Intro to Git

* Git removes the need to copy files to and from the class share and your “H” drive as you collaborate on a project
* Git is like using your camera to take a snapshot of your files at a specific point in time that you can magically go back to if terrible things happen
* In gaming terms: Git is a checkpoint for your files
* Git exist so you can: modify/change/break/improve your code, secure in the knowledge that you can not ruin your work too badly because you created save points along the way
* Git is a collaboration tool that allows different people to work on all parts of a project at the same time
* Git is a tool that protects yourself and others from yourself and others

State

* Modified- files that are new or have changes not yet saved by Git
* Staged- the current version of a file, tagged to be included in the next commit
* Committed- files that are safely stored by Git

Git Better?

* Remote repository is a copy of our project that is stored “in the cloud”
* We backup our work and share it with others
* Accessible anywhere there is an internet connection
* Git push upload all your changes to the server
* It will upload all commits since the last push

Branches

* Branches are exactly what they sound like, smaller bits of a tree
* Represent different type
* Allows us to work on code fixes and features without breaking what we already have working
* Fixes and new features should always start on a branch
* Master branch is the “trunk” of your code tree
  + Should only contain clean code ready for deployment
    - Use on the web
* Git branch <name> tells git to maintain a new copy of our code with the given name
* On its own will list the branches available and display an asterisk top the one we are working on
* Git checkout <branch> tells git to switch our working folder to the branch name specified
* Check out branches independently

Together

* Git merge <branch> combines the file changes in a branch we name into our current working branch
* Merge conflict happen when a file has changed in both of the branches you are trying to combine
  + Git can not automagically determine what you want to keep
* Git is asking for help to decide what you want to keep

This really helps us collaborate easier because we can see what each of us change and we can branch off of the main code. This allows us to work on the same code, but different ideas. This can make the idea of merging together the two ideas into one. Working on the same code without having to share the code with each other. This allows us to save time and work quickly to get the work done.

Remote repos 1

Branches 3

Merging 3

The best part about my thanksgiving break was nothing. There was nothing special that happen because it was like every day of my life.