Deliverable 1

Concept I don't understand:

- Systemcti: systemctl is a controlling interface and inspection tool for the widely-adopted init system and service manager systemd
- init system: init (short for initialization) is the first process started during booting of the operating system
- unmask value: The user permission mask is the octal value that is used to determine file/directory permission when they are created by the user.
- server Alias: Alternate names for a host used when matching requests to name-virtual hosts
- a2ensite tool: a2ensite is a script that enables the specified site (which contains a block) within the apache2 configuration.

What is a web server? Hardware and software side?

- Web server hardware:On the hardware side, a web server is a computer that stores.
- Web server software:On the software side, a web server includes several parts that control how web users access hosted files. At a minimum, this is an HTTP server.

What are some different web server applications?

NGINX: A high-performance web server that can also act as a reverse proxy and load balancer.

Apache Tomcat: A web server specialized in Java Servlets and JSP pages, open source and cross-platform.
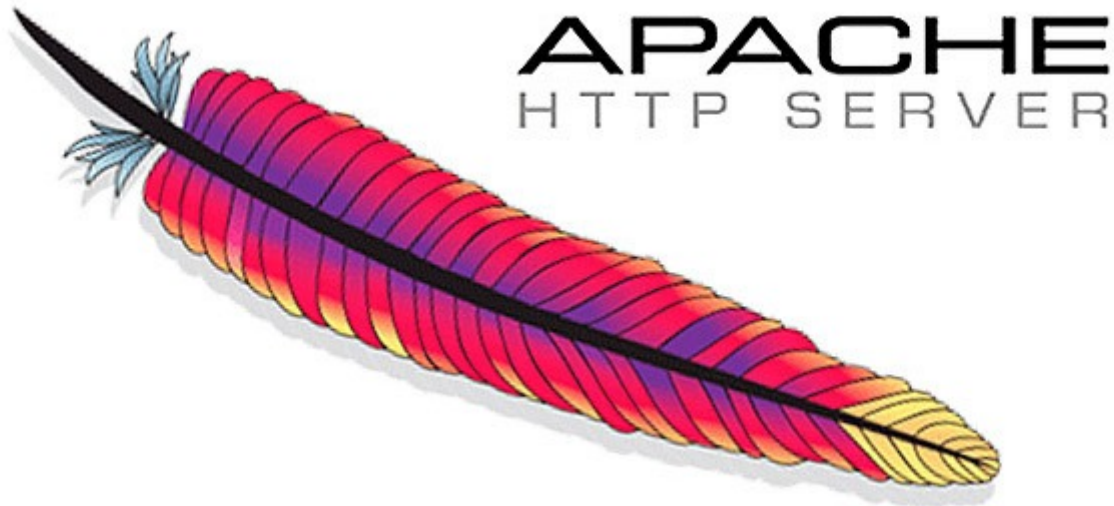
Lighttpd

A lightweight web server that is optimized for speed and low memory usage.

What is virtualization?

Virtualization uses software called hypervisors to create multiple virtual computers (known as virtual machines or VMs) on a single physical machine. These virtual machines can access all the parts of the physical machine, including the computer's brain or processors, memory and storage.Each virtual machine runs on its own operating system and functions like a completely separate machine—even though it's sharing the resources of one physical computer. This is the key feature of virtualization: a single physical machine running multiple tasks simultaneously on different virtual machines, instead of several computers each running a single task.

What is virtualbox?

VirtualBox is one of the most popular free and open-source hypervisors that anyone can try today. VirtualBox is a Type 2 hypervisor used to virtualize machines at fast and reliable speeds (depending on the host machine's hardware).

What is a virtual machine?

a computer system created using software on one physical computer in order to emulate the functionality of another separate physical computer.

What is Ubuntu Server?

Ubuntu is a Linux distribution based on Debian and composed mostly of free and open-source software

What is a firewall?

A firewall is a network security device that monitors incoming and outgoing network traffic and permits or blocks data packets based on a set of security rules.

What is SSH?

The acronym SSH stands for "Secure Shell." The SSH protocol was designed as a secure alternative to unsecured remote shell protocols