2.0 Introduction to Command Line Interface

Need to Know

- A **command line interface (CLI)** is a type of computer interface that allows users to interact with the computer by typing commands into a text-based terminal.
- Rather than using a **graphical user interface (GUI)** with windows, buttons, and icons, a CLI presents the user with a prompt and accepts text commands that the computer can execute.
- The CLI is called **Terminal** if you're using a Mac, and called **Command Prompt** for Windows

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- **Command line interface (CLI)** is a program on your computer.
    - With CLI, you can create files, run programs, and navigate through your folders and other files.
    - The CLI is called **Terminal** if you're using a Mac, and called **Command Prompt** for Windows.

```
[root@localhost ~]# ping -q fa.wikipedia.org
PING text.pmtpa.wikimedia.org (208.80.152.2) 56(84) bytes of data.
^C
--- text.pmtpa.wikimedia.org ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 540.528/540.528/540.528/0.000 ms
[root@localhost ~]# pwd
/root
[root@localhost ~]# cd /var
[root@localhost var]# ls -la
total 72
drwxr-xr-x. 18 root root 4096 Jul 30 22:43 .
drwxr-xr-x. 23 root root 4096 Sep 14 20:42 ..
drwxr-xr-x.  2 root root 4096 May 14 00:15 account
drwxr-xr-x. 11 root root 4096 Jul 31 22:26 cache
drwxr-xr-x.  3 root root 4096 May 18 16:03 db
drwxr-xr-x.  3 root root 4096 May 18 16:03 empty
drwxr-xr-x.  2 root root 4096 May 18 16:03 games
drwxrwx--T.  2 root gdm  4096 Jun  2 18:39 gdm
drwxr-xr-x. 38 root root 4096 May 18 16:03 lib
drwxr-xr-x.  2 root root 4096 May 18 16:03 local
lrwxrwxrwx.  1 root root   11 May 14 00:12 lock -> ../run/lock
drwxr-xr-x. 14 root root 4096 Sep 14 20:42 log
lrwxrwxrwx.  1 root root   10 Jul 30 22:43 mail -> spool/mail
drwxr-xr-x.  2 root root 4096 May 18 16:03 nis
drwxr-xr-x.  2 root root 4096 May 18 16:03 opt
drwxr-xr-x.  2 root root 4096 May 18 16:03 preserve
drwxr-xr-x.  2 root root 4096 Jul  1 22:11 report
lrwxrwxrwx.  1 root root    6 May 14 00:12 run -> ../run
drwxr-xr-x. 14 root root 4096 May 18 16:03 spool
drwxrwxrwt.  4 root root 4096 Sep 12 23:50 tmp
drwxr-xr-x.  2 root root 4096 May 18 16:03 yp
[root@localhost var]# yum search wiki
Loaded plugins: langpacks, presto, refresh-packagekit, remove-with-leaves
rpmfusion-free-updates                                          | 2.7 kB    00:00
rpmfusion-free-updates/primary_db                              | 206 kB    00:04
rpmfusion-nonfree-updates                                      | 2.7 kB    00:00
updates/metalink                                               | 5.9 kB    00:00
updates                                                        | 4.7 kB    00:00
updates/primary_db                       73% [==================      ]  62 kB/s | 2.6 MB    00:15 ETA
```

- CLI is an older method for interacting with applications and operating systems.
  - It is used to perform specific tasks required by users.
- CLI is a text-based interface, unlike the GUI, which uses graphical options.
  - GUI enables the user to interact with the operating system and applications.

Commands

- CLI allows a user to perform tasks by entering commands.
  1. Users enter the specific command, press "Enter", and then wait for a response.
  2. After receiving the command, the CLI processes it accordingly.
  3. It then shows the output/result on the same screen; command line interpreter is used for this purpose.

CLI Applications

- In order to best make use of CLI, a user must be able to enter a bundle of commands (one by one) quickly.
- There are many applications (mono-processing systems) that still use CLI for their operators.
  - In addition, some programming languages, such as Forth, Python and BASIC, offer CLI.
- Command line interpreter is used to implement the text-based interface.

Command Prompt

- Another feature of CLI is command prompt, which is employed as a sequence of characters used in the user interface, or shell.
- Command prompt is used to notify users that CLI is ready to accept commands.

Additional Material

- **References**
  - Techopedia ⬈ **(https://www.dummies.com/article/technology/programming-web-design/general-programming-web-design/nuts-bolts-web-coding-development-254089/)**
- **Recommended watch**

I created a Command Line Game for you // 5-Minute Node.j…