General Assembly

NAVIGATING THE COMMAND LINE

Command Line

» A text-based interface.

» *Synonyms*: command line interface (CLI) console

Terminal

» An OS X application that provides text-based access to a computer's operating system.

» Any device or application used for data entry and display in a computer system.

» *Synonyms*: client, computer terminal, terminal emulator

File System

» A file system is a systematic way to control how information is stored and retrieved on a computer. It describes where one piece of information stops and the next one begins. Each filesystem has its own structure and logic.

» *Synonyms*: NTFS (Windows' File System), HFS+ (Apple's File System), file allocation table, GFS(Global File System)

Directory

» A unit, or container, used to organize computer files into a hierarchical structure.

» *Synonyms*: folder, catalog, drawer

Path

» A sequence of symbols and names that identifies a file or directory. The path always starts from your working directory or from the root directory, and each sub-directory is followed by a forward slash.

» An *absolute*, or full, path begins with the root directory and specifies every directory above the terminating file or directory name.

» A *relative* path is a way to specify the location of a directory or file relative to another directory. It does not include the root or parent directory names.

» *Synonyms*: path name

Command

» The action we want the computer to take; always a single word.

» *Synonyms*: utility

Option

» Follows the "command" in a command line; used to modify the behavior of the command in some way.

» *Synonyms*: flag

Argument

» Follows the "command" and "options" (if any) in a command line and is used to explain what we want the command to act upon.

» The number of arguments used generally depends on the command; some don't need arguments, some require exactly one argument, some require many arguments, and some are flexible in the number they can take.

Command	Description
pwd -options	Prints the working directory; returns the absolute path name of the current directory
ls [-options][path/to/directory]	Lists files in current directory

Command	Description
ls -a	Lists hidden files in the current directory
cd [-options][path/to/directory]	Changes the current working directory to the specified directory
cd ..	Changes to parent directory
mkdir [-options][path/to/directory]	Makes a new directory
rm -r [path/to/file][path/to/file] ...	Removes directories or files permanently (use with caution)
rm myfile	removes myfile permanently (use with caution)
mv [-options][path/to/file] [path/to/directory]	Moves directories or files to a new locale
mv [-options][path/to/file] [NEW_FILE_NAME]	Renames a file or directory

TERMS

On Mac, your terminal comes with a manual. To access more (*a lot more*) information about any command, type **man**, followed by the command name, and press **Enter**:

> `man command`

You can scroll through a manual entry using the arrow keys or space bar. To quit this view and return to your prompt, type **q**.

Guiding Questions

1. What are the benefits of using the CLI instead of a GUI?
2. Why do you need to be careful when using the CLI?
3. How is a shell different than the CLI?

Additional Resources

» General Assembly's Original Command Line Review

- A walkthrough created for web development students that provides additional high-level practice.

» Learn Enough to Be Dangerous!

- One of the more thorough tutorial blogs on the subject.