Vogspsphere for APCSP

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Summary: *Let's make it as easy as possible to turn in your work!*

Contents

Chapter I

Reference

I.1 Navigating the Terminal

> 💡 use your tab button to auto-complete the names of files and folders!

pwd: "Present Working Directory" For all the "Where am I?" moments. When you first open a terminal, you start in your Home directory, which is labeled with your username.

```
$ pwd
```

cd: aka "Change Directory". "cd .." means go up a directory. "cd" by itself means go to your Home directory. Below we are moving into a directory called Desktop.

```
$ cd Desktop/
```

mkdir: Short for "Make Directory". Creates a new empty directory.

```
$ mkdir helloTerminal
```

ls or ls -a: "list", list all the folders and files inside the current directory you are in.

```
$ ls
```

touch: create files (files will usually end with the language you are using for example ruby is 42.rb, python is 42.py, text files are 42.txt)

```
$ cd helloTerminal
$ touch 42.txt
```

vim: opens an in terminal text editor to edit your files. Once inside vim, press "i" to edit and press ":wq" to save and exit the file. Try writing "Hello World" on the top and then exiting.

```
$ vim 42.txt
```

cat: to preview the contents of the file in Terminal. It should show "Hello World".

```
$ cat 42.txt
```

cp: "copy", copies files or directories. Here, we copy the file 42.txt and place it in the HackHighSchool/ directory. Don't forget to make the HackHighSchool directory first with mkdir.

```
$ cp 42.txt HackHighSchool/
```

mv: "move", move a file into a directory, use mv with the source file as the first argument and the destination directory as the second argument. Here we move 42.txt into HackHighSchool/
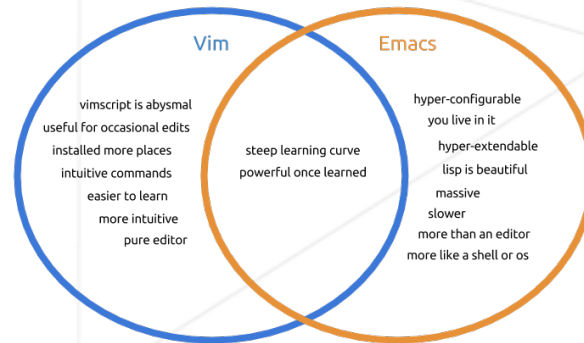
```
$ mv 42.txt HackHighSchool/
```

rm: "rm" to delete files and "rm -rf" to delete directories.

```
$ rm 42.txt
```

I.2   The Vim Text Editor

Vim is a powerful text editor from 1991 that comes built into every terminal.

Users of `Vim` are party to a long-running fandom war against those who prefer an even older and more powerful built-in text editor, called `Emacs`.

Vim basics:

- `vim <filename>` opens a file for editing, or creates one if that file doesn't exist.

- `i` toggles the editor to `insert` mode so you can write in the file.

- `ESC button` toggles the editor out of insert mode, so you can type commands instead of writing in the file.

- `:w` is a command that you can type, when not in insert mode, to `write to file` aka save your work.

- `:q` is a command that you can type, when not in insert mode, to `quit` the text editor.

- `:q!` will let you quit without saving.

- `:wq` lets you save and quit at the same time.

You can learn a lot more about how to use `Vim` by entering the command "vimtutor" in Terminal or visiting OpenVim.com.

Chapter II

Walkthrough

II.1   Make sure you are Registered on Intra

- Go to intra.42.fr online. The quickest way to find the project is by using the search bar at the top. Type "APCSP", and wait - don't press enter! Several projects will pop up. Click on the one you are working on.

- Click "Register" (if that is not an option, first make sure you are registered to the "APCSP" umbrella project).

- Click "See my Project page"

- After a few minutes, refresh the page and you should see a link labelled "Git Repository." Click on the clipboard on the right to copy the link.

- We'll go over the rest after reviewing the basics of Terminal commands and Vim!

II.2   Using a Vogsphere folder

- In Terminal, navigate to the folder where you plan to store all your 42 projects.

- Use the following command to copy the Vogsphere folder onto your computer, giving the new folder a name of your choice. Replace the parts in arrow-brackets ($<>$) with the link and a new folder name. Remember it's best not to use spaces in file or folder names.

```
git clone <repo-url> <newfolder-name>
```

- Use the command "cd <name of new folder>" to move into the newly cloned folder.

```
cd projectfolder
```

- Create a text document here, either in your text editor or by typing "vim <newfile-name.txt>" to open a blank text document.

```
        vim hw.txt
```

- In vim, press "i" to enter `insert mode`.

- From your web browser, copy the URL to your sketch in p5.js.

- Paste the link into your text document in Vim.

- Repeat for however many sketches you are turning in.

- When you are done, press the ESC button to exit Insert mode, and then type ":wq" to tell vim to `write` the file and `quit`.

- You have existed Vim and you are back in Terminal, in the Vogsphere- linked project folder. Type "git status" to notice that there is a new text file you have not uploaded to Vogsphere yet.

```
        git status
```

- Now, add your file to be tracked:

```
        git add *
```

- Commit the changes with a message:

```
        git commit -m "Your message about this project"
```

- Push the changes to Vogsphere:

```
        git push
```

- Check that it worked with "git status" again.

- Go back to the project page on Intra and click "Set Project as Finished".

- If there is at least 45 minutes left to go before you leave, sign up for one or more corrections on the project!

II.3   Peer Correction

- On your project page, click the button "Subscribe to Defense." Choose a time slot from the screen that shows next.

- When the appointment time comes, look up your assigned corrector on Slack and send them a message. Look at their profile picture on Intra. Find each other.

- Corrector, sit at the correctee's station and open a new web browser in Incognito mode. Log into your intra.

- Access the corrections page. Clone their Git repository into a new folder.

- Click "Begin correction" and follow the instructions on the correction page.

- Use this time to chat about the project and the rest of your life.

- Once the correction is finished, your corrector should remember to log out of Intra.

- After both the correction is complete, in order to finalize your score you must then provide feedback for the corrector on your project page. Go to your project page and click the "feedback" button for each completed correction.