An Intro To Source Control
What is Source Control?

- Source Control is the management of your source code.
What is Source Control?

❖ An example:
  ❖ Working with a friend on a project
  ❖ You make changes, and they need them.
  ❖ How do you get your code to them?
Simple Approach...

- Copy and Paste, emailing files.
- Pros: Fast and Simple
- Cons: Everything else…
Let's do one better

- Zip up your code, and label it with a version number.
- Email that zip to your friend
- Pros: Still pretty easy to do
- Cons: Getting more complicated
Hrm, Next!

- Put those zips on a server that you and your friend have access to.
- This is the basic concept of CVS
TLDR; CVS Sucked

- CVS Had a multitude of problems that I’m going to skip over
- Frustrated with CVS, people wrote SVN.
- SVN Is a supposedly better CVS
SVN

- Client/Server
- Clients check out code from server and commit changes
- Has Branches
- Server holds all your code
SVN Sucks

- All your code is in one place
- Branching is expensive
- Requires connection to server to work
- Slow
A Long Time Ago…

- On a computer far far away…
- Linux Kernel
- Linus Torvalds wrote Git
  - Fast patching
  - Do the opposite of whatever CVS does
  - Support distributed workflow
  - Strong safeguards against corruption
History Lesson is Over...

- Let's look at some example git commands
  - init
  - add
  - commit
Dealing with Others...

- To get code from other people, we have
  - push
  - pull
Github!