Deliverable Submission

Basic Terminology

What is a web server? Hardware and software side

A web server is both a hardware and software system responsible for serving web content to clients over the internet.

- **<u>Hardware</u>**: This usually refers to the physical server machine (computer) that hosts the web server software and serves web pages to users.
- **<u>Software</u>**: It refers to the software application that runs on the server hardware and responds to HTTP requests from clients (web browsers), delivering web pages and other resources.

What are some different web server applications?

Application Name	License	Project's Website
Nginx	2-Clause BSD-like License	[example 1](#)
Apache HTTP Server	Apache License 2.0	[example 2](#)
Microsoft Internet Services (IIS)	Proprietary Software	[example 3](#)

Example 1: Nginx

A lightweight, high-performance web server and reverse proxy server known for its efficiency in handling concurrent connections and serving static content.

Example 2: Apache HTTP Server

A powerful, open-source web server software known for its flexibility, stability, and extensive module support.

Example 3: Microsoft Internet Information Services (IIS)

A web server software developed by Microsoft for use on Windows servers, providing support for various web technologies and integration with other Microsoft products.

What is virtualization?

Virtualization is the process of creating a virtual (rather than physical) version of something, such as an operating system, server, storage device, or network resource. It allows multiple virtual instances of hardware or software to run on a single physical machine, enabling better resource utilization and flexibility.

What is virtualbox?

VirtualBox is a free and open-source virtualization software that allows users to create and manage virtual machines (VMs) on their computer. It provides a platform for running multiple guest operating systems (OS) simultaneously on a single physical host.

What is a virtual machine?

A virtual machine (VM) is a software emulation of a physical computer system that runs on a physical host machine. It behaves like a physical computer, running an operating system and applications, but it is entirely contained within a software environment.

What is Ubuntu Server?

Ubuntu Server is a variant of the Ubuntu operating system designed specifically for server environments. It provides a stable and secure platform for running various server applications, including web servers, databases, email servers, and more.

What is a firewall?

A firewall is a network security device or software application that monitors and controls incoming and outgoing network traffic based on predetermined security rules. It acts as a barrier between a trusted internal network and untrusted external networks (such as the internet), helping to prevent unauthorized access and attacks.

What is SSH?

SSH (Secure Shell) is a cryptographic network protocol used for secure remote login and command execution over an insecure network. It provides encrypted communication between two hosts, typically connecting a client to a server securely over an untrusted network, such as the internet.