Git Configuration Commands

What's the current directory (present working directory)?

pwd

Git Config (Global/User-level) Syntax

git config --global setting value

Configure User and Email

General Syntax:

git config --global user.name "Your Name"

git config --global user.email "you@someplace.com"

Example using course author's information:

git config --global user.name "Jason Taylor"

git config --global user.email "jason@jasongtaylor.com"

Listing All Global Configuration Settings

git config --global --list

Seeing Git's User-based Config file

cat ~/.gitconfig

**Starting Commands**

#### Git Starting Commands

##### **Lecture Command Listing - Fresh Start**

pwd

cd projects/

git init git-demo

##### **Lecture Command Listing - Start with Existing Project**

pwd

cd projects/

cd website/

ls

git init

##### **Command Reference**

Present Working Directory

pwd

Change Directory

cd folder-name

Git initialization

git init [project-name]

project-name parameter is optional. If not supplied, Git will initialize the current directory.

**First Commit Commands**

#### Git First Commit Commands

##### **Lecture Command Listing**

pwd

ls

mate README.md

ls

git status

git add README.md

git status

git commit -m "Initial commit"

clear

git status

##### **Command Reference**

List

ls

Lists files and folders in current directory. Without parameters, will list non-hidden folders and files.

Git Status

git status

Shows which files have been modified in the working directory vs Git's staging area.

Git Add

git add file-name

Adds the new or newly modified file-name to Git's staging area (index).

Git Commit

git commit -m "A really good commit message"

Commits all files currently in Git's staging area. The -m parameter allows for a commit message directly from the command line.

Clear!

clear

Clears all previous commands from the terminal screen -- just a bit of clean up.

**Working Locally Commands**

#### Git Working Locally Commands

##### **Lecture Command Listing - Working Locally, Part One**

pwd

git status

mate README.md

git status

git add README.md

git status

git commit -m "Adding some ipsum"

clear

git status

mate README.md

git status

git commit -am "Adding more ipsum"

git status

##### **Lecture Command Listing - Working Locally, Part Two**

pwd

git status

clear

mate index.html

git status

git add index.html

git status

mate README.md

git status

clear

git status

git add README.md

git status

git commit -m "A few changes for the website"

clear

mate README.md

mate index.html

git status

git add .

git status

git commit -m "A few more changes for website"

clear

mate README.md

git status

git add README.md

git status

git reset HEAD README.md

clear

git status

mate README.md

git checkout -- README.md

mate README.md

git status

##### **Command Reference**

Express Commit for Tracked files

git commit -am "Awesome commit message"

Use the -a parameter with the **git commit** command to directly commit newly modified tracked files. Warning: Only do this for small changes. Tracked files are files that have been previously added to Git (committed or staged).

Adding All Changed Files

git add .

The period parameter for the git add command will recursively add all new and newly modified files.

Unstage File

git reset HEAD file-name

Following the above command will "unstage" the specified file from Git's staging area (aka index).

Backout Working Directory Changes

git checkout -- file-name

Following the above command will back out any changes made to the specified file and replace it with the version last committed in Git

**History and File Management Commands**

#### Git History / File Management Commands

##### **Lecture Command Listing -- History**

git log

git help log

git log --oneline --graph --decorate --color

##### **Lecture Command Listing -- Removing Files**

pwd

git status

mate debug.log

ls

git status

git add .

git status

git commit -m "adding log file that really does not belong here"

clear

git status

git rm debug.log

ls

git status

git commit -m "removing log file"

clear

mate info.log

ls

git add info.log

git commit -m "adding info log"

git status

clear

ls

rm info.log

ls

git status

git add .

git add -u

clear

git status

git commit -m "Removing info.log"

##### **Lecture Command Listing -- Moving Files**

ls

mkdir web

ls

git mv index.html web

cd web/

ll

pwd

cd ..

ls

git status

git commit -m "Moving index.html file to web folder"

clear

##### **Lecture Command Listing -- Ignoring Files**

mate application.log

ls

git status

mate .iitignore

git status

ls -a

git add .gitignore

clear

git status

git commit -m "adding ignore file"

##### **Command Reference**

Seeing Repository History

git log

git log --oneline --graph --decorate --color

Git's **log** command displays the repository's history in reverse chronological order. The no-params version displays the standard view.

Git log options from above: --oneline Compacts log data on to one line, abbreviating the SHA1 hash --graph Adds asterisk marks and pipes next to each commit to show the branching graph lines --decorate Adds the markers for branch names and tags next to corresponding commits --color Adds some color to the output -- nice to have, depending on the operating system

Removing a file using Git

git rm file-name

Removing a file using Terminal

rm file-name

This removes the file outside Git's knowledge

Updating Git's Index (staging area)

git add -u

The -u parameter will recursively update Git's staging area regarding deleted/moved files outside of Git.

Making a directory (folder)

mkdir folder-name

The **mkdir** command is a nearly universal command for creating a directory/folder.

Making a directory (folder)

git mv source destination

The **git mv** command will move the source (file or folder) to the destination with Git.

**SSH Authentication Commands**

#### SSH Authentication Commands

##### **Lecture Command Listing**

cd ~

cd .ssh

mkdir .ssh

cd .ssh

pwd

ssh-keygen -t rsa -C "jason@jasongtaylor.com"

mate id\_rsa.pub

ssh -T git@github.com

##### **Command Reference**

Generating an SSH Key

ssh-keygen -t rsa -C "your.name@your-company.com"

Use your actual email address in the example above.

Verify SSH authentication

ssh -T git@github.com

Above command uses **ssh** to connect to GitHub over the SSH protocol.