A Git Primer

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git gud

Agenda

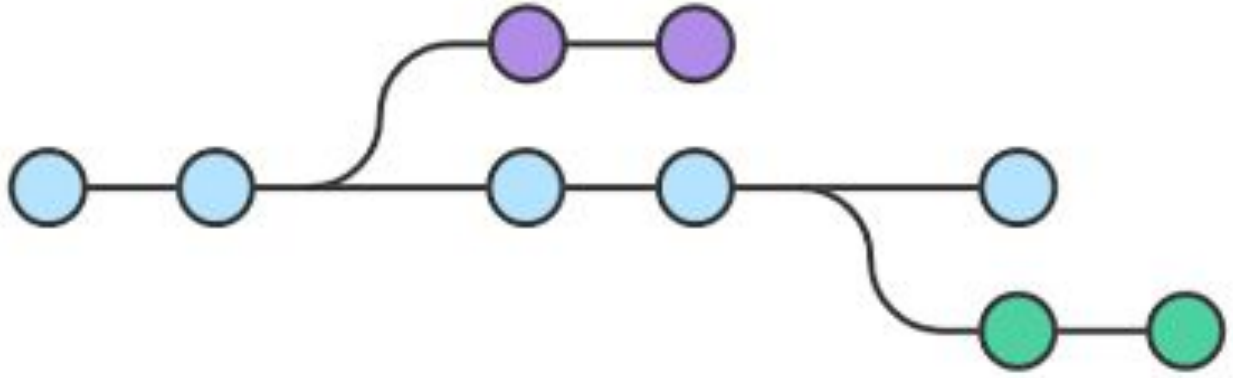
- What is git and github?
- Why you need to know it
- Basic commands you will see very soon, and very often
- What a fork is!

What is git and github?

- Git is a version control system!
- Github is a hosting platform for software development

Why you need to know git

- EVERY company uses some version/source control software or another - git is by far the most popular



COMMANDS WE TEACH YOU IN THE PRECOURSE

- **git clone <URL>** - *clones a repository into your local machine*
- **git status** - *shows status of your repo, which files have been changed*
- **git add <filename(s)>** - *adds a specific file/files whose changes will be updated to the repo upon commit*
- **git add .** - *adds ALL changed files*
- **git commit -m"<message>"** - *saves added changes to the repo*
- **git push** - *updates a remote repository with local changes*
- **git push <remote> <branch>** - *push explicitly to a remote link and a specific branch*
- **git remote -v** - *view remote links. Will look like: origin <url> (fetch)*
  origin <url> (push)

COMMANDS TO KNOW

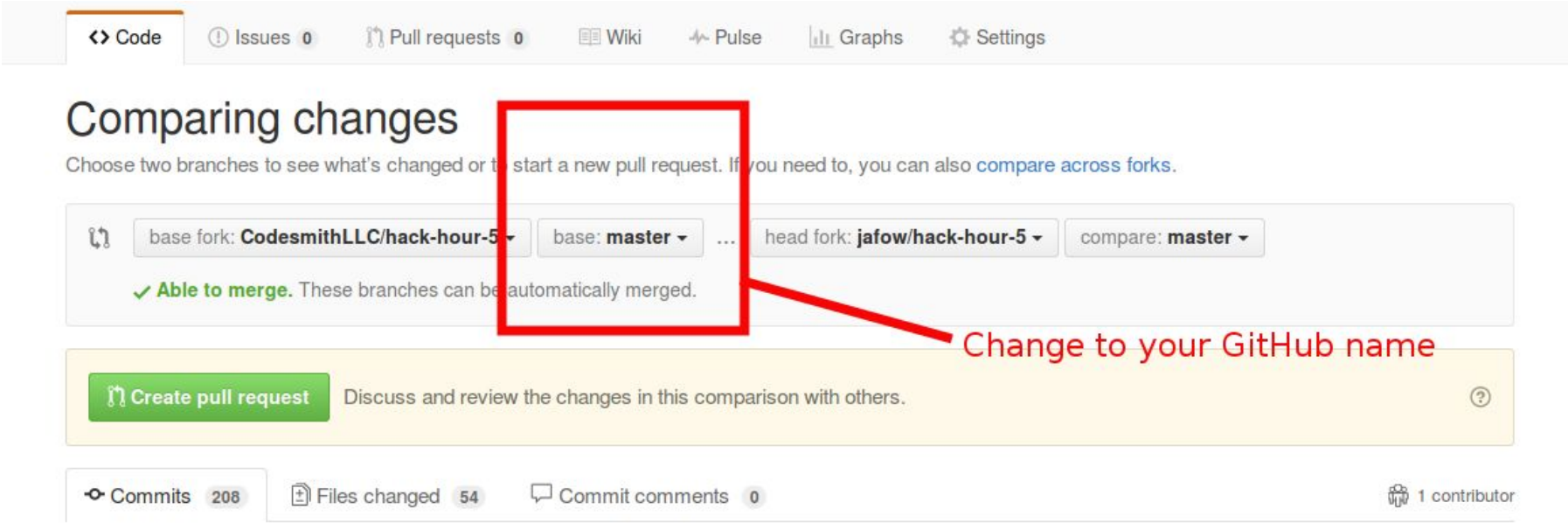
- **git branch** - *checks the current branches on your machine*
- **git checkout <branch name>** - *moves you to a different branch*
- **git checkout -b”<new branch name>”** - *creates AND moves you to a new branch*
- **git remote add <remote name> <URL>** - *creates a new link to a remote repository*
- **git pull** - *updates your current local branch with changes from a corresponding remote repository (this is a combination of git fetch + git merge)*
- **git pull <remote> <branch>** - *explicitly define which remote link and which branch you are grabbing from*

Demo time

WHEN IN DOUBT!

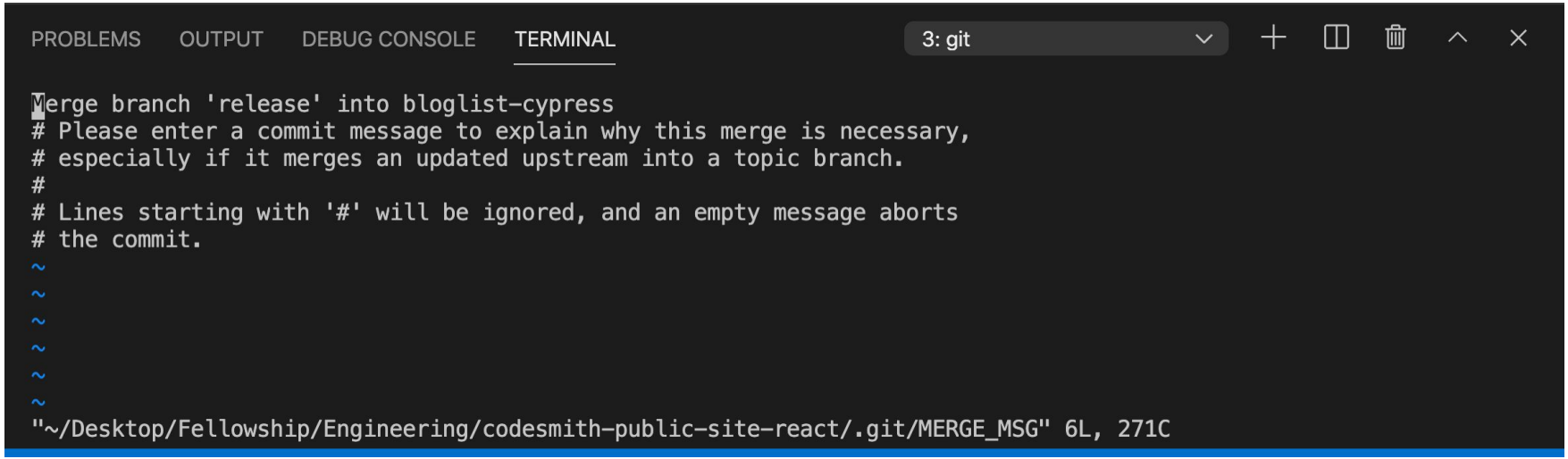
- **git status** - *shows status of your repo, which files have been changed*
- **git branch** - *checks the current branches on your machine*
- **git remote -v** - *view remote links. Will look like: origin <url> (fetch)*
  origin <url> (push)
- **git log** - *view previous commit history*

Pull requests



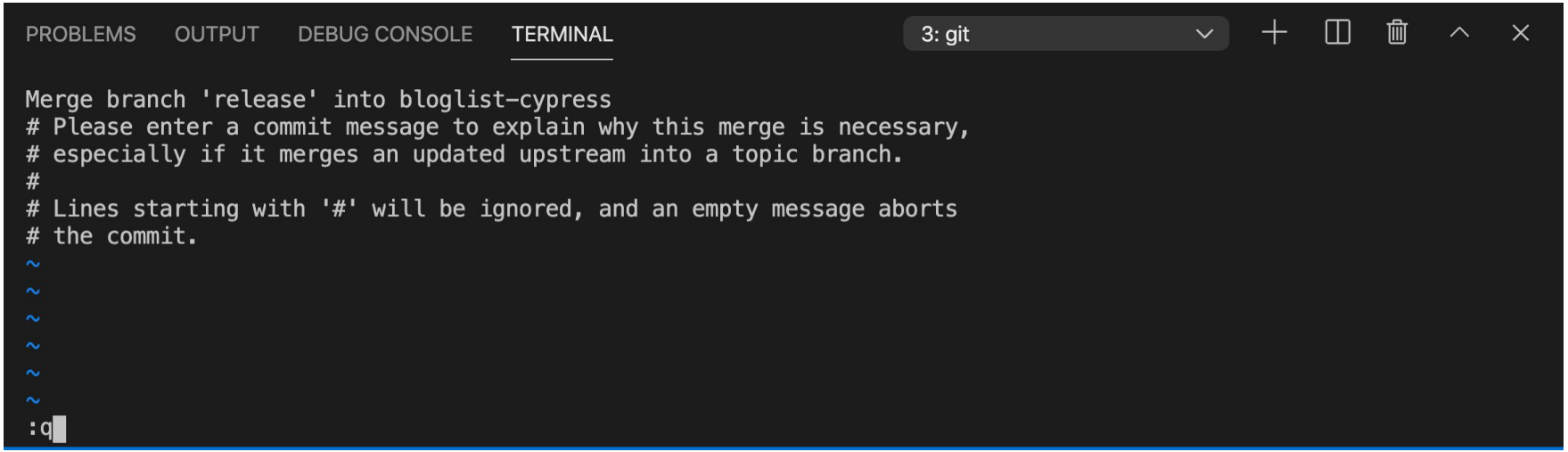
Notes on git pull

You may find yourself facing a vim editor like this



Notes on git pull

Just write :q or :qa in the terminal and then press ENTER!



What the fork?

- What's the difference between a fork and a branch?
    - *A fork is an ENTIRELY NEW repository, based off a parent*
    - *A branch is a temporary workspace, meant to be deleted once the additions have been merged into a main branch*

https://www.pluralsight.com/blog/software-development/the-definitive-guide-to-forks-and-branches-in-git

Additional resources

- Git documentation: https://git-scm.com/doc
- Github's git guide: https://github.com/git-guides
- Github's docs: https://docs.github.com/en
- Nodeschool git workshop: https://github.com/jlord/git-it-electron
- Learn git branching sandbox: https://learngitbranching.js.org/
- Fireship videos on git:
  - Git explained in 100 seconds: https://youtu.be/hwP7WQkmECE
  - Git It? How to use git and github: https://youtu.be/HkdAHXoRtos