

# Git overview

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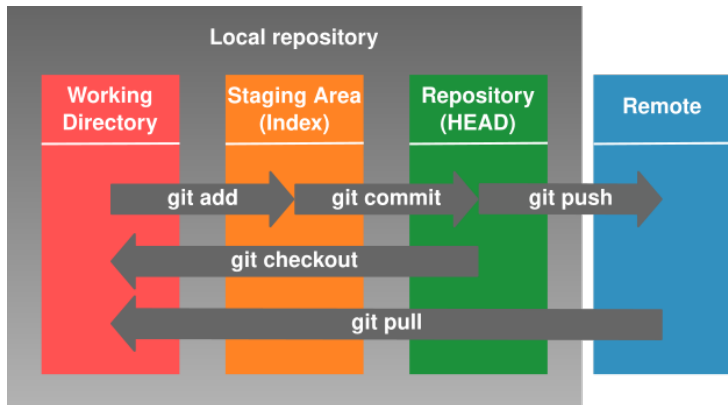
# Outline

```
:PROPERTIES:  
:EXPORT_TITLE: Glymphatics update  
:LaTeX_CLASS: beamer  
:BEAMER_FRAME_LEVEL: 2  
:EXPORT_OPTIONS: toc:nil  
:EXPORT_AUTHOR:  
:END:
```

# Git overview

Git is a version control software which consists of 4 stages

1. Working directory
2. Staging Area
3. Repository
4. Remote



# Git methodology

- ▶ Like naming word documents v1, v2, v3 etc.
- ▶ Does **NOT** track all changes you've made
- ▶ Requires you to decide when to make a new version/save changes

# Working directory

- ▶ Your local folder with code in it.
- ▶ All the code you write will be here.
- ▶ Like your own downloaded version of code

# Staging Area

- ▶ Your "to-be-backed-up" area.
- ▶ When you've made a change you want to keep track of you put it into 'staging' before locking it in.
- ▶ Lets you review what changes you're going to make

# Repository

- ▶ Your local version tracking
- ▶ Like having a list of  $\text{doc}_{v1}$ ,  $\text{doc}_{v2}$ ,  $\text{doc}_{v3}$  etc.
- ▶ Contains information about every version
- ▶ Your locked in back up history



# Remote

- ▶ A copy of your Repository, placed on the internet.
- ▶ Lets you share with others
- ▶ A back up in case you make a mistake on your computer

# Git commands

- ▶ All git commands start with the word "git"
- ▶ "git add file" will add the named file from your working to your staging.
- ▶ "git commit" will take all the files you've put in your staging and add them as a copy to your repository.
- ▶ "git push" - Syncs changes from your local repository to your remote
- ▶ "git pull" - Syncs changes from your remote to your local repository

# Git benefits

- ▶ Using git gives us a secure and extensive back up.
- ▶ If you ever make a big mistake, you can always go back to a previous version of your code
- ▶ Lets us share code between people easily
- ▶ Lets multiple people contribute code to the same files

# Git usage

- ▶ We're going to use git to keep track of our code in this project.  
We're going to go through the initial exercise together.