

## **Syllabus: MAC OSX & Terminal**

### **Training Objectives:**

At the end of this training, you will be able to:

1. Get acquainted with Mac OS X UI and basic operation
2. Use terminal and its basic commands.

### **Introduction to Mac OS X:**

1. What is Mac OS X, Why Mac?
2. The Desktop
3. The Dock
4. Dashboard
5. The Finder Window,
6. Navigating Menus and How to Use Windows, Icons
7. Creating, Deleting, Renaming Folders
8. Selecting, Moving and Copying Files
9. System Preferences
10. Finding Files, Spotlight and MAC Fonts
11. Application Menu, Installing and Uninstalling Application
12. Linux Terminal

### **Overview of Linux Terminal:**

1. What is Linux Terminal? Why Linux Terminal?
2. Basic Linux Commands:
  - a. whoami: Print login id of current user
  - b. hostname: Print name of current host (computer)
  - c. users: Print user names of all users on current host
  - d. pwd: Print present working directory (where am I?)
  - e. cd dir: Change directory to dir
  - f. cd ~: Change directory to user's home directory (~)
  - g. ls: List files in the current directory
  - h. ls -alst : List files with lots of useful information
  - i. ls dir: List files in the directory dir
  - j. mkdir dir: Make a directory named dir
  - k. rmdir dir: Remove the directory named dir (must be empty)
  - l. vim file: Use vim to edit the given file
  - m. cat file: Print (concatenate) the file(s) to standard output
  - n. less file: Print the file, one page at a time
  - o. cp file1 file2 Copy file1 to file2
  - p. cp -r dir1 dir2 Copy (recursively) directory dir1 to dir2
  - q. mv file1 file2 Move (rename) file1 to file2 (may be directories)
  - r. rm file: Remove the file

- s. man cmd: Display the manual pages for cmd
  - t. history: Print recent history of shell commands
  - u. up/down arrows: Navigate history of shell commands (also ctrl-p/ctrl-n)
  - v. cmd: Run the command cmd
  - w. ./cmd: Run the command cmd in the current directory
  - x. ln -s cmd: Make a symbolic link to cmd in the current directory
  - y. alias name cmd: Make an alias with the given name for the given command
  - z. eg: alias ll='ls -al'
  - aa. alias List all aliases
  - bb. unalias name Remove the alias with the given name
  - cc. clear Clear the terminal screen
  - dd. date Display the current date and time
  - ee. finger user Print information about user (use Andrew id for user)
  - ff. ping machine Test a network connection to the given machine (ctrl-c to stop)
  - gg. exit Exit the shell (and logout if in a login shell)
  - hh. logout Logout of a login shell
- 3. Package installation (brew + <application>.pkg / .dmg)
    - a. brew installation :
  - 4. Setting Permissions / ownership through terminal
  - 5. Process Management Commands:
    - a. top/htop
    - b. ps aux
    - c. netstat

**Further Resources:**

- 1. <http://www.ee.surrey.ac.uk/Teaching/Unix/>
- 2. <http://www.kosbie.net/cmu/fall-11/15-112/handouts/notes-getting-started.html>
- 3. Mac OS X Help

**Ask For Ebooks:**

- 1. Introduction\_to\_Macintosh\_OS.pdf

**Lab Exercises:**

- 1. Lab Exercise 1: Using Mac OS X
- 2. Lab Exercise 2: Practice Linux commands

*Note: The lab exercises will be determined and provided by respective trainer after each session.*

Happy Learning!