COMMAND LINE

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LEARNING OBJECTIVES

‣ Create folders and files using the command line (mkdir, touch)

‣ Change directories and list directory contents (cd, ls)

‣ Check current working directly (pwd)

PRE-WORK

PRE-WORK REVIEW

‣ Have a Mac (or Linux Virtual Instance on PC)

‣ Open Terminal

‣ Be able to type

COMMAND & CONQUER

AGENDA

‣ Introduction - GUI vs. CLI

‣ Codealong - Useful Shortcuts

‣ Introduction - Paths

‣ Codealong - Using Command Line

‣ 10 min: Independent Practice

‣ 10 min: Conclusion

INTRODUCTION: CLI vs. GUI

INTRO TO COMMAND LINE
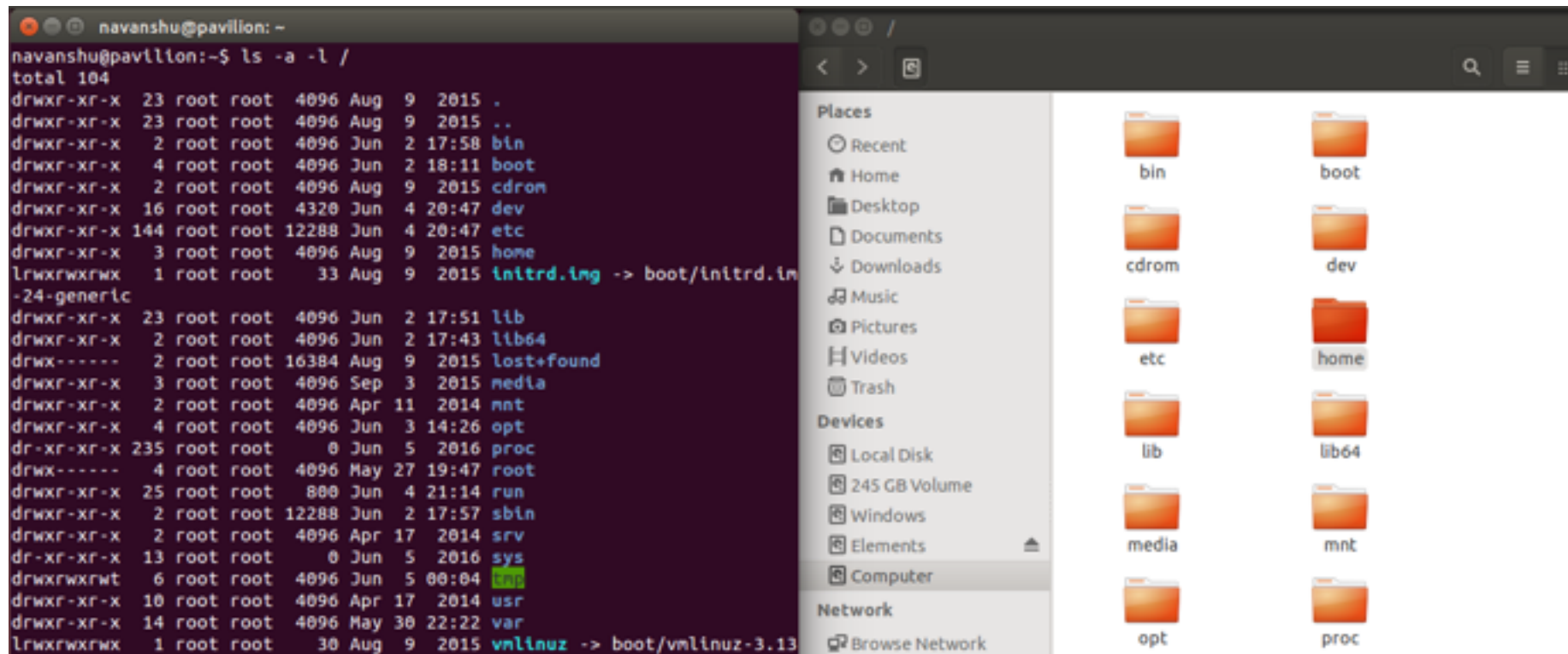
‣ CLI:
  ‣ Command Line Interface
  ‣ Runs in a "Shell"

‣ GUI:
  ‣ Graphical User Interface
  ‣ Pronounced "Gooey"

GUIDED PRACTICE: USEFUL SHORTCUTS

ACTIVITY: KEYBOARD SHORTCUTS

EXERCISE

DIRECTIONS

1. Find "Terminal" in your Applications > Utilities folder

2. Make a Terminal shortcut in your dock, click "options," "Keep in Dock"

3. Open Terminal

4. Try useful keyboard shortcuts:

   - ⌘ T = Open new tab

   - CTRL C = Stop process in Terminal

     - Test with: `ping 127.0.0.1`

   - Up key: Last command used

   - ⌘ W = Close window/tab

   - ⌘ Q = Quit program

INTRO TO COMMAND LINE

PATHS

PATHS

‣ Directory: Guide to a system's paths (like a phone directory)

  ‣ vs. Folder: actual container of the files

  ‣ Often used interchangeably

‣ Root directory: the starting point from which all other folders are defined

  ‣ usually found at '/'

‣ Home directory: where your unique files are stored

  ‣ usually found at `/Users/[Your Username]`

PATHS

‣ **Path**: The position of a file or a folder in a file system

‣ **Absolute path**: specific location of a file/folder from the root directory

  ‣ e.g. `Users/hboyan/a/b/file.txt`

‣ **Relative path**: location of a file/folder *relative* to the current position (the present working directory, 'pwd')

  ‣ e.g. if pwd is `Users/hboyan/a/` just type `./b/file.txt` to access that same file

GUIDED PRACTICE: COMMAND LINE ACTIONS

ACTIVITY: USING COMMAND LINE

DIRECTIONS

EXERCISE

What:

1. Check what directory you're in
2. See the files in that directory
3. Make a new folder
4. Navigate into that folder
5. Make files called:
   - cat.txt
   - dog.txt
   - bird.txt
   - fish.txt
6. Remove any files with 'i' in the name
7. Open the cat.txt file (then close it)
8. Navigate back to your home directory

How:

1. `pwd` *(present working directory)*
2. `ls` *(list)*
3. `mkdir animals` *(make directory)*
4. `cd animals` *(change directory)*
5. `touch [filename]`
   (puts a 'touch' note on a file. If the file doesn't exist, it makes a new one. Otherwise, it updates the 'last modified' date.)
6. `rm *i*` *(remove)*
7. `open cat.txt` *(open)*
8. `cd` *(change directory - again)*

CHECK IN

‣ Name 3 files in your root directory

‣ Name 3 files in your home directory

‣ What is the difference between your root and home directories?

‣ What is the difference between a directory and a folder?

‣ Why use the Terminal at all?

Q & A