Lecture series: Command Line Interphases (CLI)

#CLI is a way of working with files and folders that involves ty
ping a *command* as opposed to clicking a mouse.

#it's used primarily by programmers, data scientists and also co
mputer
enthusiasts.

#Every computer comes with CLI.

#Windows:

- Windows Command Prompt (cmd)
- Windows PowerShell
- Git Bash, the CLI for Git

#Mac/Linus:

-Terminal

#CLI can help you:

- Navigate folders
- Create files, folders and programs
- Edit files, folders and programs
- Run Computer programs (which is one of the primarily uses in D
ata Science)

Basics of Directories

- 'Directory' is just another name for Folder
- They are organized like a tree in your computer
- One directory can be inside another directory
- And the CLI helps us navigate them
- The directory at the *top* of the tree is called the 'root direc
tory.'
- The root directory contains all other directories
- The *root directory* is usually represented with a slash: /
- Your *home* directory is represented as a tilde: ~
- Your home directory usually contains most of your personal fil
es: pictures, music, etc.
- The name of your home directory is usually the name you use to
log into
your computer

CLI Basics or Commands

#Checking your Git Version on *Git Bash*.

```
use@DESKTOP-S6MSCKF MINGW64 ~
$ git --version
git version 2.21.0.windows.1
```

#Checking your Git Version on *Windows Command Prompt*

#Search for cmd

```
C:\Users\use>git --version

git version 2.21.0.windows.1
```

#Checking your Git Version on *Windows PowerShell*

```
PS C:\Users\use> git --version

git version 2.21.0.windows.1
```

#Checking your 'Working Directory' using the 'pwd' (*print working directory*) command

```
use@DESKTOP-S6MSCKF MINGW64 ~
$ pwd


 /c/Users/use
```

```
# Clear will clear out the commands in your current CLI window
# ls lists files and folders in the current directory
# ls -l lists details of files and folders in the current directory. Could al
so give us information on file size.
# ls -a list hidden and unhidden files and folders
# ls -al list details for hidden and unhidden files and folders
# -a and -l are called flags, as they are preceded by a 'dash' - which tells
the CLI what kind of behavior to take, and can be combined into the flag, for
example: -al
```

```
# The hidden files starts with a ‘dot.’
# cd stands for “change directory.”
# cd with an ‘argument’ which are folders to modify, takes you straight to
the folder you want to modify
# cd .. allows you to change directory to one level above your current direct
ory
# cd with no argument just takes you straight to your home directory


use@DESKTOP-S6MSCKF MINGW64 ~
$ cd Documents

use@DESKTOP-S6MSCKF MINGW64 ~/Documents
$


$ pwd
/c/Users/use/Documents

use@DESKTOP-S6MSCKF MINGW64 ~/Documents
$ ls

'~$DER OF FUNERAL SERVICE.docx'
 desktop.ini
 discussion.docx
'Documents 2019'/
'Euclid AcademicTranscript-Felix Emeka Anyiam.pdf'
'my ethical aproval updated (edits).docx'


use@DESKTOP-S6MSCKF MINGW64 ~/Documents
$ cd ..

use@DESKTOP-S6MSCKF MINGW64 ~
$ ls
 AppData/
'Application Data'@
 Contacts/
 Cookies@
 Desktop/

# mkdir stands for “make directory”
# Just like: right click -> create new folder
# mkdir with the argument gives a clue on the directory you are creating


use@DESKTOP-S6MSCKF MINGW64 ~
$ mkdir India


use@DESKTOP-S6MSCKF MINGW64 ~
$ cd India
```

```
use@DESKTOP-S6MSCKF MINGW64 ~/India
$ pwd
/c/Users/use/India
```

Touch creates an empty file

```
use@DESKTOP-S6MSCKF MINGW64 ~/India
$ touch test-file

use@DESKTOP-S6MSCKF MINGW64 ~/India
$ ls
test-file
```

#rm stands for remove or delete

```
use@DESKTOP-S6MSCKF MINGW64 ~/India
$ rm test-file

use@DESKTOP-S6MSCKF MINGW64 ~/India
$ ls
```

{Empty}

#echo will print whatever arguments you provide

```
use@DESKTOP-S6MSCKF MINGW64 ~
$ echo Hello World!
Hello World!
```

#date will print today's date

```
use@DESKTOP-S6MSCKF MINGW64 ~
$ date
Tue, Apr  2, 2019  3:37:56 PM
```

#git help is used for getting help on Git

#git help config gets you the manpage help for git

Thank you