**Objectives**

1. Research information about software for a specific operating system (OS) environment. You will be assigned one of the operating systems form the list of: Windows, Mac OS, Linux. You will also be provided with a list of topics to investigate.
2. Organize your rough research information into a list of topics, sub-topics and facts. This process will involve identifying sub-topics, rearranging your rough research notes, and selecting (or highlighting) interesting facts.
3. Report a summary of your research in the form of a “concept map”. Use the PowerPoint template provided as a starting point. The concept map should only include the best and most interesting information from your organized research notes.

Your assigned operating system is:

* Windows
* Mac OS
* Linux
* iOS
* Android

Topic A:Productivity & application:

Sub Topic: Software used on Linux

Fact:

● Microsoft Office

● Libre Office

● Evernote

● Calligra

● Office 365

● WPS office

● Only Office

● Open Office

● Qownnotes

● Xmind

● Thinkfree Office

● Officesuite

Topic B: Entertainment and media software:

Sub Topic: Types of Entertainment/Media applications on Linux

Fact:

● VLC Media Player

● Firefox

● Spotify

● MPlayer

● SUBSONIC

● Emby

● Plex

● Kodi

Topic C: Programming Tools & Environment

Sub Topic: Development Tools Useful on Linux

Fact:

● Containers-

● Version Control System

● Text Editor

● IDE

● Diff tools

● Atom-Linux Code editor

● Brackets-Linux HTML Code editor

● Gedit-Integrated Developments Environment

● Bluefish-Linux HTML Editor

Topic D: System Tools:

Sub Topic: Useful Linux OS Tools

● Top-Linux Process Monitoring

● Sysadmin-System Admintor

● Linux Rsync- Rsync Remote

● Python- Collects and Analyze Information in codes

● Pandora FMS- Server Monitoring

Topic E: Software security and Updates

Sub Topic #1: Security Features on Linux

● Linux have a multi-tier security that permits them from rooting any system wide changes

● Use are restricted to where they can save files,what hardware they can access,there memory usage,disk usage and range of priority settings they can apply

Sub Topic #2: Linux Security Softwares

● Authentication Modules(PAM and OPIE)

● System Logging (Syslog)

● Networking Services(TCP Wrappers,port mappers and xinetd

● The Shell (SSH)

● Cryptographic Software (TCFS)

Sub Topic #3: Linux Updates & Patches

● Linux has multiple different operating systems….which all have different versions of updates

● Latest version of Kali Linux contains AMD Secure Memory Encryption Support and Increase memory limits

● Updates can fix bugs and tweaks and minor items in the software around a few couple weeks

● New updates can install new useful applications for programing,virus and more.

Topic F: File System & User Accounts:

Sub Topic #1: Types of File Systems with Linux

Fact:

● Ext2

● Ext3

● Ext4

● Jfs

● ReiserFS

● XFS

● Btrfs

● Encryption

Sub Topic #2: Linux Features on Users

● More than one person can make a user on Linux OS

● Can change user properties

● Can add security to users with passwords and other ways

Topic G: Special Features of Linux

Sub Topic: Features that come with Linux

Facts:

● Multi Platform - which means can work on different types of hardware in same way

● Multitasking

● Multi User

● Multiprocessor (SMP) Support

● Multithreading Support

● Virtual Memory

● Hierarchical file system

● Graphic User System(X Window System, Wayland)

● Open Source

Topic H: Limitations of your OS

Sub Topic: Restrictions against Linux

Facts:

● Difficult to find applications for needs on linux

● Before you install any new driver make sure it’s available for Linux

● Most PC GAMES don’t support linux

● No Standard edition for linux like MACS or WINDOWS