## The <u>UPL</u> Video Lecture Series

euphorically presents ...

# git, GitHub, and you



By Leo LOZORD Rudberg

## About me\*

- Junior undergrad at <u>UW-</u> <u>Madison</u>
- Studies <u>Computer</u>
   <u>Science</u> and <u>Mathematics</u>
- Interests: SWE sanity, futurism, donuts



\*Not this cool IRI

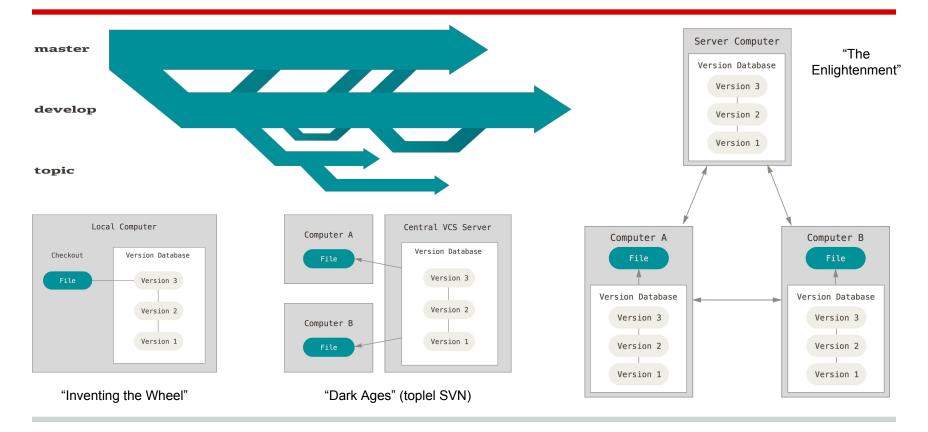
## **About you**

- Likes computers
- Likes working on software projects
- Interested in stepping up yo' hacker game
- Tolerates bad puns and dorky presentations
- Enjoys learning and practicing powerful concepts and tools

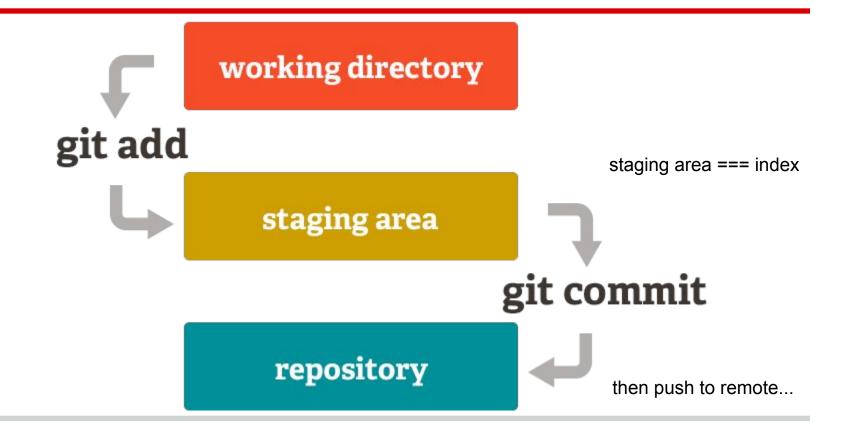
## git log --history

- Originally created by Linus Torvalds (Linux guy) in 2005
- Free and open source under GPL
- Most popular source control management tool (SCM) tool today (sorry SVN, Hg, etc.)
- Distributed!
- <u>git-scm.org</u> is awesome!

## git === distributed



#### The Workflow



### <u>GitHub</u>

- Began in 2007
- Layer on top of git
- Repo (project) and org hosting
- Free public hosting (and free private options for students!)
- git GUI for Mac, Linux, and Windows
- gists, graphs, and more!
- Bitbucket is also great!

## How can SCM improve my life?

- Collaboration for school and hack projects
- "Oh crap" moments
- History for your project (git log and git blame)
- Portability (git clone)
- Different branches
- Easily integrated into workflow

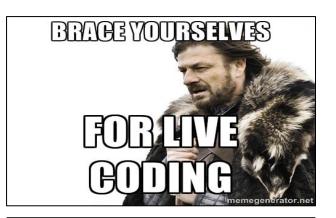
## Let's get this party init'd!

- Download git (check if you have it first!)
- Stay tuned for live demo! (https://gist.github.

com/LOZORD/3f4271e461f6d8aaa99d)

### Other great sources:

- Try Git
- o git-scm.org's tutorial
- Git The Simple Guide
- o CS 506 (SWE)
- Stack Overflow
- Your friendly neighborhood hacker



#### Topics:

init, status, add, commit,
push, pull, checkout, branch,
merge, mergetool, log, reset,
clean, gc, clone, blame