LINUX

Operating System

What is Linux O.S ?

LINUX IT IS A GENERATING TERM REFERING TO UNIX LIKE GUI,

THE BEST COMPUTER OPERATING SYSTEM (OPEN SOURCE)

IT IS A MULTIUSER,MULTI TASKING AND MULTIPROCESSING

IT HAS THE X WINDOWS GUI

IT RUNS ON THE MULTIPLE PLATFORM

IT INCLUDE THE SOURCE CODE

HISTORY OF LINUX

- Linux Operating System was developed by : LINUS TORVALDS
- Torvalds began the development of the linux kernel on MINIX and application written for minix were also used on linux
- Later linux took place on minix system for further development
- in 1991 First version of linux was relised and its version is 0.11
- Current version is 6.0 - 2022

DIFFERENCE BETWEEN LINUX OS AND WINDOWS OS

LINUX OS

- An open source Unix like operating system kernel
- There is access to the source code
- This is open source and its cost is free
- User should have good knowledge
- It is secure
- We can customize and add features

WINDOWS OS

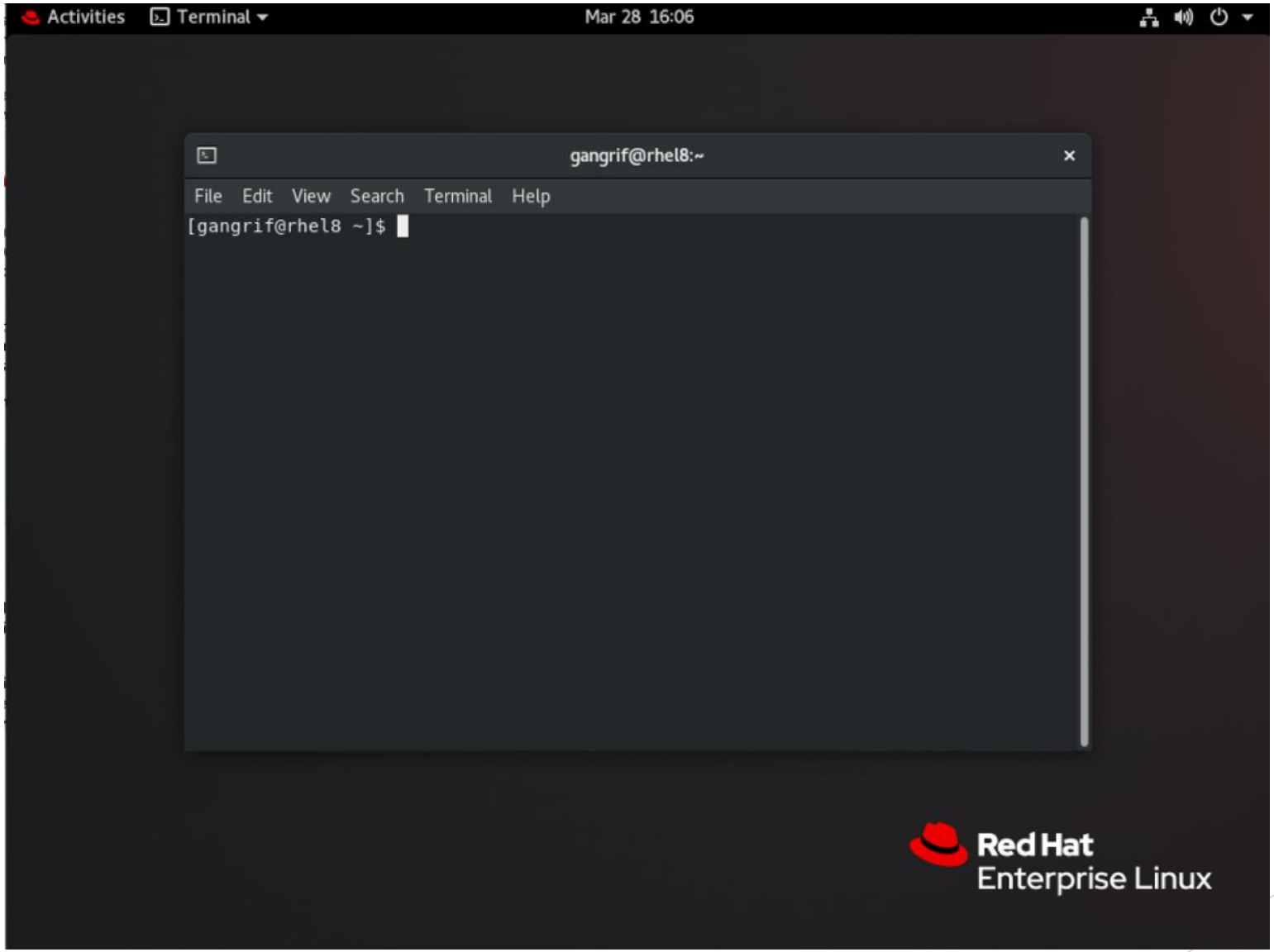
- A commercial kernel of windows operating system developed by Microsoft
- There is no access to the source code
- This is for commercial purpose
- Every user can easily handle
- It is insecure
- Not customize

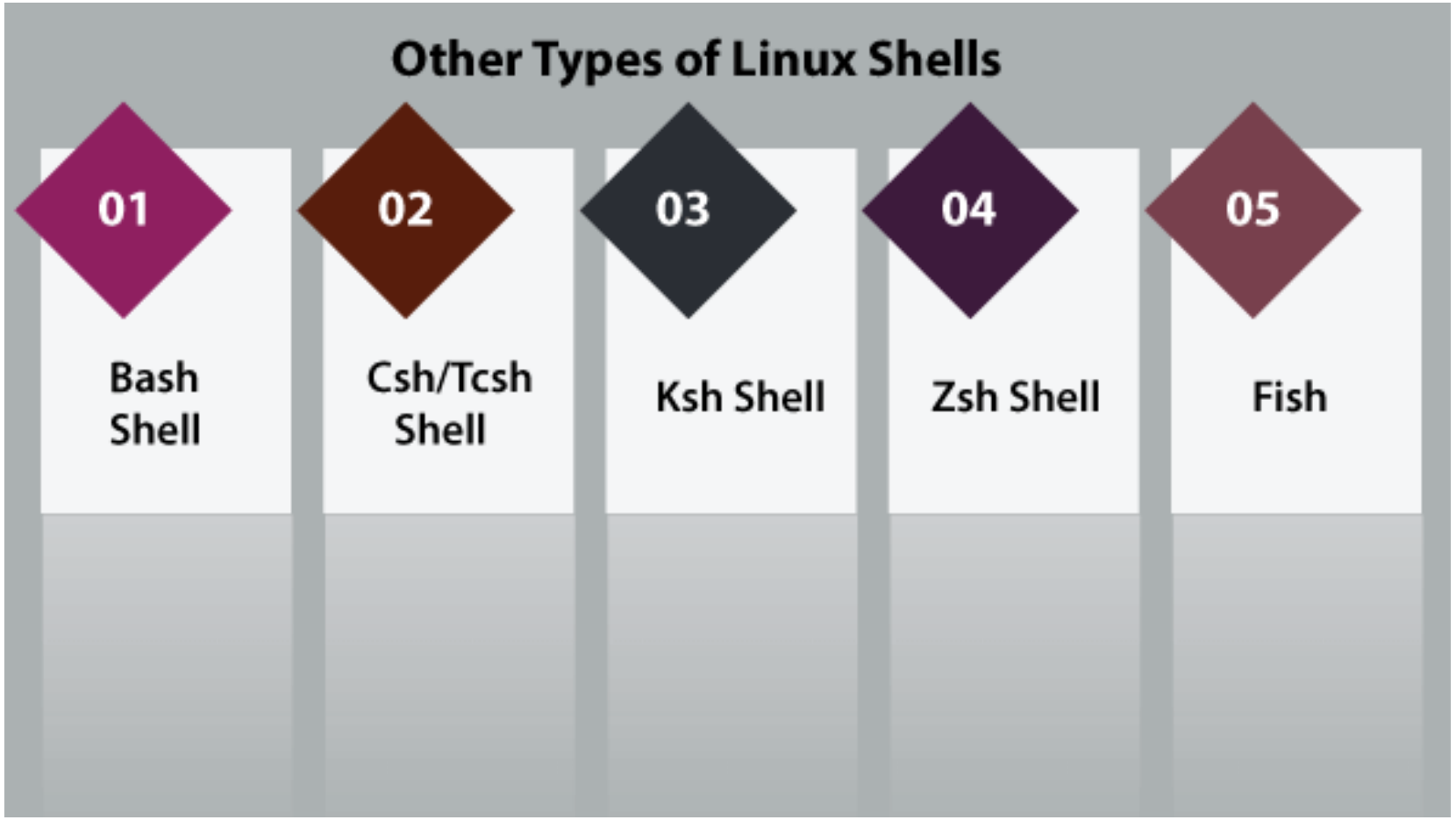
In-flight entertainment system booting up displaying the Linux

Nexus is android but developed in Linux O.S

Linux Distributors : Ubuntu,redhat enterprises,federo,centos etc….

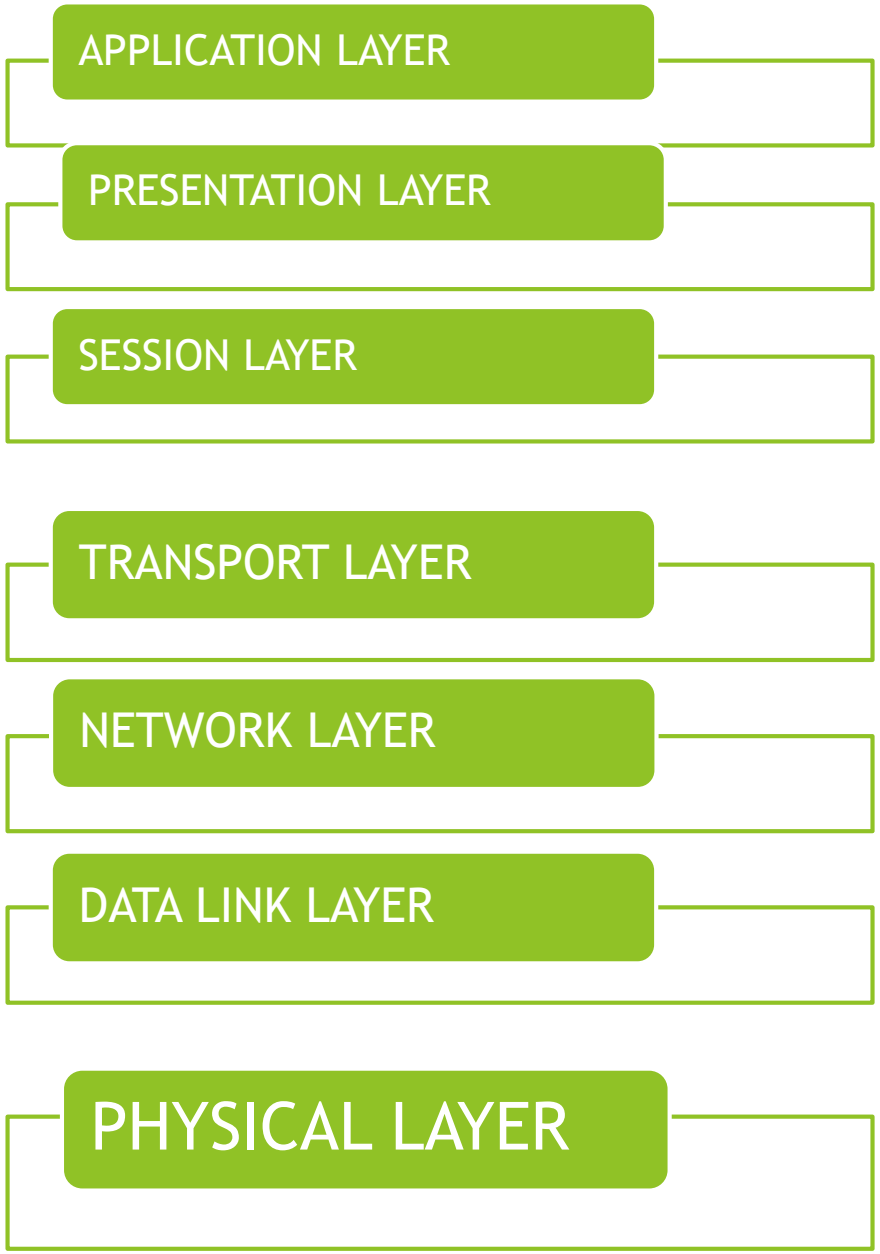
RED HAT TERMINAL




Other Types of Linux Shells
01
Bash Shell
02
Csh/Tcsh Shell
03
Ksh Shell
04
Zsh Shell
05
Fish

LAYERS OF TCP AND IP

- OSI stands for Open System Interconnection.
- OSI model define how the data is transfer one computer to another computer,
- OSI model was introduced by INTERNATIONAL STANDARD ORGANIZATION (ISO) in 1984,
- Using TCP/IP model we can see how the protocol are use to show the breakdown and how a package travel through the network
- There are seven layers in OSI.


APPLICATION LAYER
PRESENTATION LAYER
SESSION LAYER
TRANSPORT LAYER
NETWORK LAYER
DATA LINK LAYER
PHYSICAL LAYER

APPLICATION LAYER: to allow access to network resources,
The top layer of TCP/IP model , it determine how user computer programs interface with transport layer services to view the data that sent or receive these layer HTTP and SMTP used

PRESENTATION LAYER: to translate encrypt and compress data

SESSION LAYER: session layer is use to establish manage and terminate session

TRANSPORT LAYER : transport layer is used to provide reliable process to process message delivery and error recovery and it show data will be transmitted includes checking the correct posts and basic deliver the package,
These layer uses TCP/UDP

NETWORK LAYER: the network is move packages form source to destination to provide internetworking ,
These layer specify how to move packages between host to across network
These layer uses IP and ICMP
IP – helps to root packages from one machine to another
ICMP – tells us what is going on such as Error messages and Debugging information

DATA LINK : to organize bits into frames and provide hop to hop delivery
These layer specifies how to send data across a physical piece of hardware such as data travelling through Ethernet ,Fibre, etc…

Physical layer : it is used to transmitted bits over a medium and provide mechanical and electrical specification

T H A N K Y O U