

Deliverable 1 Submission

Basic Terminology

What is a web server?

A web server is a software program that serves web pages and other content to clients over the internet or a local network. The web server listens for requests from clients and responds by sending the appropriate content back to the client's web browser.

What is Apache?

Apache is a popular open-source web server software that runs on a variety of operating systems, including Unix, Linux, and Windows. Apache is known for its flexibility, reliability, and security, and it is widely used to serve static and dynamic web pages on the internet.

What are some examples of web server applications?

Application Name	license	Project's Website
Example 1	GNU General Public License (GPL)	example 1
Example 2	Apache License 2.0	example 2
Example 2	MIT license	example 3

Example 1



The General Public License (GPL) is a type of software license that is used to protect the rights of the users of free and open-source software. The GPL allows users to freely use, modify, and distribute software, as long as the resulting software is also licensed under the GPL and the original copyright and license notices are included. The GPL is designed to ensure that software remains free and open, and that users have access to the source code and the right to modify and redistribute it. The GPL is used by many popular open-source software projects, including the Linux operating system, the Apache web server, and the MySQL database.

Example 2



The Apache License 2.0 is a permissive open-source software license that allows users to freely use, modify, and distribute software. The Apache License 2.0 requires that any modified or redistributed software be licensed under the same license, and that the original copyright and license notices be included. The Apache License 2.0 also includes a patent license, which grants users the right to use any patents that are owned by the software's contributors. This license is used by many popular open-source software projects, including the Apache web server, Hadoop, and the Android operating system.

Example 3



The MIT License is a permissive open-source software license that allows users to freely use, modify, and

distribute software. The MIT License requires that any modified or redistributed software be licensed under the same license, and that the original copyright and license notices be included. The MIT License is often used for libraries and other code that can be easily incorporated into other projects. It is considered to be a very permissive license and is often used by developers who want to encourage the widespread adoption and use of their software. The MIT License is used by many popular open-source software projects, including the jQuery JavaScript library and the Ruby programming language.

What is virtualization?

Virtualization is the process of creating a virtual version of a computer system or operating system, which can run on top of another system or host. This allows multiple virtual machines to run on a single physical machine, which can help reduce hardware costs and improve system efficiency.

What is virtualbox?



VirtualBox is a free and open-source virtualization software package that allows users to create and run virtual machines on their computers. It is widely used for testing software, running multiple operating systems on a single machine, and other purposes.

What is a virtual machine?

A virtual machine (VM) is a software-based emulation of a physical computer system, which can run its own operating system and applications as if it were a separate physical machine. Virtual machines are often

used to run multiple operating systems on a single physical machine, or to test software in a controlled environment.

What is Ubuntu Server?



Ubuntu Server is a version of the Ubuntu Linux operating system that is optimized for use as a server. It includes a variety of server-specific tools and software packages, and is widely used for web hosting, cloud computing, and other server applications.

What is a firewall?

A firewall is a security system that monitors and controls incoming and outgoing network traffic based on predefined security rules. Firewalls are often used to prevent unauthorized access to a network or system, and to protect against malware and other security threats.

What is SSH?

SSH (Secure Shell) is a network protocol that allows secure communication between two networked devices. It is commonly used to remotely access and manage computer systems, and provides a secure, encrypted connection between the client and server.

Other Relevant Concepts

- **Systemd** Systemd is a system and service manager for Linux-based operating systems. It is designed to provide a more efficient and reliable way to manage system processes, services, and resources, and includes features such as dependency tracking, process management, and logging.
- **Systemctl** Systemctl is a command-line tool used to manage system services and processes on Linux-based operating systems. It is part of the systemd system and service manager, and allows users to start, stop, restart, and check the status of services and processes.
- **Virtual hosts** Virtual hosts are a feature of web servers that allows multiple websites to be served from a single physical server. Each virtual host has its own domain name and IP address, and can be configured with its own set of web files, applications, and security settings.
- **Log file** A log file is a record of events or transactions that occur within a software system or operating system. Log files are commonly used for troubleshooting and debugging purposes, and can provide valuable information about system errors, security incidents, and other events.