Web Fundamentals - Session 4

The Command Line.

The command-line interface, sometimes referred to as the CLI, is a **tool** into which you can type text commands to perform specific tasks—in contrast to the mouse's pointing and clicking on menus and buttons.

Since you can directly control the computer by typing, many tasks can be performed more quickly, and some tasks can be automated with special commands that loop through and perform the same action on many files—saving you, potentially, loads of time in the process.

The command line is simply a place where you **type commands directly to the computer**.

The computer will take these commands at face value, and will attempt to carry out any command that it understands. Unfortunately, the computer does not speak in any language spoken by humans (although it has recognizable elements). The people who created the operating systems you work on have thus created a standard set of commands that are built into the computer without having to be processed or compiled.

NOTE: The command line, as with all power, has its risks. You have the capability to instruct the computer to do anything it has the capability of doing. If you instruct the computer to erase all of your data, it will cheerfully proceed to do so. **Do not run a command just to see what it does.** Make sure you understand what the command is supposed to do first, especially if the command involves changing or removing files.

The application or user interface that *accepts your typed responses and displays the data on the screen* is called a **shell**, and there are many different varieties that you can choose from, but the most common these days is the **Bash** shell, which is the default on **Linux** and **Mac** systems in the **Terminal** application. By default, **Windows** systems only include the anemic Command Prompt application, which has nowhere near the power of Bash, so for the purposes of this article we're going to suggest you use the open source **Cygwin** tool as your Windows command line, since it's quite a bit more powerful.

Resources

This Guide , This Guide was given last week

A Mac-Specific Guide

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Git

We learned about Version Control Systems earlier in the course, and have already been using GitHub. So technically, you do already know how to use version control and git, but you've only been doing it via a GUI - the GitHub Desktop Client.

Git is a very powerful and popular version control system, and the only place you can run **all** Git commands is from the command line.

Most GUIs only use a subset of all functionalities for simplicity, so if you know how to run the command line version, you can probably figure out any GUI versions. Command-line tools are also available across operating systems, whilst GUIs are subjective for different companies or teams. So it's best to understand it for the future.

Task:
Try Git here.
We recommend that you follow this guide to try it yourself in your own command line, the GitHub guide for this is here.

More Guides

A Git Cheatsheet from GitHub
A Cheatsheet & Reference from Git
A Non-Programmer's Guide to Git
Pro Git
Think Like a Git
GitHub List of References
A Visual Git Guide