

# Day 08 - Version control with `git`

Oct. 1, 2020



# From Pre-Class Assignment

The pre-class assignment was very long. We will take this into account when awarding credit.

## Challenging bits

- Unable to have `git` work for me
- So many commands to learn!
- The pre-class didn't make me feel ready to use `git`

We will work on this over time, so we can all get better at it.

# Why use the `git`?

## For yourself

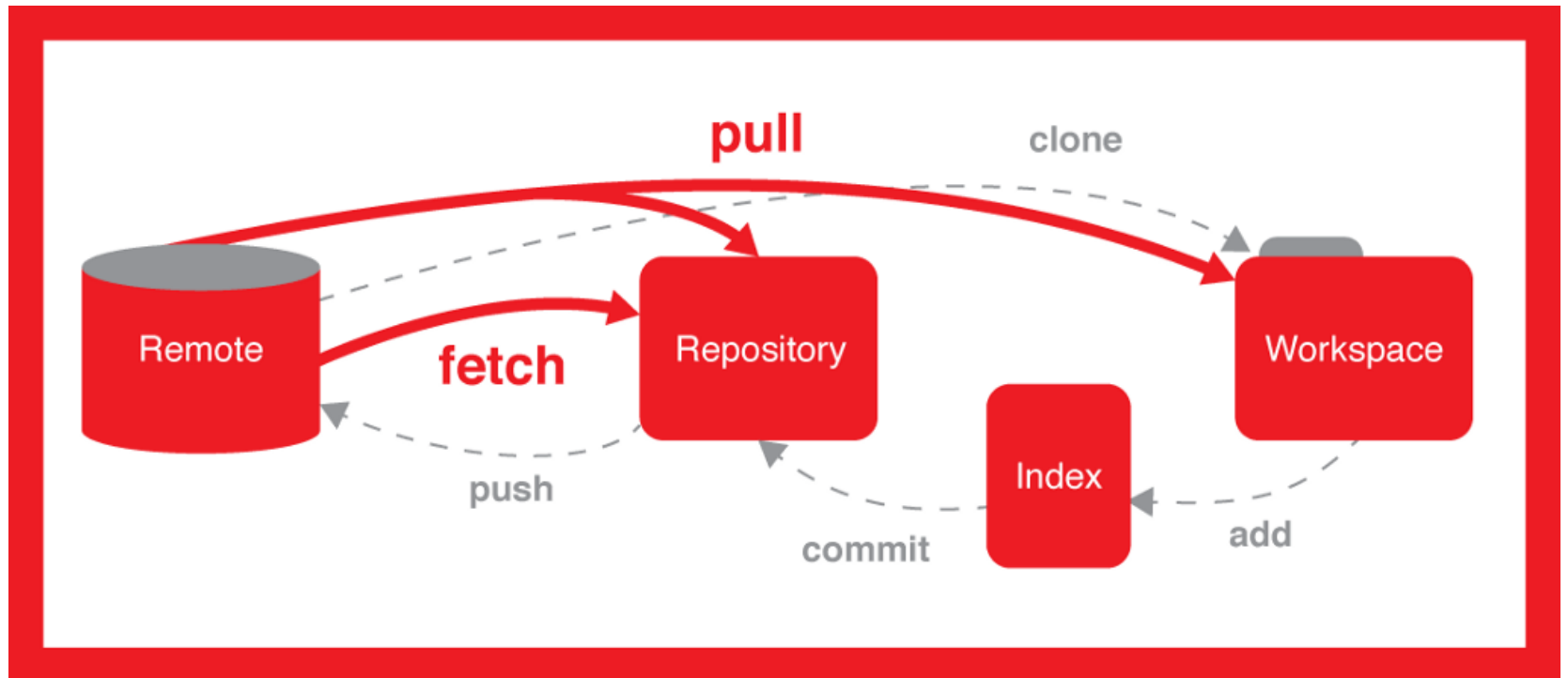
- `git` repositories provide a full history of everything you have done
- with a good workflow, `git` repos can document a project every step of the way including problems, solutions, and todos
- with github, you have remote copies of you work also!

## On a team

- people can work on different parts of a project at the same time
- merging together those contributions is relatively simple
- conflicts are explicitly raised to be dealt with

`git` is the standard version control system for data science work

# Using git



# Common `git` commands

## Getting started

- `git init` - Initialize a new `git` repo on your local machine; **used only once** to tell your OS this directory is going to be a `git` repo. Creates a `.git` directory for that purpose.
- `git clone <URL>` - Clone an existing repo located at `<URL>`; **used only once** to download the repository including the files of the most recent commit and the history prior to that commit.

# Common `git` commands

## Working with a repo

- `git add <FILE>` - Adds file to a new commit; only puts the file into a staging area for commit.
- `git add -a` - the `-a` flag adds all changed files to a new commit; it's faster, but **be careful with this**
- `git commit -m "MESSAGE"` - commits your file to your local repo; this makes no changes to the remote repo (e.g., on github). The `MESSAGE` should be informative about your changes.
- `git push` - Pushes your changes to the remote repository so everyone else can see them.
- `git pull` - Pulls changes from the remote repository to your repo and local machine.

# Common `git` commands

## Seeing what is happening

- `git status` - Tells you what changes to files have happened, if they have been staged for commit, or if they need to be added.
- `git log` - Tells you about the history of the repository

# I'd be more comfortable with a GUI

[GitHub Desktop](https://desktop.github.com/) (<https://desktop.github.com/>) is available for free. It's built for `github.com` and it has all the commands you use in the CLI.



Current Repository  
desktop

Current Branch  
esc-pr #3972 ✓

Fetch origin  
Last fetched 3 minutes ago

Changes

History

### Add event handler to dropdown component

iAmWillShepherd and Markus Olsson committed c79e71c 1 changed file

Co-Authored-By: Markus Olsson <niiik@users.noreply.github.com>

#### Appease linter

iAmWillShepherd committed a day ago

#### Add event handler to dropdown com...

iAmWillShepherd and Markus Olsson...

#### Move escape behavior to correct co...

iAmWillShepherd and Markus Olsson...

#### Remove event handler from the bran...

iAmWillShepherd and Markus Olsson...

#### Merge branch 'master' into esc-pr

iAmWillShepherd committed a day ago

#### Merge pull request #4044 from des...

Neha Batra committed a day ago

#### Merge pull request #4070 from desk..

Brendan Forster committed 2 days ago

#### bump to beta3

Brendan Forster committed 2 days ago

#### Merge pull request #4057 from desk..

Brendan Forster committed 2 days ago

#### Merge pull request #4067 from desk..

Brendan Forster committed 2 days ago

#### Release to 1.1.0-beta2

Neha Batra committed 2 days ago

```
app/src/ui/t.../dropdown.tsx 100%  
@@ -145,6 +145,10 @@ export class ToolbarDropdown extends  
  React.Component<  
    145     this.state = { clientRect: null }  
    146   }  
    147  
    148 + private get isOpen() {  
    149 +   return this.props.dropdownState === 'open'  
    150 + }  
    151 +  
    148   private dropdownIcon(state: DropdownState): OcticonSym  
    149   bol {  
    150     // @TODO: Remake triangle octicon in a 12px version,  
    151     // right now it's scaled badly on normal dpi monitor  
    152     s.  
@@ -249,6 +253,13 @@ export class ToolbarDropdown extends  
  React.Component<  
    249   }  
    250   }  
    251  
    256 + private onFoldoutKeyDown = (event:  
    257 +   React.KeyboardEvent<HTMLInputElement>) => {  
    258 +   if (!event.defaultPrevented && this.isOpen &&  
    259 +     event.key === 'Escape') {  
    260     event.preventDefault()  
    261     this.props.onDropdownStateChanged('closed', 'keybo  
    262     ard')
```

**Questions, Comments, Concerns?**