**Learning Journal**

**Weeks 4-6**

**Ellen Kirkpatrick**

**Week 4**

 The Unix Shell Data Carpentry

Downloaded set-up in class.

Navigating files and directories

1. Inputted ls. Successful (colours also automatic on my laptop - do not have to input code for colours).
2. Inputted pwd. Successful.
3. Inputted -F (switch or flag) . Not successful. Shell responded with command not found.
4. Re-attempted with ‘ls -F’ (adding in ls and a space). Successful. Same results as ls as colours automatically there.
5. Requested help. Successful.
6. Requested manual. Not successful.
7. Inputted ‘ls -1’. **Result**: Listed the directories (same as ls command). I cannot see the difference.
8. Inputted ‘ls -1-h’.  **Result**: Not successful. Computer came back with a message saying ambigious. Read through help and it refers to h as human readable. I can’t get it to work with -1 option. Only by itself.
9. Inputted ls -R. Successful but it removed $. Did not know how to get it back. Closed down and started again for next command.
10. Inputted ls -t
11. **Objective:** Determine what order ‘ls -R -t’ displays things in? Process - inputted command. **Result:** sorted by time of last change.
12. Inputted desktop command. Successful.
13. Inputted command to locate data-shell. Successful.
14. Followed and copied other commands in lesson. Successful.

Absolute vs relative paths acitivty - How can Amanda get back to her home directory?

**Solution:** cd by itself takes you back to the home directory.

Also cd ~ (which I didn’t know). The other 2 options for yes I was aware of but they are longer steps.

Relative path resolution activity - What will ls -F ../backup display?

**Solution:** Option 4. Did not get this right away. Had to look at solution and work out why it was correct. Consulted back to the commands. Used help command and understood why it was the right answer.

Comprehension activity - What commands will display output?

**Solution:** Option 2 - correct. Shortcut. Option 3 also correct but lists the absolute path.

Working with files and directories

1. Followed lesson. Created thesis directory. Successful.
2. Created new tex file. Successful.
3. **Error -** Was successful in creating directory and file. But they did not appear in the right place. They are not in the data-shell folder. They are on the drive but somewhere else.
4. Tried to exit with command. **Error -** Unsuccessful. Closed down and started again. How to exit?!

Creating files in a different way activity

1. Inputted command. **Result -** file did not show up. Unsuccessful?
2. Inputted second command. **Result -** there was a file created and I can see it in the list. **Error -** I cannot see the size of it. The solution says 0 bytes but I cannot see this.
3. I could not think of a reason why to create a file this way. Read solution. Would be useful for programs that already require some kind of output or file.

**Error -** Tried to follow instructions on renaming the file within the new thesis directory. My directory appeared elsewhere on the computer and I don’t know how to access it through shell. I can’t practice this part of the lesson on the required file. Need help to find the files and how to create them in the right place. Read through the instructions of this part of the lesson.

Moving files activity - What does she need to move the file away from wrong folder?

**Solution:** Use .. to return to folder before and use /xxxxx (name of the folder).

Renaming files activity - How to rename file?

**Error -** Did not know answer. Had to look at solution to understand.

Copy with multiple filenames activity -

1. Inputted first instruction. Unsuccessful. Computer responded saying ‘cannot stat...’. Don’t know why this happened. Followed instructions clearly.
2. **Error** - Need help to go through this lesson. Entering commands as shown on the online lesson but not going through as desired.

Elaboration I assignment

**Aim:** Elaborate on week 4 scoping to identify technologies that can accomplish each step.

1. Talked about week 4 scoping with group (Jeremy and John).
2. Opened up voyant online (which was mentioned in the week 4 lecture) and tested. Uploaded various sources from a semester 1 assignment.
3. **Result:** Voyant deemed useful. It is able to accomplish the first 3 steps identified in scoping exercise II.
4. Narrowed the focus of scoping II to focus only on identifying connections between different sources and exporting references with sources if they are decided to be relevant. This is a more prominent area in research.
5. Started elaboration on Latex document. Changed settings to auto-compile.
6. Applied codoing which I have learnt to format the structure.
7. Found program Zotero. Installed. Identified as a useful program for storing sources, adding metadata, linking sources through tags and exporting reference details.
8. Decided to use voyant, zotero and cloudstor (for non-localised storage) to accomplish the tasks set out in scoping.
9. Voyant - identifies key themes for further searching and draws connections between sources. Zotero - stores the sources with additional metadata and connects the sources through tags and exports reference details. Cloudstor - additional cloud storage for extra back up/
10. Speculated as to whether shell can be used to more efficiently connect these programs?
11. **Problems:** Texts are a little difficult to read on Voyant, could be more user friendly. Despite the usefulness of all 3 programs, they are currently disconnected. Is there a way to link these? Possibly sourcetree? Or is there a cloudstor syncing function? (don’t know how to use this).

Latex

Had an easier time using Latex this time as I already knew how to itemise, this is the only formatting required for this assignment.

Committed to github more often to start taking advantage of version control. Previously, would only commit the final document. This way I can track changes.

**Latex codes ongoing**

|  |  |
| --- | --- |
| **Code** | **Function** |
| \section | section heading |
| \\ | vertical line break (manual) |
| \textbf | bolden text |
| \begin{itemize}  \item  \end{itemize] | making bullet point list |
|  |  |

**Shell ongoing**

|  |  |
| --- | --- |
| Symbol/command | Function/meaning |
| $ | Shell waiting for input |
| ls | list contents of current directory |
| pwd | print working directory (where we are) |
| ls —help | request help |
| / | If at the front - it refers to the root directory  If inside a name - it is a separator. |
| ls -R | lists content of directories recursively (lists sub-directories etc.) |
| ls -t | lists things according to time of last change |
| cd | change directory (without an argument will return you to home directory) |
| .. | the directory containing this one |
| mkdir | make directory |
| rm  -i | remove (permanent as no trash bin)  will prompt for removal |
| \* | wildcard - matches zero or other characters |