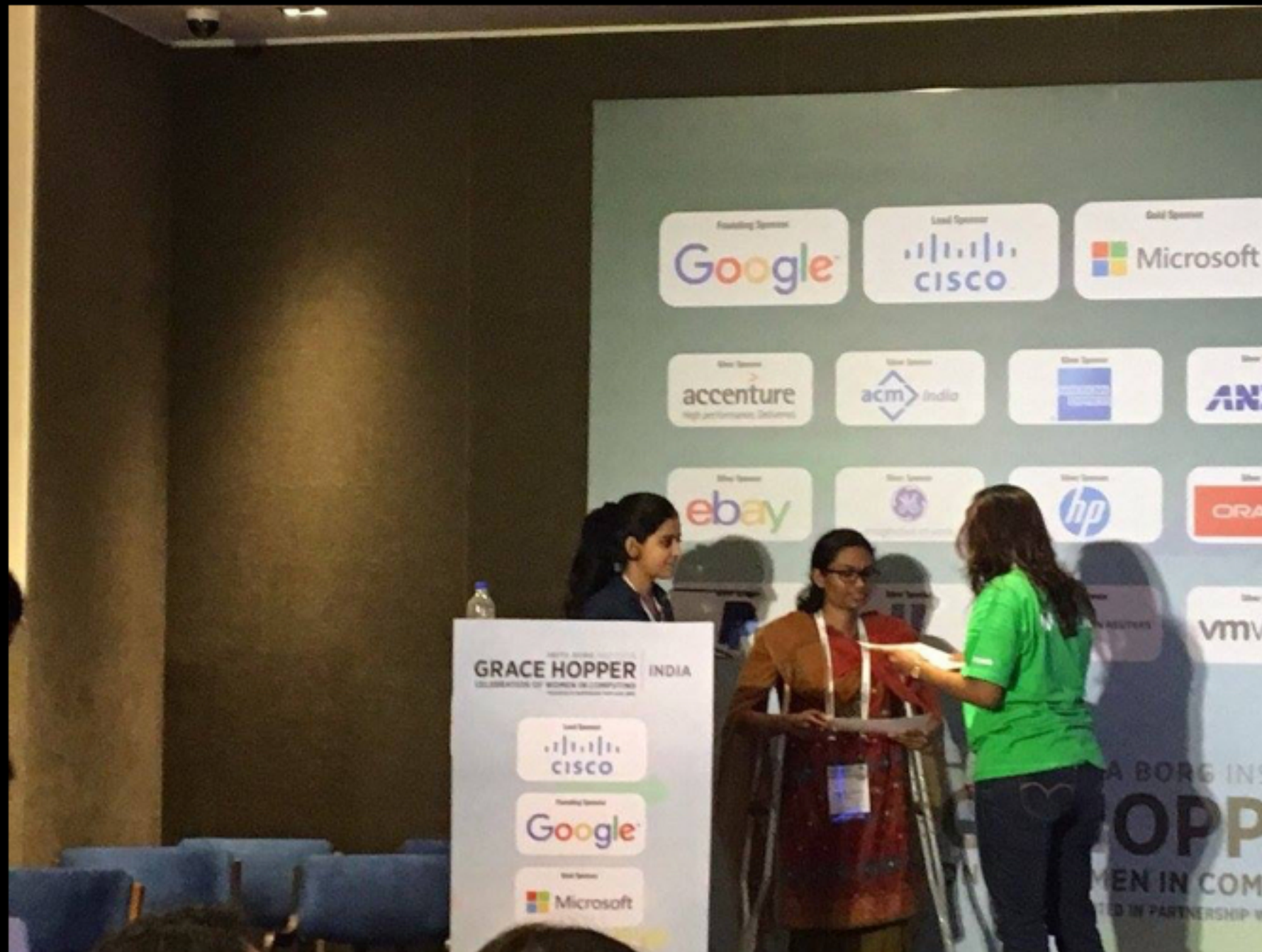


Collaborating with Github

Susmita & Harshita

Good morning



Grace Hopper Conference 2015

Tech for good Hackathon

Why Collaborate

- Diverse inputs
- Socialise and learn
- Improve code quality
- Evolve rapidly



Github



Rebecca Slatkin

@RebeccaSlatkin



Following

My mom thinks Github is the name of a bar I hangout at.

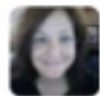
I'm not going to correct her.

RETWEETS

1,173

LIKES

1,923



8:37 AM - 24 Jan 2016

“GitHub is how **people** build **software**.”

– *Github*

Github

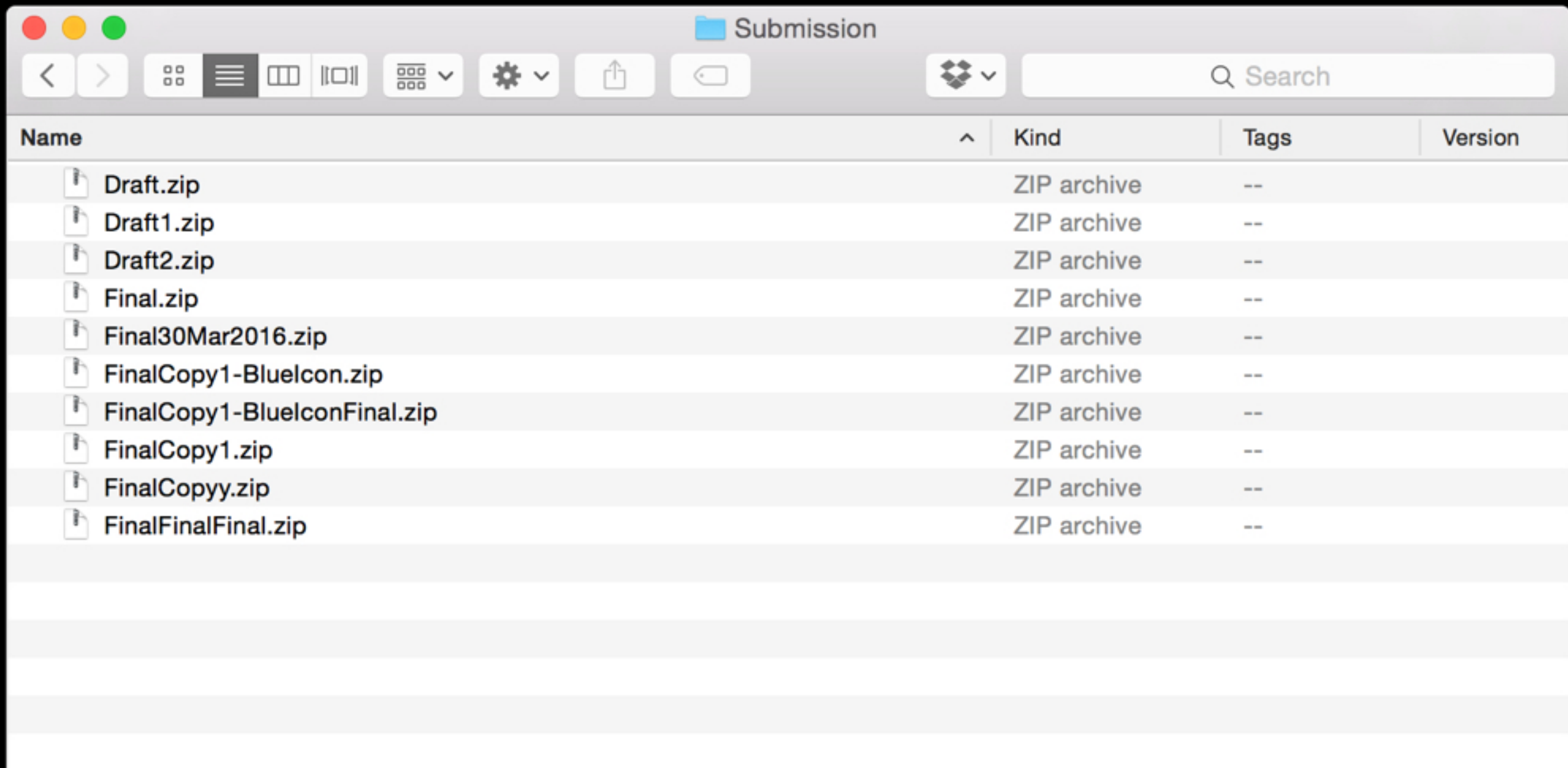
- Built on Git technology
- Provides wide variety of tools apart from code management
- Drives social development through discussion
- Increases discoverability of projects
- Acts as a living resume

Git

Git is a free and open source distributed version control system (SCM)

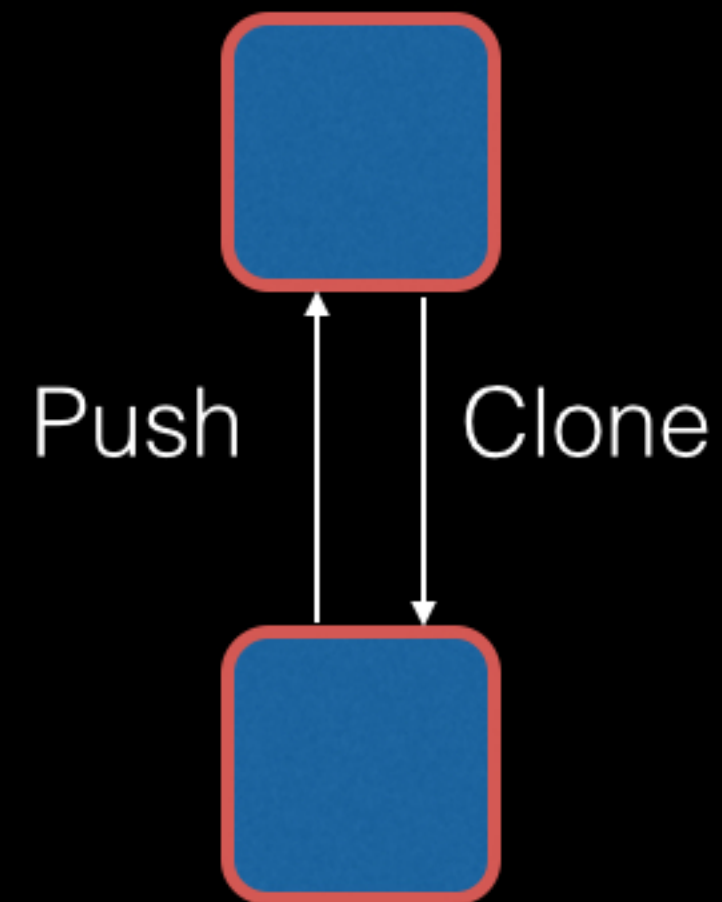
It was created by Linus Torvalds in 2005

Delete not duplicate

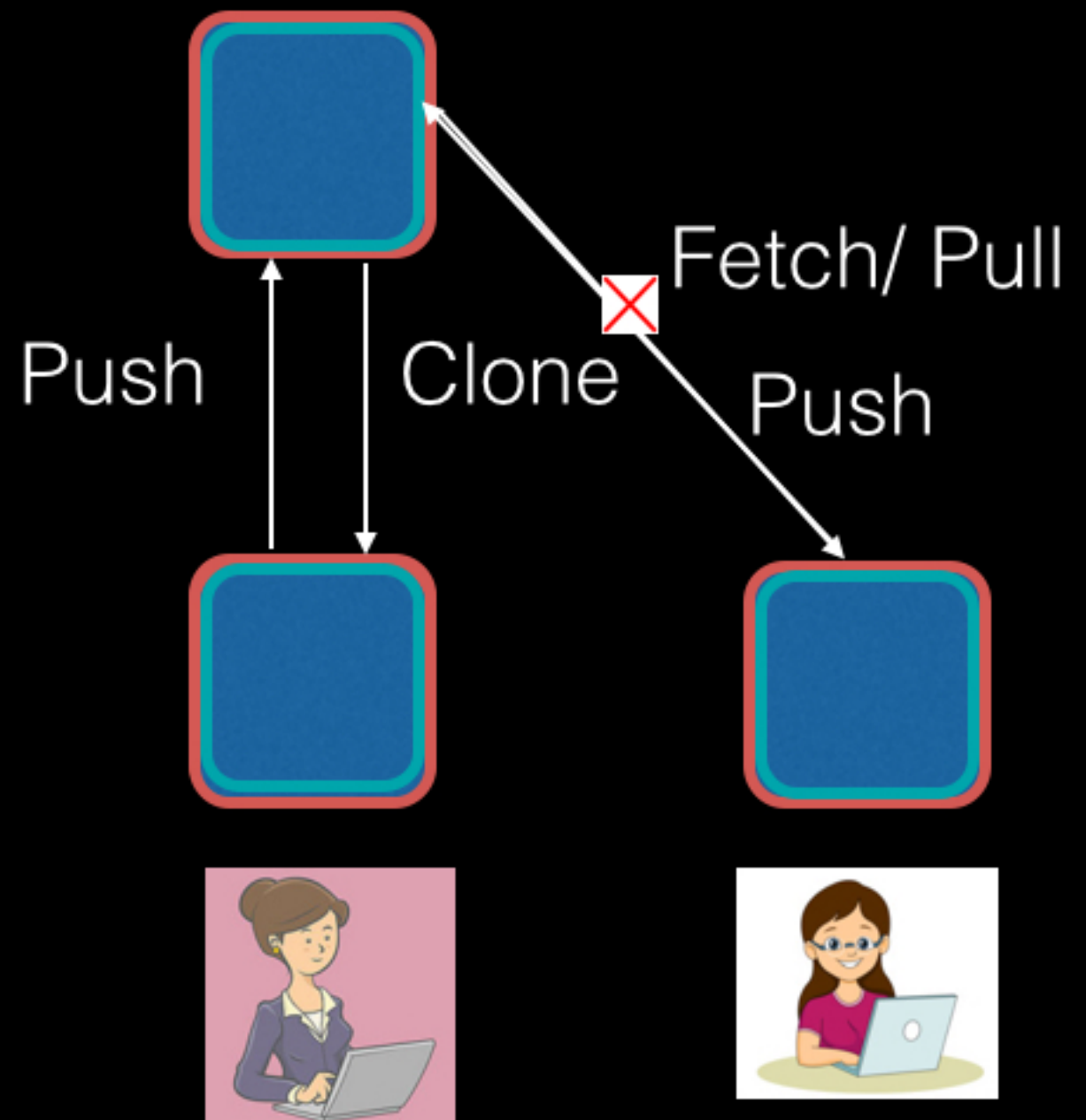


Terminology

- Repository
 - A repository is the most basic element of GitHub, which is the project's main folder.
- Remote
 - This is the version of something that is hosted on a server, most likely GitHub.com. It can be connected to local clones so that changes can be synced.
- Clone
 - A clone is a copy of a repository that lives on your computer instead of on a website's server
- Push
 - Pushing refers to sending your committed changes to a remote repository such as [GitHub.com](https://github.com).

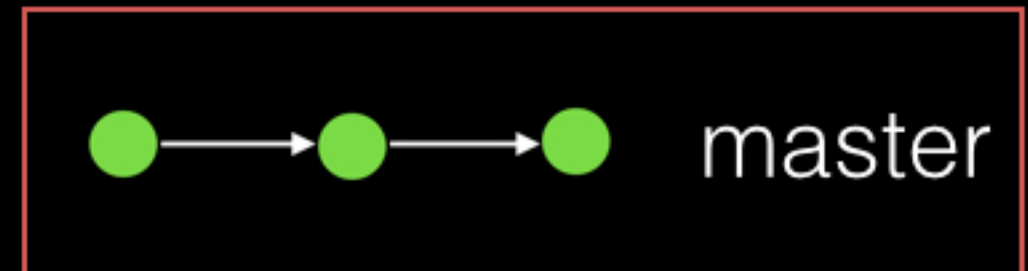


- Fetch
 - Fetching refers to getting the latest changes from an online repository (like GitHub.com) without merging them in.
- Pull
 - Pull refers to when you are fetching in changes and merging them
- Fork
 - A fork is a personal copy of another user's repository that lives on your account. Forks allow you to freely make changes to a project without affecting the original.



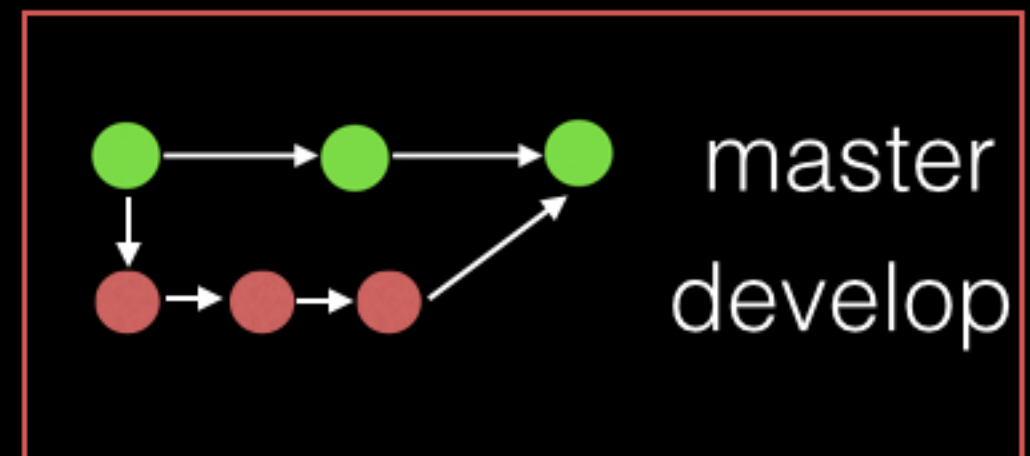
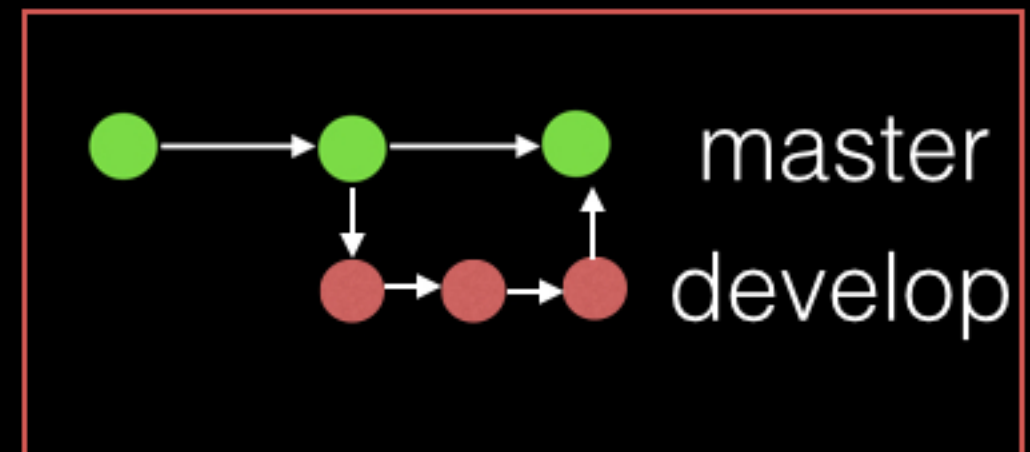
Git Tree

Remote



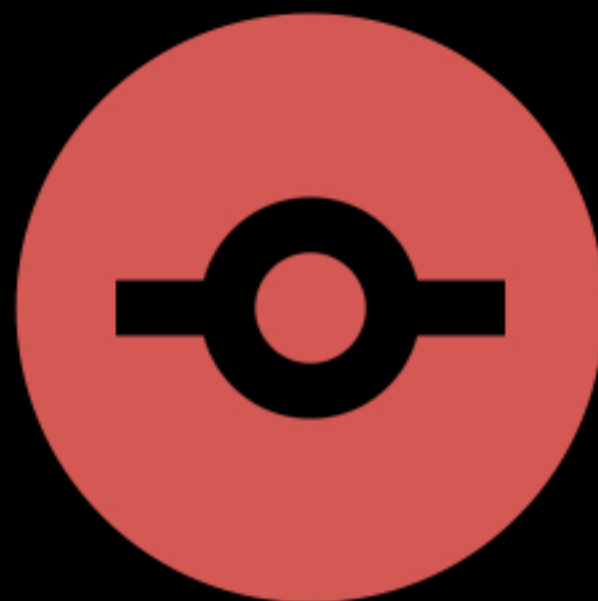
- Branch
 - A branch is a parallel version of a repository. It is contained within the repository, but does not affect the primary or master branch.
- Commit
 - A commit, or "revision", is an individual change to a file (or set of files). Every time you save it creates a unique ID (a.k.a. the "SHA" or "hash") that allows you to keep record of what changes were made when and by who.
- Merge
 - Merging takes the changes from one branch (in the same repository or from a fork), and applies them into another.
- Rebase
 - Rebasing is the process of moving a branch to a new base commit.

Local





Branch



Commit



Merge



Branch



Commit



Pull Request



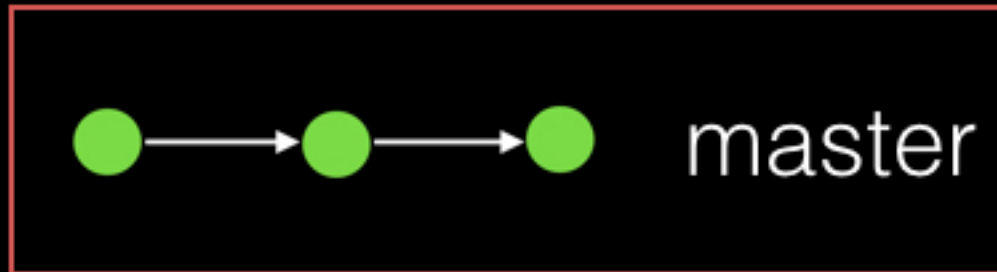
Merge



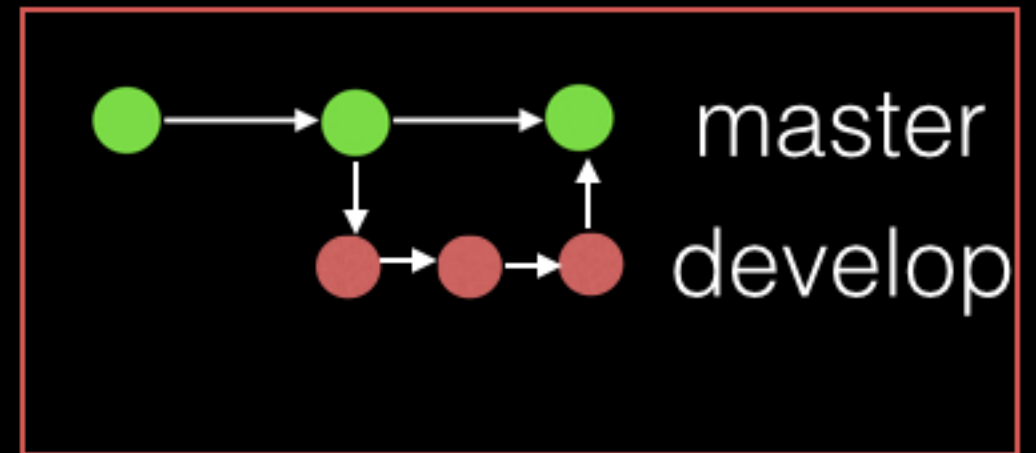
Review



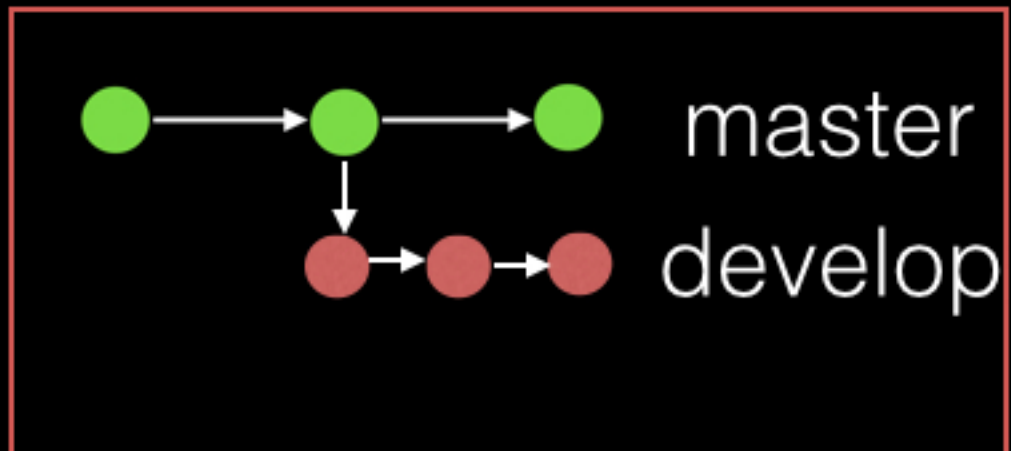
Remote (Initial)



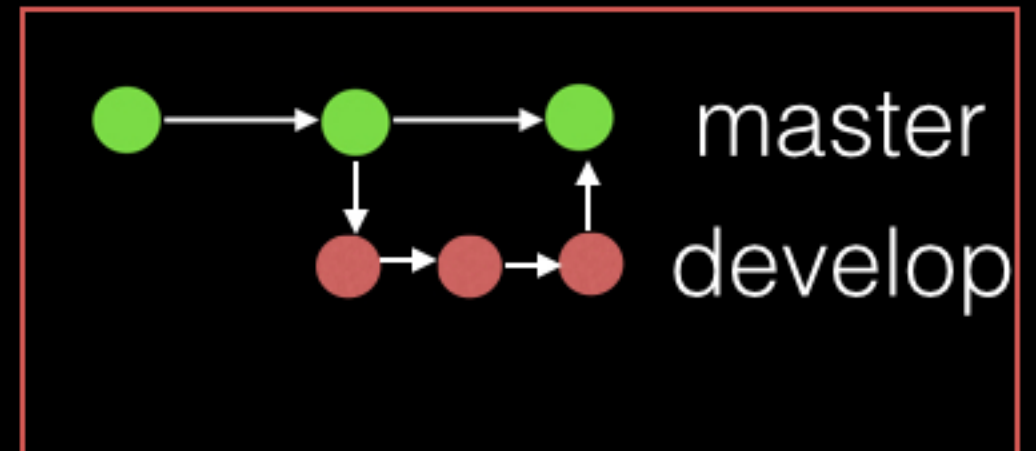
Remote (Final)



Local



Review, Merge & Push



Pull Request



- Collaborator
 - A collaborator is a person with read and write access to a repository who has been invited to contribute by the repository owner.
- Contributor
 - A contributor is someone who has contributed to a project by having a pull request merged but does not have collaborator access.
- Issue
 - Issues are suggested improvements, tasks or questions related to the repository. Issues can be created by anyone (for public repositories), and are moderated by repository collaborators.
- Code Review
 - Pull requests are proposed changes to a repository submitted by a user and accepted or rejected by a repository's collaborators. Like issues, pull requests each have their own discussion forum.

Git tools

- Terminal
- Github Desktop
- Source tree
- Gitx

Tutorials

- <https://try.github.io>
- <https://www.git-tower.com/learn/>
- <https://www.codeschool.com/courses/try-git>

Github

- Free unlimited public repositories
- Detailed history visible to all
- Discussion platform for issues and pull requests
- Tools for documentation
- Pastebin service (Gist)
- Statistics for repositories
- Watch repositories and subscribe to follow discussions
- Public API
- Free hosting of static webpages

Time to git started


- Create a Github profile
- Open url: <https://github.com/thelastjedi/osw-talk>
- Clone the repo
- Create a branch: *my-edit-patch*
- Add your name and social link to the file and commit with a meaningful message
- Send a pull request

Explore

- Explore trending repositories <https://github.com/explore>
- Follow users (like www.github.com/thelastjedi)
- Once you find a repo you like, read the documentation, look out for literature on contributions
- Track issues, comment and discuss
- Commit and send that pull request

Thank you

Susmita Harrow

 hsusmita

Harshita Chandra

 thelastjedi

CREDITS

- <https://guides.github.com>
- <https://help.github.com/articles/github-glossary/>
- <http://plainicon.com/>