GitHub for Cats Outline

# LESS DETAILS MORE IDEALS

GOAL: If you use VC you should switch to GH if you can, if you have issues you need to bring them up but still speak up.

If you don’t use VC you should, and you should use GIT

Here is how to get started. Never more than 1 half step ahead of beginner

# What is open source

<http://ben.balter.com/open-source-for-government/>

Transparency

# What is version control?

AKA Revision control, Source Control

Writing your Final Essay for a class.

* Start by versioning the name, then you can version it on git, now you version it and distribute it for free online and anyone can edit that essay and even submit fixes or additional content to make it utterly amazing.

## Old version control for Essay

* Use list of increasingly longer File names

## Using Git for the Essay

Distributed Version Control system built on an open source platform where the files are located at a centralized server but you pull down a local copy and submit patches back to the centralized location with your local modifications

# Using GitHub for the Essay

GitHub centralizes the distributed system

Anyone in the world can improve your essay now.

# GitHub Overview

Logo is the Octocat, a cross between a cat and an octopus: <http://octodex.github.com/>

GitHub provides a medium for programmers to share code.

Existence of github means that Git is the best vc system.

Create public and prvate repos, served over https or SSH (Matrix of pub vs priv)

GitHub is the new standard. So many people are using it and it has become a requirement for many tech jobs

Adds a social aspect to coding

You don’t have to take my word on it: Android, jQuery, etc etc

# ITS official stance on GH

If no official word, its “In the works”

# Why use GitHub?

* Use Cases for GitHub (Sprints, collaboration etc)
* No checking files in and out to modify them. Editing the same file simultaneously
* Long distance collaboration (Guy from UK that enhanced my plugin)
* Breaks down the silos we've built for years and shares our code with each other and if we choose, the world.
  + Benefits of Open Source vs Siloed programming.
* Will make us better coders when we know people are watching.
* History of Every change to ever file
* Detailed line by line list of who owns each line of every file "blame log"
* Offline editing (airplane submarine), keeps a lit of all of your revisions until you are ready to commit
* Fast workflow

# Terminology

* Repo
* Branch
* Clone
* COmmit
* Pull (maybe drop in favor of keeping simpler and just do forking)
* Fork (Metaphor: photocopying, clone)

# Quick overview of the site

* Browse repos
* Stars
* Following people
* More

# Creating your First Repo

Create GH account Install GitHub GUI (windows and MAc) Add Username Copy in existing project Publish it Done

# Creating your SEcond Repo

Copy in existing project Publish it Done.

# Creating your third repo

Getting the picture?

# GitHub makes VC Easy

Up and running so quickly

# Cloning someone elses repo

GH is social, all code that is made publically available is at your fingertips Find jQuery CLone jQuery Can make changes to it now and use them for yourself or make a bug fix and send changes back to them to fix it.

# Keeping Track of changes

* Committing 101
  + MEtaphor: Planting a flag in the ground to say this is what this code was like at this point in time.
  + Have the ability to create new flags, and review flags, and go back to old flags
* Make a small change in project
* See the change detailed line by line
* Commit the changes, and sync back to GH
  + Notice that commits are on the left line by line and code changes are on the right with diffs clearly displayed (Dont use the term Diff as we havent explained that, go with somethign more concrete)

# Other Useful Features

GitHub isn't just for code, you can use it for documents and images as well. replaces that list of 12 versions of the same document with increasingly long file names (Maybe say this earlier so as to not lose the non-coders right from teh beginning)

Mobile GH

Pulse - Keep track of progress across the code base (How to represent this? "dashboard?"")

Issues - Track bugs - Track feature requests - Notifications

GitHub Pages - Create a branch and see your changes imediately

# Further Resources

Why is it better? http://thkoch2001.github.io/whygitisbetter and http://git-scm.com/about

[Trygit](http://try.github.io)

[ProGit Book](http://git-scm.com/book)

## Possible additions, but are being pulled to the bottom to keep out of sight

Branching

Pull requests on GH

Workflow

Merge Conflicts