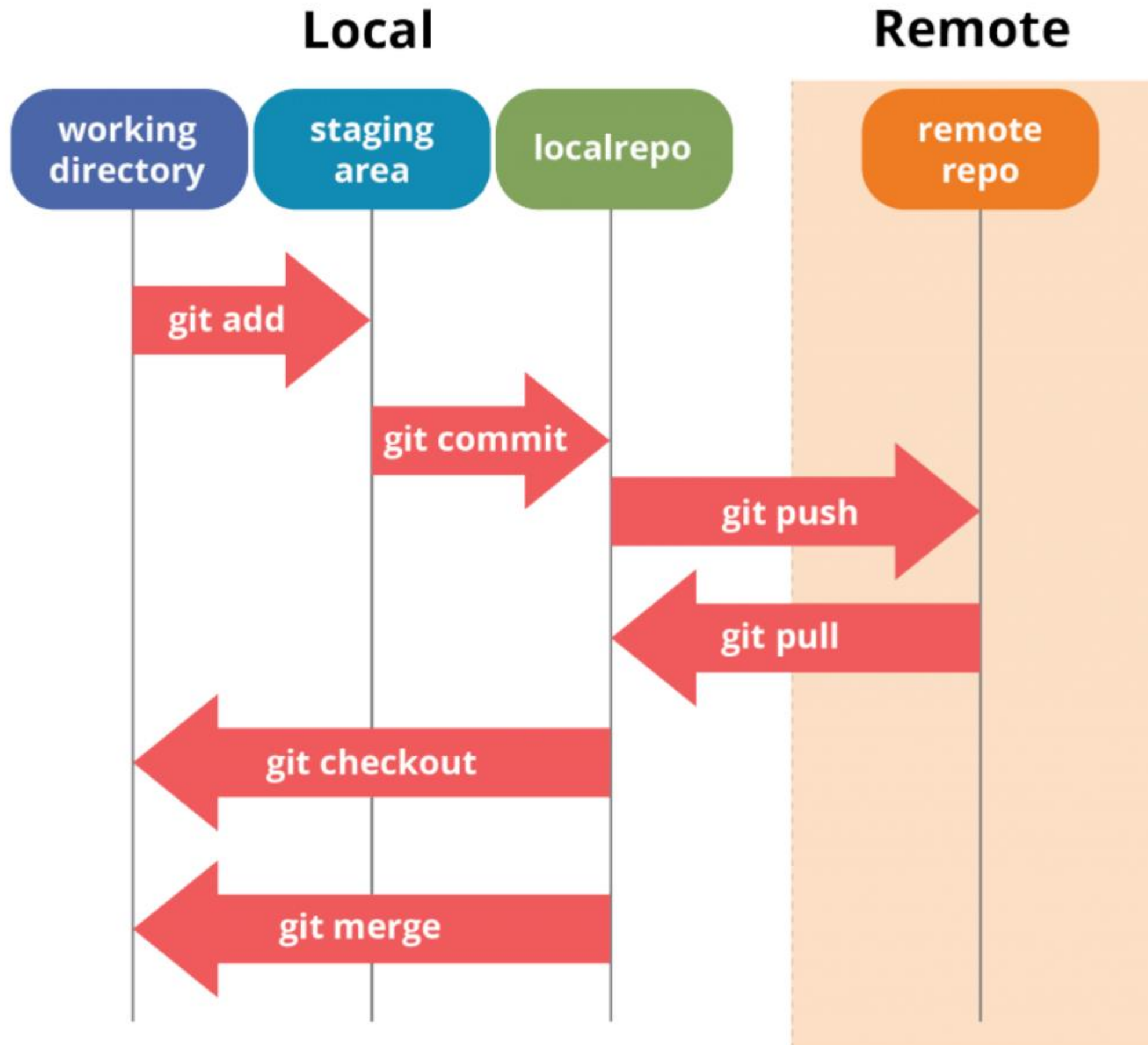
5- Adding an existing project to GitHub using the command line

How to Navigate Folders

- ▶ `pwd` is used to print the 'present working directory'. `pwd` is equivalent to executing `cd` on a DOS(Windows console host) terminal. This is the folder or path that the current Bash session resides in.
- ▶ `ls` is used to 'list' contents of the current working directory. `ls` is equivalent to `DIR` on a Windows console host terminal.
- ▶ Both Bash and Windows console host have a `cd` command. `cd` is an acronym for 'Change Directory'. `cd` is invoked with an appended directory name. Executing `cd` will change the terminal sessions current working directory to the passed directory argument.

Useful Commands

Command (Windows)	Command (Mac OS / Linux)	Description	Example
exit	exit	close the window	exit
cd	cd	change directory	cd test
cd	pwd	show the current directory	cd (Windows) or pwd (Mac OS / Linux)
dir	ls	list directories/files	dir



Practice

- ▶ Follow this Hello World exercise to get started with GitHub.
- ▶ [Hello World - GitHub Docs](#)
- ▶ Read the markdown cheatsheet:
- ▶ [Markdown Cheatsheet · adam-p/markdown-here Wiki \(github.com\)](#)