Krish Krish

Mr. Nestor

ICS2O0

08 November 2018

Organized Research - Linux - Ubuntu

Topic A – Productivity & Application Software

* Libreoffice as software used to create documents, spreadsheets, presentations and many more things.
* Edit your photos or create professional illustrations and designs with tools like Gimp, Blender, and Inkscape, available in the Ubuntu Software Centre.
* Many email clients are available on Ubuntu that can be customized by the user to maximize their productivity.

Topic B – Entertainment & Media Software

* Web Browser
  + Chrome
  + Firefox
  + Chromium
    - All of these can be used to browse social media
    - All of these can be used to access entertainment and media websites such as netflix and youtube online.
* Media Players
  + VLC Media Player
  + MPlayer
* Kodi Media Center
* Video Games
  + Steam Games
  + Unity Games

Topic C – Programming Tools & Environment

* Bash
  + Main command line with best programming support
  + High speed multi-language pipeline
  + High speed command execution for programming languages.
* Programming Tools that make Linux better than windows for programming:
  + Package managers (easier installing and uninstalling)
    - Brew
    - Apt-get
    - Built in package-store
  + Environments
    - Create environments with different packages and libraries.
    - Environments help separate project versions.
    - Environments can run older versions of programming language.

Topic D – System Tools

* Bash
  + SSH access
* Grub Bootloader
  + Easy os management
  + Linux Debugging
  + Linux safe mode
* Built-In terminal commands
  + Vmstat
    - Allows user to monitor virtual memory (swap) and virtual CPU usage.
  + Netstat
    - Shows network statistics and allows bandwidth control
  + Top
    - Shows process and their computer processing usage

Topic E – Software Security & Updates

* Most secure operating system
  + Confirmed by many benchmarks.
  + Classified as the most secure by the UK government.
  + Updates released every week to stop infection from the latest viruses.
* Updates
  + New major version released every two years
  + Minor updates every week
  + Security updates as soon as possible

Topic F – File System & User Accounts

* User Accounts
  + Up to millions of user accounts on a single computer
    - Must have enough storage
  + Special administration functions
    - root access prevention
    - Customizable password constraints
    - Bash SSH access
* File System
  + Ext 3
    - 2 TB Storage Limit
    - Older versions
  + Ext 4
    - 16 TB Storage Limit
    - Newer Version
  + Swap Memory
    - Virtual Memory
    - Uses
      * Extra Memory/RAM
      * Hibernation
      * Faster Disk Speeds
      * Faster Memory
      * More time to recover work in case of a crash.

Topic G – Special Features of your OS

* SSH
* No Antivirus Required
* Multiple Desktops
* Auto Hardware Configuration
* Special Virtualization using Docker
* Server Support
* Software repositories that can be accessed within the bash terminal.

Topic H – Limitations of your OS

* Partial Driver Support
* Sharing OS specific work is a problem
* Not much support for modern games
* Not enough support from graphic design suites like Adobe