1 LINUX TRAINING MODULE

1.1 LEARNING OBJECTIVES
- What is Linux?
- How is it different from Windows?
- Why Linux?
- Directory Structure
- Namespaces
- Permissions and the root user
- Processes and Signals
- Distributions (Ubuntu)
- The Shell/Terminal (sh, bash)
  - Environment Variables
  - Basic Commands
    - Cheat Sheet
    - Brief Examples
    - Other Resources – Link-1, Link-2
  - Bash scripting
- Secure Shell (SSH)
- Understand APT and its usages
- TTY and PTY

1.2 LEARNING RESOURCES

1.2.1 Books
- Linux for Newbies (Mandatory)
- Linux Dictionary - Glossary, quick lookups
- Linux Filesystem Hierarchy (Optional)
- Linux in a Nutshell (Optional)

1.2.2 Books (Optional)
- Linux Kernel Crash book
- The Linux Command Line
- Linux Know-How

1.2.3 Courses
- The Complete Linux Course (Mandatory)
- Introduction to Linux (Optional)
- Basics of Linux (Optional)

1.2.4 References
- Linux Survival (An adventurous tutorial)
- JSLinux (Run linux in the browser)
- Awesome Linux Software (Curated List)
- Linux Curated Lists – List-1, List-2

- <u>Webminal (Similar to JSLinux)</u>

1.3 ASSIGNMENT

1. Setup Linux on your laptop (Ubuntu 18.04)
2. Understand the GUI/Desktop Environment
3. Setup Guake through regular terminal using apt commands
4. Understand directory structure
5. Perform the following tasks through terminal
   a. Run through basic file manipulation commands (Create, update, delete, change perms, ownership etc)
   b. Create a new user
   c. Run commands as super user and new user
   d. Install nginx web server and start/stop/restart the service
   e. Install ssh server and start the service
   f. SSH into you own local machine and get a "remote" shell.