**Group Research Challenge**

Server-Side Technology

Group Members: *<please list all group members who contributed here>*

**1) LAMP**

* What is “open source”?

Open Source refers to computer programs where the original creator freely shares the blueprint or code, enabling others to contribute by adding, modifying, or using it without concerns about copyright infringement or plagiarism. This open access encourages collaboration and allows anyone to duplicate the code for their own purposes. (https://en.wikipedia.org/wiki/Open\_source)

* What does the LAMP acronym stand for in terms of a tech stack?

**LAMP** represents a powerful combination of open-source technologies: **Linux**, **Apache**, **MySQL**, and **PHP**/**Perl**/**Python**. Linux serves as the operating system, Apache as the HTTP server, MySQL handles relational databases, and PHP/Perl/Python are programming languages within this framework. These elements work together to create a robust foundation for web development and hosting, each contributing its unique strengths to the process. (https://en.wikipedia.org/wiki/LAMP\_%28software\_bundle%29)

* What are some other variants of this tech stack for hosting PHP with database?

PHP is a versatile programming language commonly used in web development, sharing similarities with other languages like Perl and Python. All these languages are open source, allowing users to freely modify and enhance their functionalities.

What's interesting is that these languages can smoothly run on various operating systems. This flexibility enables users to choose from different stacks tailored to their preferences:

- WAMP (Windows OS, Apache, MySQL, PHP)

- MAMP (Mac OS, Apache, MySQL, PHP)

- WISA (Windows, IIS, SQL, ASP.NET)

- BAMP (BSD, Apache, MySQL, PHP)

- XAMPP (a distribution containing MariaDB, PHP, and Perl)

- SAMP (Solaris, Apache, MySQL, PHP)

Each stack configuration offers its unique advantages, making it easier for developers to work in environments that suit their needs best. (<https://www.webdatarocks.com/blog/which-tech-stack-to-choose-for-your-project-in-2020/>)

**4) PHP (**https://www.php.net/manual/en/intro-whatis.php**)**

* What does PHP stand for?

PHP recursive acronym for PHP: Hypertext Preprocessor, open-source general purpose scripting language that is especially suited for web development and can be embedded into HTML.

* What is strange about this?

One interesting aspect of PHP is that it operates on the server-side while its code is embedded within HTML pages visible to clients. However, the client doesn't have insight into its server-side functionalities or how it operates behind the scenes.

**6) Internet Acronyms**

Define the following acronyms in a sentence or two.

* W3C - World Wide Web Consortium develops standards and guidelines aimed at assisting everyone in constructing a principled web-based platform.

(https://www.w3.org/)

* IETF – Internet Engineering Task Force is an organization that sets the standards for the Internet and oversees the technical protocols comprising the Internet protocol suite (TCP/IP). (https://en.wikipedia.org/wiki/Internet\_Engineering\_Task\_Force)