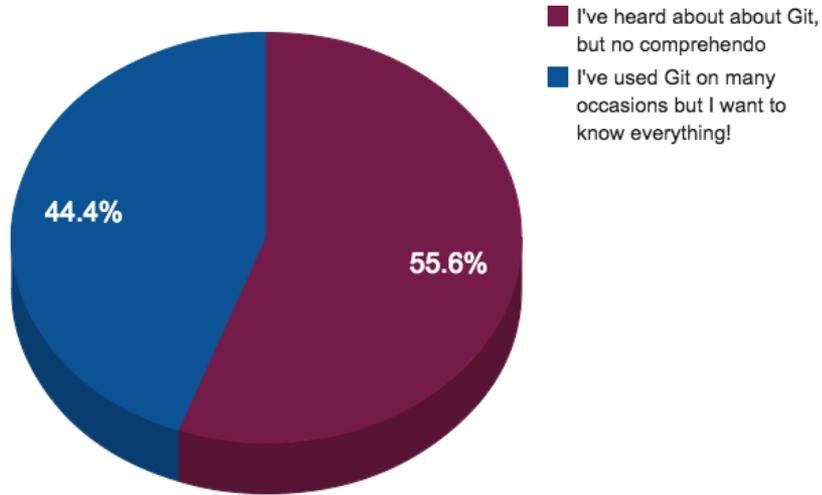




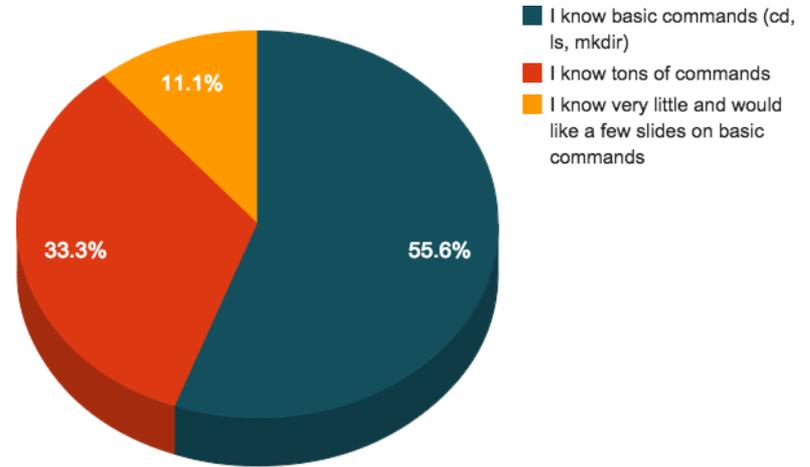
Basic Git Commands

Shannon Lee
Jonathan Miedel
Alvin Wang

Survey



Prior Git Experience



Command Line Experience

Last time on Git

- Git is VCS software
- working directory/index(stage)/repository
- add files to the staging area
- viewing changes in your working directory

Review Quiz

- What is git? Why would I want to use it?
- Explain the purpose of `git status`
- Difference between `git add` and `git commit`?
- Difference between `git add .` and `git add --all`?
- What is the difference between the Staging area and the Index in Git?

Ignoring Files

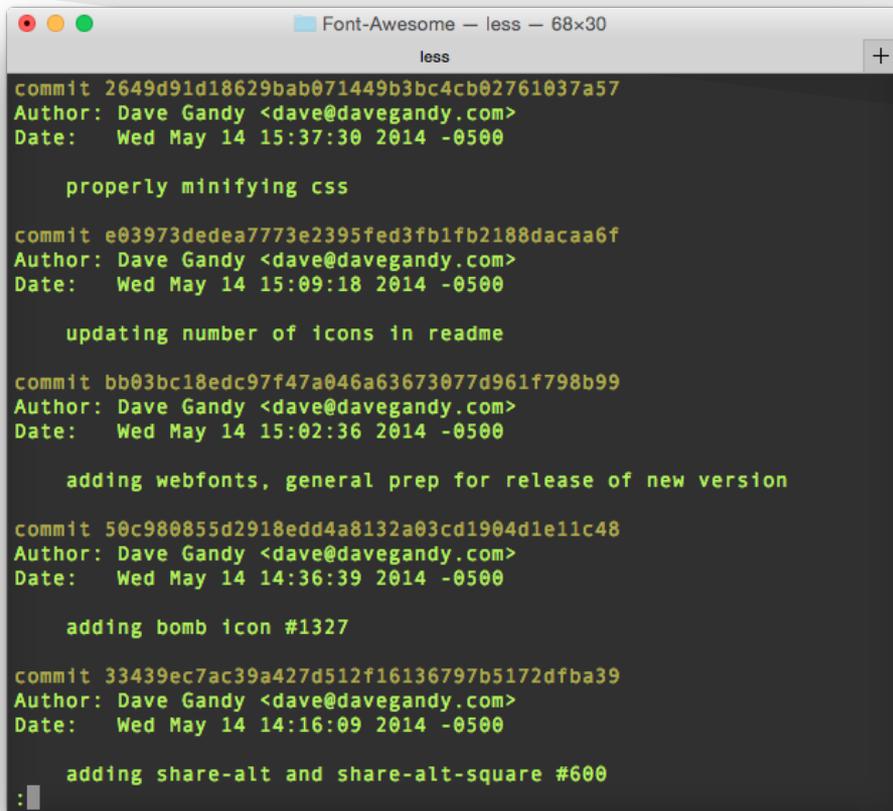
- Create a `.gitignore` file.

Example

```
# Java section #  
*.class  
# Django section #  
*.log  
*.pyc  
local_settings.py  
# Installer logs  
pip-log.txt  
# Database  
Thumbs.db
```

Viewing Repository Log

- `git log`
- Shows a list of all your commits
- Why is this useful?



```
Font-Awesome -- less -- 68x30
less
commit 2649d91d18629bab071449b3bc4cb02761037a57
Author: Dave Gandy <dave@davegandy.com>
Date:   Wed May 14 15:37:30 2014 -0500

    properly minifying css

commit e03973dedea7773e2395fed3fb1fb2188daca6f
Author: Dave Gandy <dave@davegandy.com>
Date:   Wed May 14 15:09:18 2014 -0500

    updating number of icons in readme

commit bb03bc18edc97f47a046a63673077d961f798b99
Author: Dave Gandy <dave@davegandy.com>
Date:   Wed May 14 15:02:36 2014 -0500

    adding webfonts, general prep for release of new version

commit 50c980855d2918edd4a8132a03cd1904d1e11c48
Author: Dave Gandy <dave@davegandy.com>
Date:   Wed May 14 14:36:39 2014 -0500

    adding bomb icon #1327

commit 33439ec7ac39a427d512f16136797b5172dfba39
Author: Dave Gandy <dave@davegandy.com>
Date:   Wed May 14 14:16:09 2014 -0500

    adding share-alt and share-alt-square #600
:
```

Good Commits cont.

- A characteristic of good commit messages is that they are feature-based.
- This means that a commit should explain what was changed in regards to a certain feature.

Commit Messages

- `git commit -m <message>`
- Explain your changes (feature-based commits) and how they work
- Explain side effects of changes
- Be concise

Bad Messages

- fixed stuff
- better
- changed line 88 in program.txt from $x=2y$ to $x=3y$
- Inappropriate language
- bill broke it so I fixed it

- <http://www.commitlogsfromlastnight.com/>

Good Commit Messages

Commits on Jun 15, 2014

-  **Build: Update commitplease dev dependency**
markelog authored on Jun 15 39b7606 [↔](#)
-  **Build: Move test to appropriate module**
markelog authored on Jun 14 fbdbb6f [↔](#)
-  **Effects: Improve raf logic** ...
markelog authored on May 12 708764f [↔](#)
-  **Effects: Reintroduce use of requestAnimationFrame** ...
markelog authored on May 8 72119e0 [↔](#)
-  **Ajax: Always use script injection in globalEval** ...
markelog authored on Nov 29, 2013 bbdfbb4 [↔](#)
-  **CSS: Do not throw on frame elements in FF** ...
markelog authored on May 18 e488d98 [↔](#)

Commits on Jun 10, 2014

-  **Support: clean up comments and Support notation** ...
dmethvin authored on Apr 25 d837f11 [↔](#)

Commits on Jun 07, 2014

-  **Tests: Clean up isNumeric tests** ...
gibson042 authored on Jun 7 ff9dcfb [↔](#)
-  **Core: Work around loss of precision from parseFloat** ...
gibson042 authored on Jun 7 e1192af [↔](#)

Comparing Changes

- Here are some commands that will help you craft a good commit message.
- `git diff`
- Allows you to see what you have changed in your working tree.
- `git diff` vs. `git status`
 - `git diff` compares the differences at the line-level
 - `git status` compares the differences at the file-level

Changing Messages

- `git commit --amend`
 - Advice: don't amend commits that have been pushed.

Working with Remotes

- Remotes are essentially servers where your repository is hosted.
- GitHub will always be your remote this class.

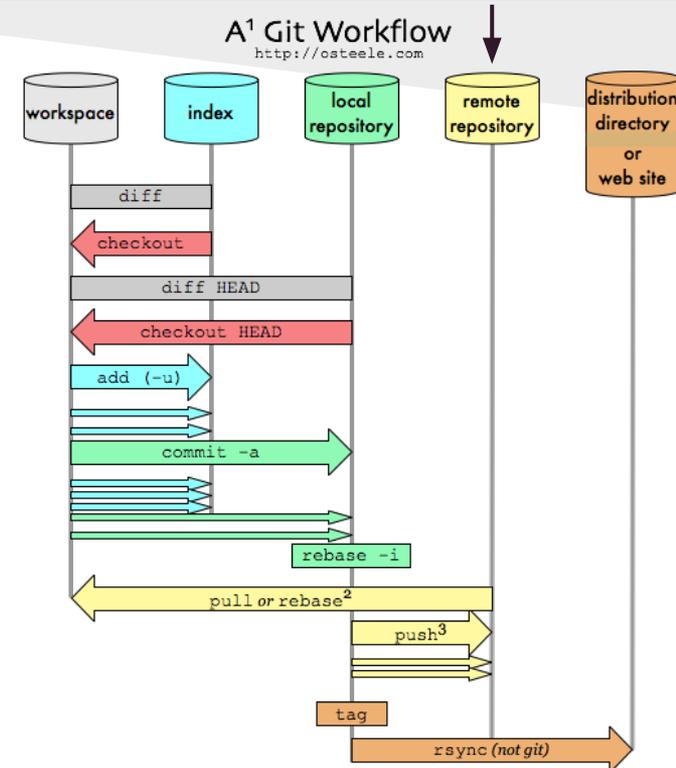
Setting Remote

- `git remote`
 - `git remote -v` will show all remotes
 - `git remote add <url>`
 - `git rm <remote_name>`

git push



- git push
- Push your commits to a remote server (ie. Github)



1 Git is a workflow construction toolkit. This is just one of many possible workflows.

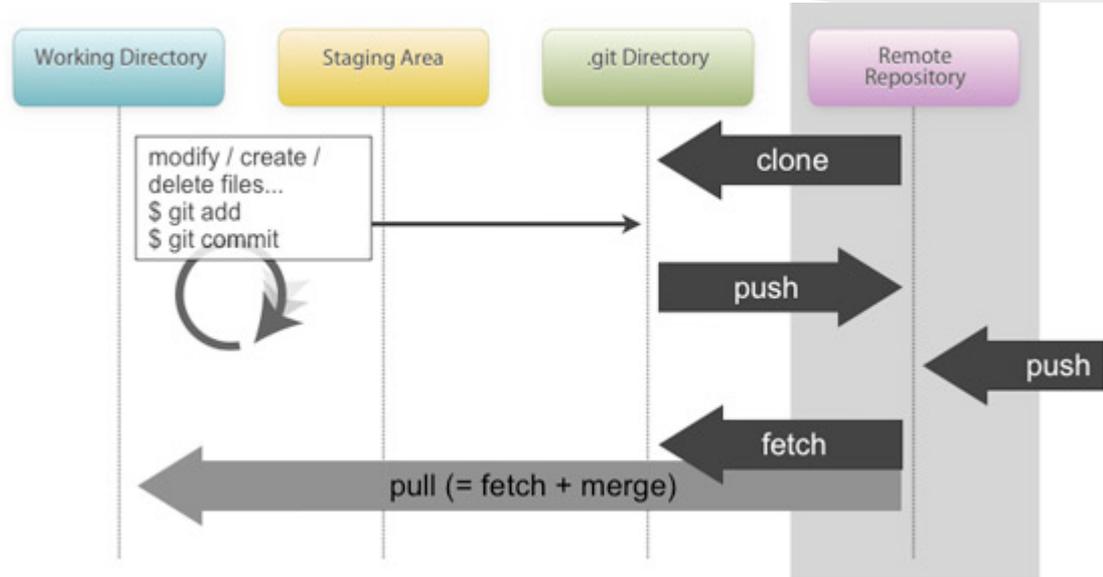
2 With git-svn: "git svn rebase". With git-p4: "git p4 rebase"

3 With git-svn: "git svn dcommit"

git pull

`git pull <remote> <local branch>`

- Fetches any updates from the remote and merges them into your branch
- Essentially the same as `git fetch` followed by `git merge`



Questions



Add later

```
git add --patch
```