Learning Journal

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August 2019

The Unix Shell (Task 1)

Main Objective: To complete the Unix Shell exercise till Working Files And Directories.

Objective: Set up on my computer (done in class)

1. Action: open https://gitforwindows.org/
2. Click download
3. Click open git bash

Error: None

Result: Success.

Introducing the Shell

Objective*: What is a command shell and why would I use one*?

The Shell is a program which runs other programs rather than doing calculations itself. Those programs can be as complicated as climate modelling software and as simple as a program that creates a new directory. The simple programs which are used to perform stand-alone tasks are usually referred to as commands. The most popular Unix shell is Bash.

Navigating Files and Directories

Objective: Exploring More ls Flags

Action:

Type ls -l

Result: Shows the file/directory and file size

Type ls -h

Result: Makes it human readable, more clearer.

Type ls -a (ls –all)

Result: Shows all of the files in current directory, including hidden files.

Objective: Listing Recursively and By Time

Action: Type ls -R -t

Result: Files sorted by the time of last change. The text showed up with no end. I got confused what to do next so I closed it and reopened it again.

Objective: To see inside desktop

Action: Type ls -F desktop

Result:

```
$ ls -F Desktop
ls: cannot access 'Desktop': No such file or directory
```

But accidentally `$ ^C popped up. Don't know what to do.`

As I reopened git-bash I was in the wrong directory. I typed cd and now I am in home directory.

Result: Success

Objective: Move to data directory.

Action: Type the following series of commands one after the other.

```
$ cd Desktop

$ cd data-shell

$ cd data
```

Following is the result:

```
$ cd desktop

user@DESKTOP-GQ5ALOD MINGW64 ~/desktop
$ cd data shell
bash: cd: too many arguments

user@DESKTOP-GQ5ALOD MINGW64 ~/desktop
$ cd data-shell

user@DESKTOP-GQ5ALOD MINGW64 ~/desktop/data-shell
$ cd data

user@DESKTOP-GQ5ALOD MINGW64 ~/desktop/data-shell/data
```

Success.

Objective: Move up a directory.

Action: Type cd . .

Error: `$ cd . .`

```
bash: cd: too many arguments
```

Solution: removed the space between . , it worked.

Result: success

Objective: Move to home directory.

Action:

- To go back to home directory, type cd
- To move to data in a single step, type cd desktop/data-shell/data
- Type pwd to check where I am, it shows:

```
$ pwd
/c/Users/user/desktop/data-shell/data

user@DESKTOP-GQ5ALOD MINGW64 ~/desktop/data-shell/data
```

Result: success.

Objective: Absolute Vs Relative paths.

Action: To get back to the home directory, following commands are tried with the result 5,8 and 9 are correct.

```
$ cd .

user@DESKTOP-GQ5ALOD MINGW64 ~/desktop/data-shell/data
$ cd /
```

```
user@DESKTOP-GQ5ALOD MINGW64 /
$ cd /home/
bash: cd: /home/: No such file or directory

user@DESKTOP-GQ5ALOD MINGW64 /
$ cd ../..

user@DESKTOP-GQ5ALOD MINGW64 /
$ cd ~

user@DESKTOP-GQ5ALOD MINGW64 ~
$ cd home
```
bash: cd: home: No such file or directory

```
user@DESKTOP-GQ5ALOD MINGW64 ~
$ cd ~/data/..
bash: cd: /c/Users/user/data/..: No such file or directory

user@DESKTOP-GQ5ALOD MINGW64 ~
$ cd

user@DESKTOP-GQ5ALOD MINGW64 ~
$ cd ..

user@DESKTOP-GQ5ALOD MINGW64 /c/Users
```

Result: Success.

Objective: Relative Path Resolution

The command Is -F ../backup displays:

```
Error:$ ls -F ../backup
ls: cannot access '../backup': No such file or directory
```

Result: not able to resolve, will ask Brian or Katheryn in class.

Objective: ls Reading Comprehension

Action: Type:

```
$ ls -r -F
 user/   Public/   desktop.ini  'Default User'@   Default/  'All Users'@

user@DESKTOP-GQ5ALOD MINGW64 /c/Users
$ ls -r -F/Users/backup
ls: unknown option -- /
Try 'ls --help' for more information.

user@DESKTOP-GQ5ALOD MINGW64 /c/Users
$ ls -r -F /Users/backup
ls: cannot access '/Users/backup': No such file or directory

user@DESKTOP-GQ5ALOD MINGW64 /c/Users
$ ls pwd
ls: cannot access 'pwd': No such file or directory

user@DESKTOP-GQ5ALOD MINGW64 /c/Users
```

Result: Second option gives the result but not the third one, will consult Brian.

Working With Files and Directories

Objective: To create a Directory

Action: Type mkdir thesis

```
$ mkdir thesis
mkdir: cannot create directory ‘thesis’: Permission denied
```

Result: Error, again it has to be consulted.

Objective: To create a text file

Action:

- Type nano draft.txt to make a new file
- Type text
- Press ctrl O to save the text
- Press ctrl X to quit out

Result: Success.

Objective: Creating files a different way

Action: type touch my_file.txt

Result:

```
$ touch my_file.txt
touch: cannot touch 'my_file.txt': Permission denied
```

Result: not sure how to resolve this.

Objective: Copying files and directories.

Action:

```
$ cp quotes.txt thesis/quotations.txt
cp: cannot stat 'quotes.txt': No such file or directory

user@DESKTOP-GQ5ALOD MINGW64 /
$ ls quotes.txt thesis/quotations.txt
ls: cannot access 'quotes.txt': No such file or directory
ls: cannot access 'thesis/quotations.txt': No such file or directory
```

Result: Error.

All Commands are showing some errors. I have tried all the commands but facing errors in everything. Don't have any option other than consulting Brian during consultation time. I am not able to complete the last exercise due to these errors, but I tried as the wide range of commands are overwhelming. Hope to understand in consultation with Brian or Shawn.

Overall Result: Not able to complete third exercise but successfully completed the earlier ones.

TASK 2 – ELABORATION 1

This week we were required to complete Elaboration 1, for this purpose the scoping has been narrowed down to finding referencing and citation managing tools that can assist in speed and accuracy in citation and formatting the references.

This has been successfully uploaded to Cloudstor in pdf and committed to github.