Topic A – Productivity & Application Software

**Applications:** Desktop environments do not offer the full array of apps. Just like Windows and Mac, Linux offers thousands upon thousands of high-quality software titles that can be easily found and installed. Most modern Linux distributions (more on this in a moment) include App Store-like tools that centralize and simplify application installation. For example: Ubuntu Linux has the Ubuntu Software Center (Figure 1) which allows you to quickly search among the thousands of apps and install them from one centralized location.

[Firefox](https://www.mozilla.org/en-GB/firefox/new/) is the default web browser for a number of Linux distros such as Ubuntu and Linux Mint. The browser’s simple and fluid interface is one of its many attractions. Firefox will play YouTube videos right off the bat, and can download plugins to play other formats for you. The browser also updates itself from the get-go, meaning you always have the latest version. <https://www.techradar.com/news/best-linux-apps>

[GIMP](https://www.gimp.org/) (GNU Image Manipulation Program) is a free image editor. It can be used to edit and retouch images by resizing, adding layers and other special effects.By default the program takes up less than 100MB, which is another considerable benefit, particularly for those short on disk space.

While many Linux distributions already come with a BitTorrent client, [Deluge](http://deluge-torrent.org/) stands out as a lightweight yet fully-featured app for downloading your files. You can even [set up Deluge](http://dev.deluge-torrent.org/wiki/UserGuide/ThinClient) so that it can be accessed via a web interface from other devices, allowing you to download files to your home computer when you're away.

[LibreOffice](https://www.libreoffice.org/) is nothing less than a full-blown office suite, on a par with commercial alternatives like Microsoft Office. While the interface may look rather basic, this product has some extremely advanced features.The LibreOffice word processor Writer, spreadsheet software Calc and presentation app Impress are preinstalled in Ubuntu and most of its derivatives. The suite also includes three less well-known apps – Draw, Math and Base – which are used for editing vector graphics, composing mathematical formulae and managing databases respectively. While LibreOffice uses the ODF (Open Document Format) by default it can open and save Microsoft Office compatible files too.

Topic B – Entertainment & Media Software

<https://www.tecmint.com/best-media-server-software-for-linux/>

[Kodi](https://kodi.tv/) (previously known as XBMC) is a free and open source, highly customizable media server software. It is cross-platform and runs on Linux, Windows, MacOS; iOS and Android. It is more than just a media server; it’s an ideal entertainment center software with a fabulous user interface and several other media server software appliances are based on it.

features

* Runs on a wide variety of devices.
* It is user friendly.
* Supports a web interface.
* Supports a variety of user created Add-ons.
* Supports televisions and remote controls.
* Has a highly configurable interface via skins.
* Allows you to watch and record live TV.
* Supports importing pictures into a library.
* Allows you to browse, view, sort, filter or even start a slideshow of your pictures and much more.

[Plex](https://www.plex.tv/) is a powerful, secure and fully-featured and easy-to-install media server software. It runs on Linux, Windows, MacOS, and many other platforms. It supports almost all major file formats and allows you to organize your media in a central point for easy access. Plex has an easy-to-navigate interface, and a collection of useful apps for a variety of devices: phones, tablets, gaming consoles, streaming devices and smart TVs.

Features

* Supports encrypted connections with multiple user accounts.
* Allows you to easily pick and choose what to share.
* Offers a parental control functionality.
* Supports mobile sync which offers offline access to your media files.
* Supports flinging of video from one device to another.
* Also supports cloud sync.
* Supports audio fingerprinting and automatic photo-tagging.
* Has a media optimizer and much more.

Topic C – Programming Tools & Environment

The OS is comprised of a number of pieces:

* **The Bootloader:** The software that manages the boot process of your computer. For most users, this will simply be a splash screen that pops up and eventually goes away to boot into the operating system.
* **The kernel:** This is the one piece of the whole that is actually called “Linux”. The kernel is the core of the system and manages the CPU, memory, and peripheral devices. The kernel is the “lowest” level of the OS.
* **Daemons:** These are background services (printing, sound, scheduling, etc) that either start up during boot, or after you log into the desktop.
* **The Shell:** You’ve probably heard mention of the Linux command line. This is the shell – a command process that allows you to control the computer via commands typed into a text interface. This is what, at one time, scared people away from Linux the most (assuming they had to learn a seemingly archaic command line structure to make Linux work). This is no longer the case. With modern desktop Linux, there is no need to ever touch the command line.
* **Graphical Server:** This is the sub-system that displays the graphics on your monitor. It is commonly referred to as the X server or just “X”.
* **Desktop Environment:** This is the piece of the puzzle that the users actually interact with. There are many desktop environments to choose from (Unity, GNOME, Cinnamon, Enlightenment, KDE, XFCE, etc). Each desktop environment includes built-in applications (such as file managers, configuration tools, web browsers, games, etc).

Topic D – System Tools

Topic E – Software Security & Updates

Topic F – File System & User Accounts

Topic G – Special Features of your OS

Topic H – Limitations of your OS

[Initial release date](https://www.google.ca/search?safe=strict&rlz=1C1GGRV_enCA814CA814&q=linux+initial+release+date&stick=H4sIAAAAAAAAAOPgE-LUz9U3SCuoqirQ0soot9JPzs_JSU0uyczP088vSC1KLMnMS48vriwuSc0ttirOyCxQSEksSQUAaS4mrTkAAAA&sa=X&ved=2ahUKEwimndOI_sTeAhWM4IMKHRgVD0IQ6BMoADAmegQIAxAK): September 17, 1991

(google)

Linux is an operating system that runs on the Linux kernel which was created by Linus Torvalds back in the early 1990s in Finland. The kernel was made available for free and allowed other programmers to add to the kernel as a free contribution. After hundreds of programmers started developing the kernel, the Linux system rapidly grew. Like UNIX, Linux is a free operating system which can by run on your PC hardware and it provides you with more control over your operating system. (<https://www.spamlaws.com/how-linux-works.html>)

An operating system is simply a collection of software that manages hardware resources and provides an environment where applications can run. The operating system allows applications to store information, send documents to printers, interact with users and other things.

It’s been around since the mid ‘90s, and has since reached a user-base that spans industries and continents. For those in the know, you understand that Linux is actually everywhere. It’s in your phones, in your cars, in your refrigerators, your Roku devices. It runs most of the Internet, the supercomputers making scientific breakthroughs, and the world\'s stock exchanges.

<https://www.linux.com/what-is-linux>