

Deliverable 1

Tutorial can be found [here] (<https://www.digitalocean.com/community/tutorials/how-to-install-the-apache-web-server-on-ubuntu-22-04>)

Concepts I don't understand:

- Sudo nano: When you use sudo nano, you are invoking the Nano text editor with superuser privileges.
- Systemd: It is a system and service manager for Linux operating systems. It is a suite of system management daemons, libraries, and utilities designed as a replacement for the traditional SysV init system.

What is a web server? Hardware and software side

A web server refers to both hardware and software components that work together to deliver content (web pages, images, files, etc.) to users over the Internet or an intranet.

What are some different web server applications?

Apache HTTP Server

It's almost synonymous to the World Wide Web, and still powers the majority of websites in the world. ! (apache logo)[https://geekflare.com/wp-content/uploads/2019/03/apache_server.jpg]

Nginx

While Apache is arguably at par today, Nginx offered some stunning improvements that helped it win. ! (nginx logo)[<https://geekflare.com/wp-content/uploads/2019/03/nginx-server-804x270.png>]

Lighttpd

Lighttpd is a capable, single-threaded web server that can easily handle a few hundred requests per second and still go easy on system resources. ! (lighttpd logo)[<https://geekflare.com/wp-content/uploads/2019/03/lighttpd-server-281x270.png>]


LiteSpeed Web sever

OpenLiteSpeed makes a lot of sense for WordPress-based content-driven websites, as page optimizations are already part of the server. ! (litespeed logo)[<https://geekflare.com/wp-content/uploads/2019/03/litespeed-server-840x210.png>]

Caddy

Think of Caddy as an Nginx-like web server (similar syntax and all) but everything is simplified to a pleasant extreme. ! (caddy logo)[<https://geekflare.com/wp-content/uploads/2019/03/caddy-server-637x270.png>]

Cherokee

It does provide an easy, fun and performant alternative to the mainstream web servers. 
[<https://geekflare.com/wp-content/uploads/2019/03/cherokee-server.png>]

What is virtualization?

It is a technology that enables the creation of virtual instances or environments of computing resources, such as servers, storage, network, and operating systems, on a single physical hardware system.

What is virtualbox?

VirtualBox is a free and open-source virtualization software developed by Oracle Corporation. It allows users to create and manage virtual machines on a host computer, enabling the running of multiple operating systems simultaneously.

What is a virtual machine?

A virtual machine (VM) is a software-based emulation of a physical computer that runs on a host system.

What is Ubuntu Server?

Ubuntu Server is a variant of the Ubuntu operating system that is specifically designed for server environments.

What is a firewall?

A firewall is a network security device or software that monitors and controls incoming and outgoing network traffic based on predetermined security rules.

What is SSH?

SSH, which stands for Secure Shell, is a cryptographic network protocol used for secure communication over an unsecured network.