Learning CUI using command prompt

Class-1

In Windows operating systems, the Command Prompt is a program that emulates the input field in a text-based user interface screen with the Windows Graphical User Interface (GUI).

It can be used to execute entered commands and perform advanced administrative functions. It can also be used to troubleshoot and solve certain kinds of Windows issues.

Commonly Used Commands

- **cd** (change directory)
  Command used to switch the directory (path) in which you are working.

  Example: cd\windows\system32 Will move the prompt to the system32 folder path located in the Windows folder.

- **dir** (Directory)
  Allows you to see available files and folders within the selected directory. Also provides details on the modification date and size of files.

  Several additional switches can be used with the command to perform additional actions. (see the Microsoft guide  below for further info on the available commands).

  Example: C:\> dir
  This will display the contents of the C: directory or drive.
- **ipconfig**
  This command will display the current network information for your adapters including IP Address, Default Gateway, Subnet Mask etc.

- **ping**
  This command is used as a troubleshooting tool to resolve network issues. It will send a data packet to another system on the network and will await a reply - outputting the results.

  Example: ping 192.168.0.2
  This will ping the computer with the address 192.168.0.2 and output any response.

- **Help (/?)**
  The help command provides information about another command including available

switches to perform additional tasks.

Example: ipconfig /help

for more : https://learn.microsoft.com/en-us/windows-server/administration/windows-commands/windows-commands

Why Would You Use CLI over GUI?

As previously mentioned, the GUI was developed within the operating system as soon as the mouse became a new input device to operate the computer.

We should admit that GUI is visually attractive and easily understood. But, for some tasks which are vital, CLI is way more powerful.

Here, we would like to pick some points why you would use CLI over GUI. However, we leave it to you to choose depending on your type of work.

1. **Less Resource**
   It is not a secret that the text-based program needs very little resources of your computer. This means that with CLI you can do similar tasks with minimum resources.
2. **High Precision**
   You can use a specific command to target specific destinations with ease. As long as you don't type the wrong command, it will work like a charm. Once you learn the basics, writing syntax is not as hard as you might think.
3. **Repetitive Tasks Friendly**
   GUI has developed well over the years. But, the operating system may not give you all the menus and buttons to perform all tasks. One of the reasons is safety. This leaves you overwhelmed if you have to do repetitive tasks. For example, when you have to handle hundreds of files within a folder, CLI enables you to use a single command to do automate the repetition easily.
4. **Powerful**
   Most operating systems today prevent you from messing up the system's core process. Windows has system protection and MacOS has SIP (System Integrity Protection). You won't be able to perform certain tasks which are system protected. However, with CLI, you will have full control over your system.