## Linux

Linux is a free and open source operating system based on UNIX.

It was created by Linus Torwalds in 1991. Linux is known for its stability, security and flexibility. It is widely used in servers, supercomputers, mobile devices (like Android) and personal computers.

Linus distributions include Ubuntu, Fedora, Red Hat, Debian etc.

## LINUX ARCHITECTURE

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		KERNEL		
		HARDWARE		
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## I: Hardware

- · Consists of the physical devices: CPU, memory, disk, drives, network cards, etc.

  · Provides the resources that the operating system manages.
- Mark I H

## I Kornal Exore of Linux }

The kernal layer is the heart of linus, directly interacting with hardware.

It manages system resources and acts as a brio between hardware and software.

Main functions of the Kernel:

- · Process management
- Memory management
- · Device management
- ofile System management biologies and will mittel Networking bone abonemno pullinary us alson

Election contract file handling and furthermones

Shell is a command-line interpreter in linux.

It acts as an interface between the user and the

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Vsers enter commands -> the shell interprets them -> passes to the operating system -> returns output to the user

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	functions
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Comm	and Input/ Pipes and Environment Scripting for
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	System utilities are essential tools that make Linux usable by providing commands and programs for system control, file handling and furformance monitoring.
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File	Monitority
ranageme utilities	
Manag	ment
viw	