Git,Github:Don't get scared,Get started

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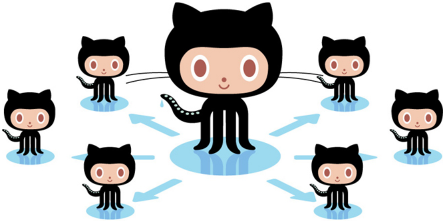
Overview

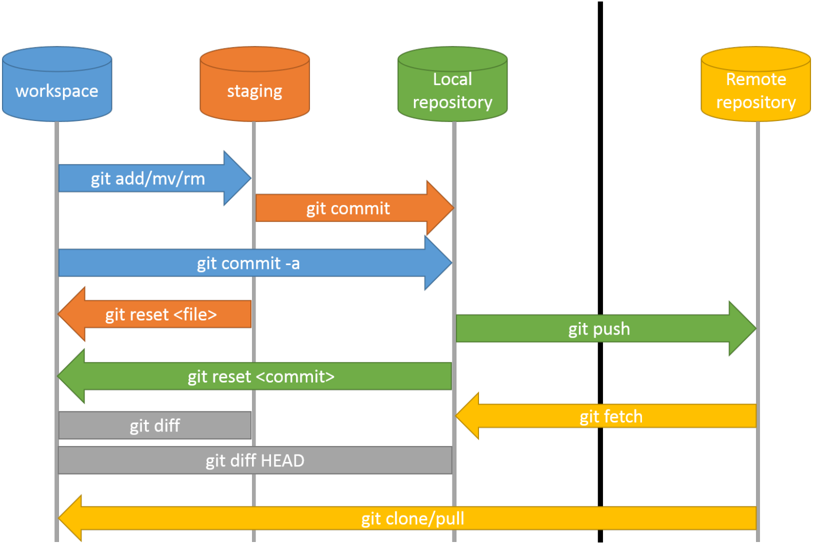
1. Git and github
   - Git
   - Git architecture
   - git workflow
   - Github
2. Get started social coding !
   - How to get started ?
   - Terminology
   - Some commands
   - Setting up git and github
   - Try these...
   - Working with git
   - Our first git repo

Heard about git ?

- **Git is a free and open source distributed version control system.**
- It is a version control system means that it can help you keep track of files that are frequently changed.



Git architecture



Git architecture

Workflow

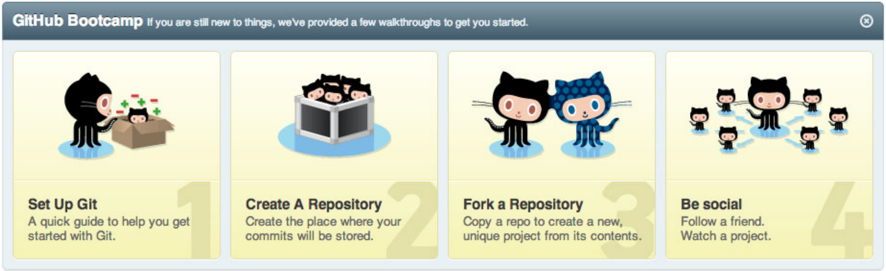
The basic Git workflow goes something like this:

- You modify files in your working directory.
- You stage the files, adding snapshots of them to your staging area.
- You do a commit, which takes the files as they are in the staging area and stores that snapshot permanently to your Git directory.

What about Github ?

- **GitHub is an amazing service.**
- GitHub is a web-based service for people who want to use git.
- Its widely used by teams who want to make some or all of their work publicly available under an open source license.
- Since thats what we do, we feel that GitHub is a natural choice for us to store our code.
- it's a social network that has completely changed the way we work :)

How to get started ?



GitHub Bootcamp If you are still new to things, we've provided a few walkthroughs to get you started.

Set Up Git
A quick guide to help you get started with Git.

Create A Repository
Create the place where your commits will be stored.

Fork a Repository
Copy a repo to create a new, unique project from its contents.

Be social
Follow a friend.
Watch a project.

Words People Use When They Talk About Git

1. Command Line
2. Repository
3. Version Control
4. Commit
5. Branch

some commands

Getting a Repository

1. git init
2. git clone

Commits

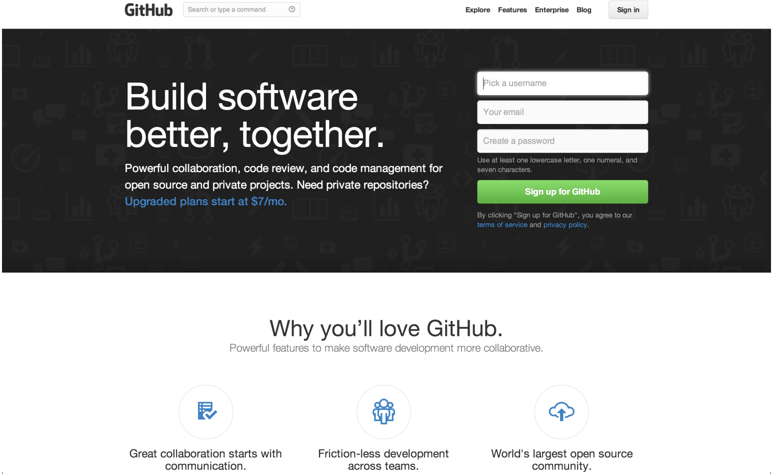
1. git add
2. git commit

Getting information

1. git help
2. git status
3. git diff
4. git log
5. git show

Setting up git and github

- **Make yourself a GitHub account first.**



GitHub Search or type a command Explore Features Enterprise Blog Sign in

Build software better, together.

Powerful collaboration, code review, and code management for open source and private projects. Need private repositories? Upgraded plans start at $7/mo.

Pick a username

Your email

Create a password

Use at least one lowercase letter, one numeral, and seven characters.

Sign up for GitHub

By clicking "Sign up for GitHub", you agree to our terms of service and privacy policy.

Why you'll love GitHub.

Powerful features to make software development more collaborative.

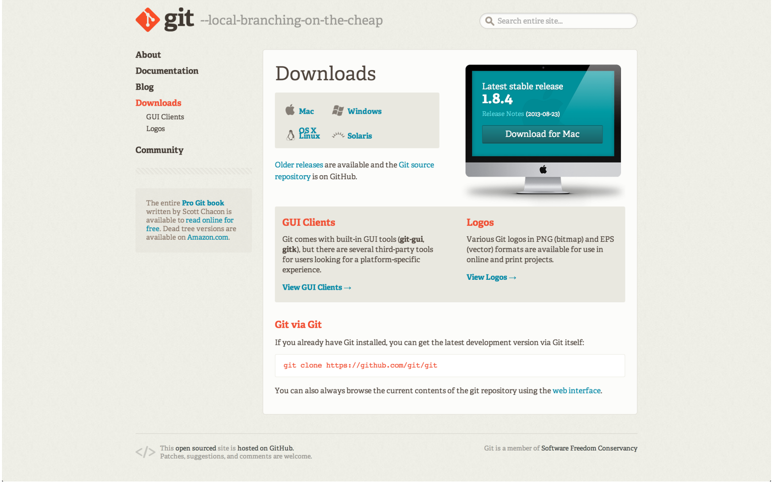
Great collaboration starts with communication.

Friction-less development across teams.

World's largest open source community.

Setting up git and github

- **And install git in your system**



git --local-branching-on-the-cheap

Search entire site...

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The entire Pro Git book written by Scott Chacon is available to read online for free. Dead tree versions are available on Amazon.com.

Downloads

Mac
Windows
OS X Linux
Solaris

Older releases are available and the Git source repository is on GitHub.

Latest stable release
1.8.4
Release Notes (2013-08-23)
Download for Mac

GUI Clients

Git comes with built-in GUI tools (**git-gui**, **gitk**), but there are several third-party tools for users looking for a platform-specific experience.

View GUI Clients →

Logos

Various Git logos in PNG (bitmap) and EPS (vector) formats are available for use in online and print projects.

View Logos →

Git via Git

If you already have Git installed, you can get the latest development version via Git itself:

```
git clone https://github.com/git/git
```

You can also always browse the current contents of the git repository using the web interface.

</> This open sourced site is hosted on GitHub.
Patches, suggestions, and comments are welcome.

Git is a member of Software Freedom Conservancy

Try some specific commands

1. git init
2. git config
3. git help
4. git status
5. git add
6. git commit

1. git branch
2. git checkout
3. git merge
4. git push
5. git pull

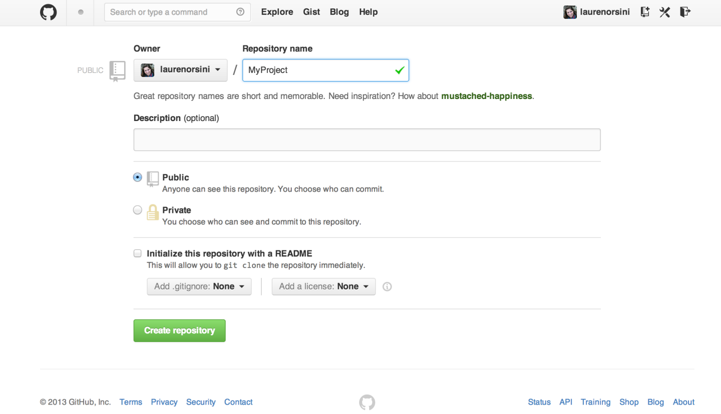
Working with git

first git commands !

```
git config –global user.name ”Your Name Here”
git config –global user.email ”your_email@youremail.com”
```

Our first git repo

Create new repo from your github page,it is the online repository...



Search or type a command

Explore Gist Blog Help

laurenorsini

PUBLIC

Owner: laurenorsini / Repository name: MyProject ✓

Great repository names are short and memorable. Need inspiration? How about **mustached-happiness**.

Description (optional)

● **Public**
Anyone can see this repository. You choose who can commit.

○ **Private**
You choose who can see and commit to this repository.

□ **Initialize this repository with a README**
This will allow you to `git clone` the repository immediately.

Add .gitignore: **None**

Add a license: **None**

Create repository

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Our first git repo

Now create the local repository...

- mkdir /home/user/MyProject
- cd /home/user/MyProject
- git init

If you already had a repository ready to go, you'd just need to cd to that directory and then run the git init command in there instead.

Run this command to create a README file: *touch README*

Our first git repo

- git add README Now, run this command to commit it:
- git commit -m 'first commit' To get this empty README file to GitHub, you need to push it with a couple of commands.
- git remote add origin https://github.com/yourusername/Hello-World.github
- git push origin master

Congratulations on your first commit!

Some more experiments

- Track changes : echo "This is a simple test repository" > README (git status)
  Now, run this command :
- git add README and git status
  Commit changes : git commit -m "add README to repository"
- Commit multiple files : touch file1.txt file2.txt
- git add ∗.txt
- git status
- git commit -m "add more files to repo"

Some more experiments

- History : git log , git log –summary
  What have I changed ?
- echo "This repo is getting interesting" > > README
  Now run this :
- git diff README
- work, commit, work, commit, ... : git add README and git commit -m "Update README with interesting stuff."
- Rename files : git mv file1.txt file_boring.txt and git status
- Removing files : git rm file2.txt and git status
- Now commit : git commit -m "renaming and removing files"
- Fork a project: git clone
  git@git.lumc.nl:z.tatum/course-assignments.git

Check codeschool¡¿ to explore and learn more about git.

Have fun managing your code!