

01-3 – git – Remote Repositories

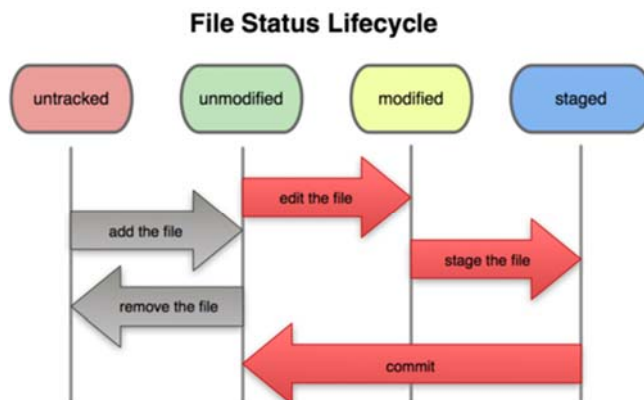
Much of this is from
<https://help.github.com/articles/using-pull-requests>
and
<https://help.github.com/articles/fork-a-repo>

git with remote repositories

- Last time we looked at git and learned:
- Every Git working directory is
 - a full-fledged repository
 - with complete history and
 - full revision tracking capabilities,
 - not dependent on network access or a central server
- Now we'll look at ways of using git for **collaboration**

File Status Lifecycle

- See: <http://progit.org/book/ch2-2.html>

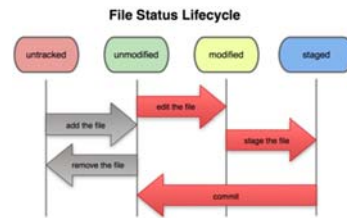


Two popular models for collaboration

- Shared Repository Model
 - Use with small teams on private project
 - Everyone has access to a single shared repository
 - Topic branches us to isolate change
- Fork & Pull
 - Anyone can fork an existing repository
 - Push changes to own repository without permission to original source
 - Changes are pulled into the source by the maintainer
 - Reduces friction for new contributors
 - People can work independently without coordination

Fork and Pull Workflow

- Fork the Repo
- Use same local work flow
- Push to your repo
- Pull Request
 - Initiate The Pull Request
 - Review The Pull Request
 - Send The Pull Request
- Receiving Pull Requests
- Manage Pull Requests
 - Review Proposed Changes
 - Apply the Changes



Fork a Repo



- Go to <https://github.com/MarkAYoder/gitLearnFork>
- Click the **Fork** button in the upperright
- Clone your fork
- **git clone**
<https://github.com/username/gitLearnFork.git>
- Configure remotes
- **git remote add upstream**
<https://github.com/MarkAYoder/gitLearnFork.git>
- **git fetch upstream**
- Pulls in changes not present in your local repository, without modifying your files

More things

- Push commits to *your* remote repository stored on GitHub
- **git push origin master**
- Fetches any new changes from the original repository
- **git fetch upstream**
- Merges any changes fetched into your working files
- **git merge upstream/master**

Try it

- Fork the gitLearnFork repo
- Configure the remote
- Add your name to **helloWorld.c**
- Do the git add, git commit -m, git push origin master
- Do a pull request