

# Deliverable 1

## Project description

I am demonstrating how to make a website through linux.I am going to use a computer that can virtualize.

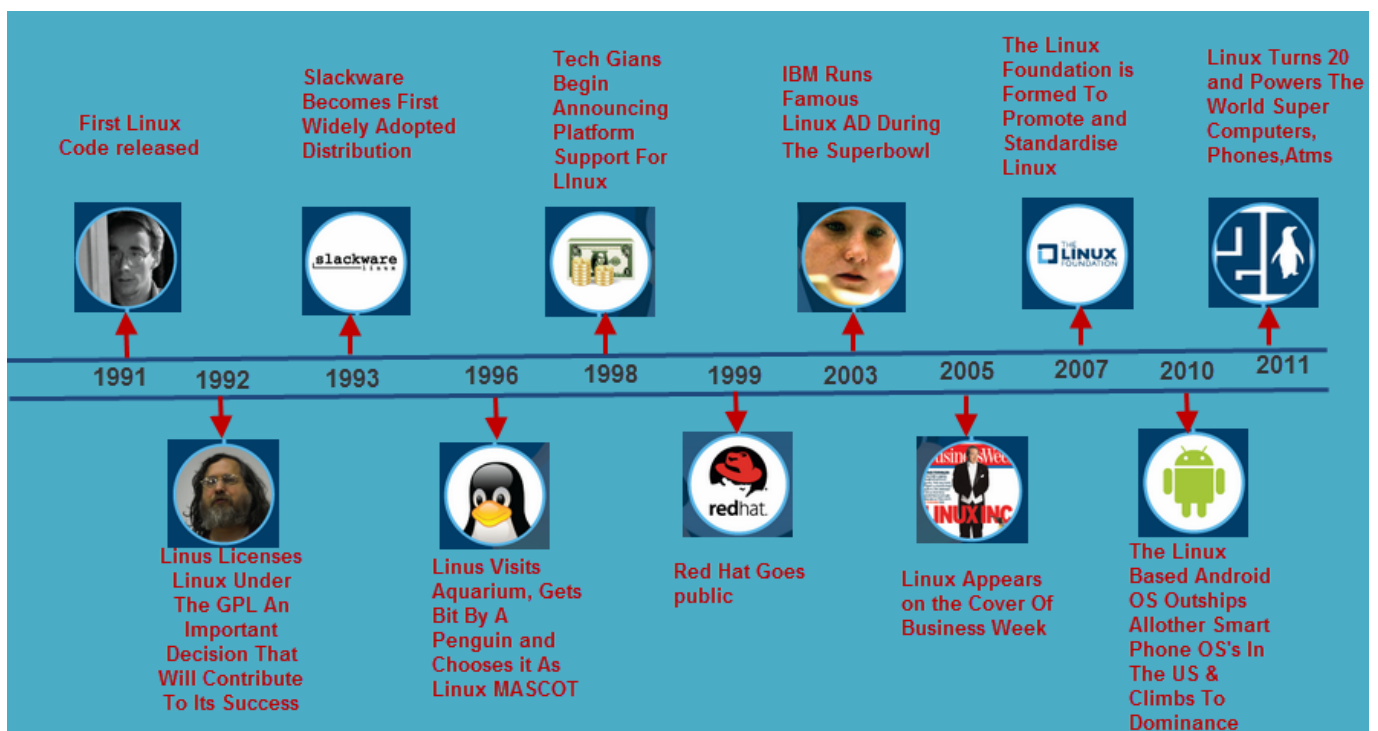
## Project hardware and software requirements

- virtual machine ,a laptop that can virtualize and a hypervisor.

## What is Linux?

- Linux is a family of open-source Unix-like operating systems.It is based on the Linux kernel.An operating system is the software that directly manages a system's hardware and resources.Like for example CPU, memory, and storage.The OS sits between applications and hardware and makes the connections between all of your software and the physical resources that do the work.

## Short history of linux



## Linux distribution

- **Slackware:** is used for design stability and simplicity and to be the most "Unix-like" Linux distribution
- **Debian:** is a GNU/Linux distribution composed of free and open-source software, developed by the community-supported Debian

**Debian Based used Distributions** Ubuntu:is a Linux distribution based on Debian and composed mostly of free and open-source software. Ubuntu is officially released in three editions: Desktop,

Server, and Core for Internet of things devices and robots. All the editions can run on the computer alone, or in a virtual machine.

Kali Linux: is an open-source, Debian-based Linux distribution geared towards various information security tasks, such as Penetration Testing, Security Research, Computer Forensics and Reverse Engineering.

- Red Hat Enterprise Linux: It's an open source operating system (OS). Developers can choose from the most recent stable development languages, databases, tools,

Fedora: is a powerful operating system based on the Linux kernel which is available for free.

## Open Source VS Closed Source

- Open-source software is computer software. It is released under a license in which the copyright holder grants users the rights to use, study and change. It also distributes the software and its source code to anyone. And also for any purpose. Open-source software may be developed in a collaborative public manner.
- With closed source software (also known as proprietary software), the public is not given access to the source code, so they can't see or modify it in any way. Share the software, restricting user freedom with the software they lease. The company won't want users to be able to see their code so being compiled is better as it produces object code which can be distributed and run. If it was interpreted, the user would need the source code to interpret and run on their machine. When purchasing software, the user does not buy the software itself, but buys a license to use the software

### advantages of open source

- Lesser hardware costs
- High-quality software
- No vendor lock-in
- Simple license management
- Lower software costs
- Abundant support

### advantages of closed source

- User Friendly
- Security
- Support
- Testing
- updates
- trouble shoot

## The Free software movement

The free software movement is a social movement with the goal of obtaining and guaranteeing certain freedoms for software users. namely the freedoms to run the software, to study the software, to modify the software, and to share copies of the software.

sources <https://www.kali.org/>  
,[https://en.wikipedia.org/wiki/Free\\_software\\_movement](https://en.wikipedia.org/wiki/Free_software_movement)