

Introduction to PHP

Installation & Basics





Intervenant



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Introduction to PHP

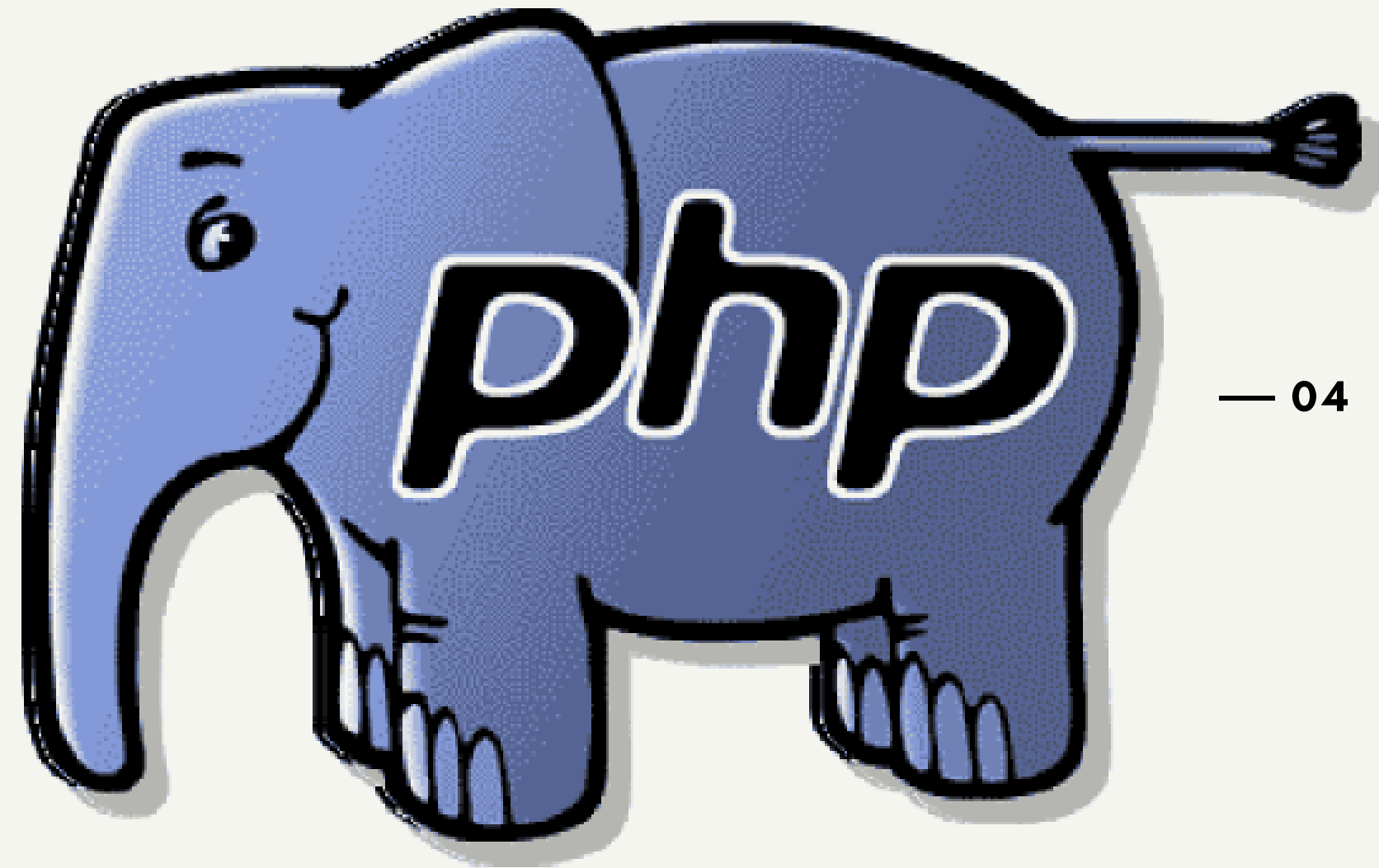
1st part



What is PHP ?

General Presentation

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



Why PHP ?

Open Source

Hypertext Preprocessor is a free programming language, which mean that you have possibilities of free redistribution, access to the source code and creation of derivative works

Widely Used

As we will see further, PHP is used by A LOT of major companies, such as Facebook at start, and Wikipedia

Server Side

"Backend" technology, mostly used as a scripting language. What distinguished PHP from client-side JavaScript is that the code is executed on the server, generating HTML which is then sent to the client.



How to use it ?

```
<?php  
echo "Hello World!\n";
```

- Open the PHP tag
- Declaration of the variable
- Echo allows you to display a string of character



Exercise

Execute a PHP file

Create a file called `hello_world.php`

Insert in this file the code you've seen before

Execute the file using the PHP CLI (command line interface)

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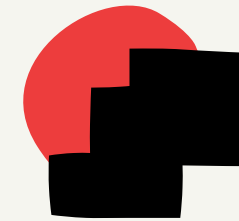
 Hint: If you don't have PHP installed yet on your laptop, apt is your best friend

PHP Specificities



An interpreted language

PHP is not a compiled language (like C or C++ for example), but an interpreted one, that's why it's compiled in real time when it's run, and it's why it often uses simpler and more human-friendly syntax for coding.



Sought by companies

- Maintained
- Stable
- Easy to deploy
- Used in CMS

CMS

A CMS is a site allowing any user to create their own site (e-commerce, showcase, etc)



Wordpress



PrestaShop

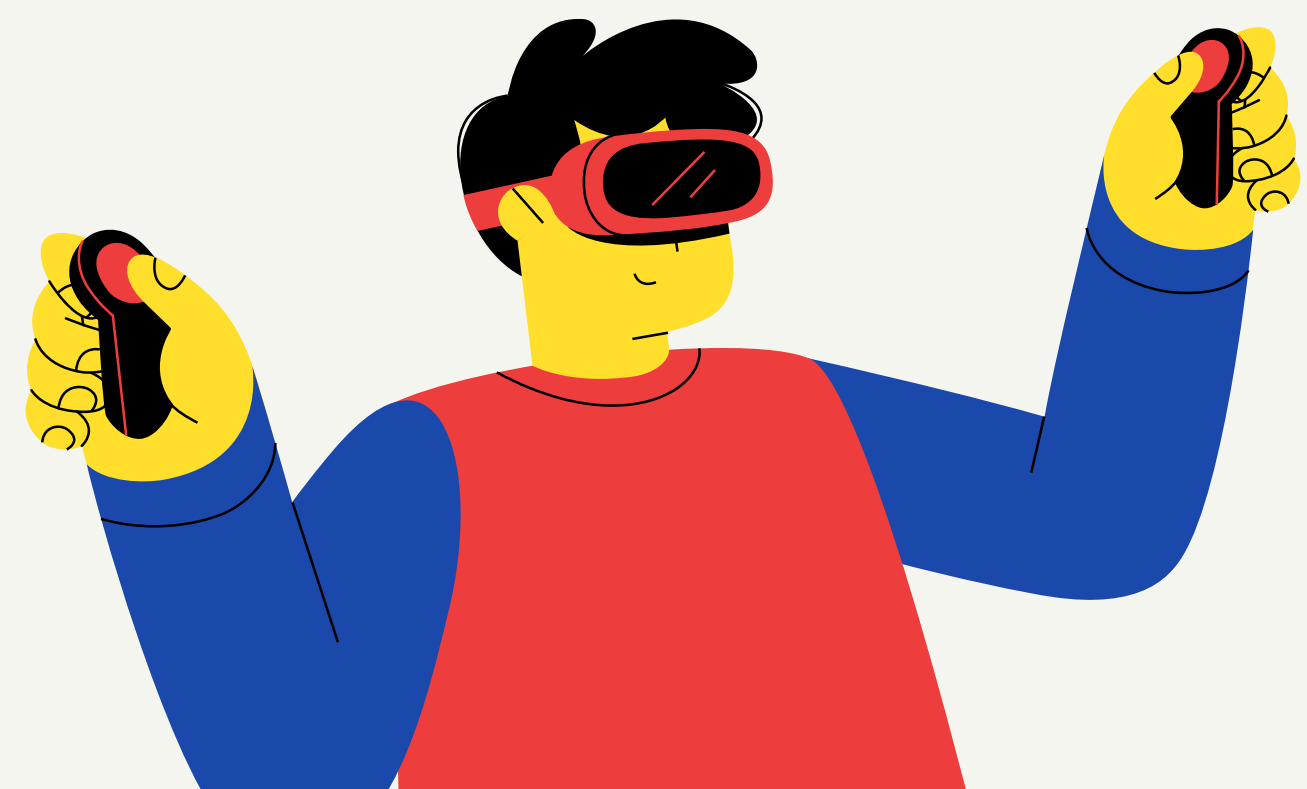


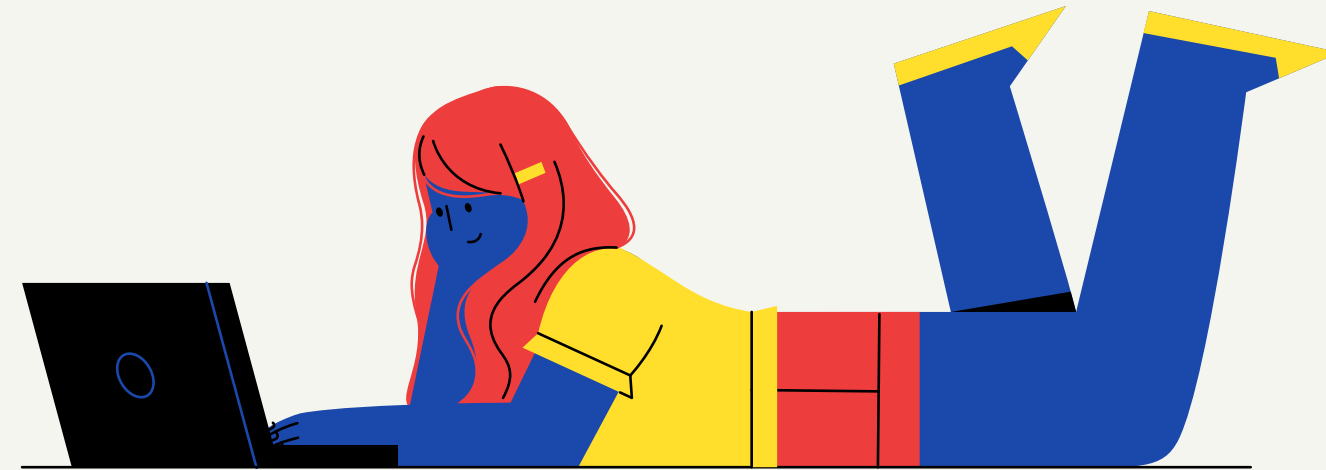
Magento

Most of plugins are also developed and design in PHP

Useful Fonctions

<div>echo</div> <div>DISPLAYS A STRING OF CHARACTERS</div> <div>https://www.php.net/manual/en/function.echo.php</div>	<div>var_dump</div> <div>DISPLAYS THE CONTENT OF ANY VARIABLES, VERY USEFUL FOR DEBUGGING</div> <div>https://www.php.net/manual/en/function.var-dump</div>	<div>array</div> <div>CREATE AN ARRAY</div> <div>https://www.php.net/manual/en/function.array</div>	<div>count</div> <div>RETURNS THE LENGTH OF AN ARRAY OR OF AN OBJECT</div> <div>https://www.php.net/manual/en/function.count</div>	<div>strlen</div> <div>DISPLAYS THE LENGTH OF A STRING OF CHARACTERS</div> <div>https://www.php.net/manual/en/function strlen</div>
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READ THE DOC !

<https://www.php.net/docs.php>



Using Apache2

2nd part



What is Apache ?

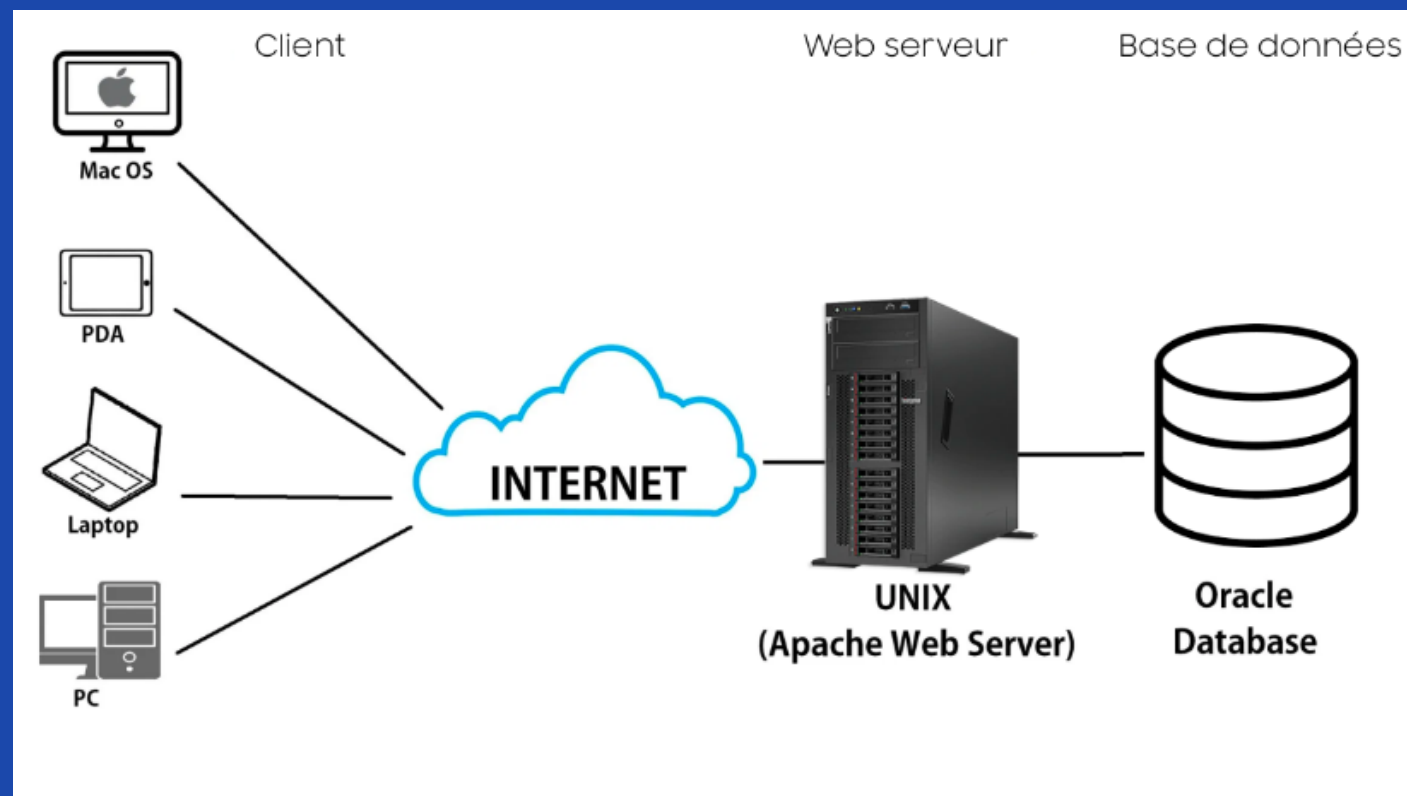
General Presentation

In April 2019, it was still the most popular HTTP server on the World Wide Web.

This web server allows to answer user requests made via a URL

Apache2 interprets several languages including PHP (which you will use during the training) to serve web pages in "plain" html





Web Server Example

An HTTP server is software that understands URLs and the HTTP protocol (the protocol used by the browser to display web pages).

At the simplest level, whenever a browser needs a file hosted on a web server, the browser requests (says it sends a request) the file via HTTP.

When the request reaches the correct web server (hardware), the HTTP server (software) returns the requested document, also via HTTP.

An alternative to Apache2: NGINX

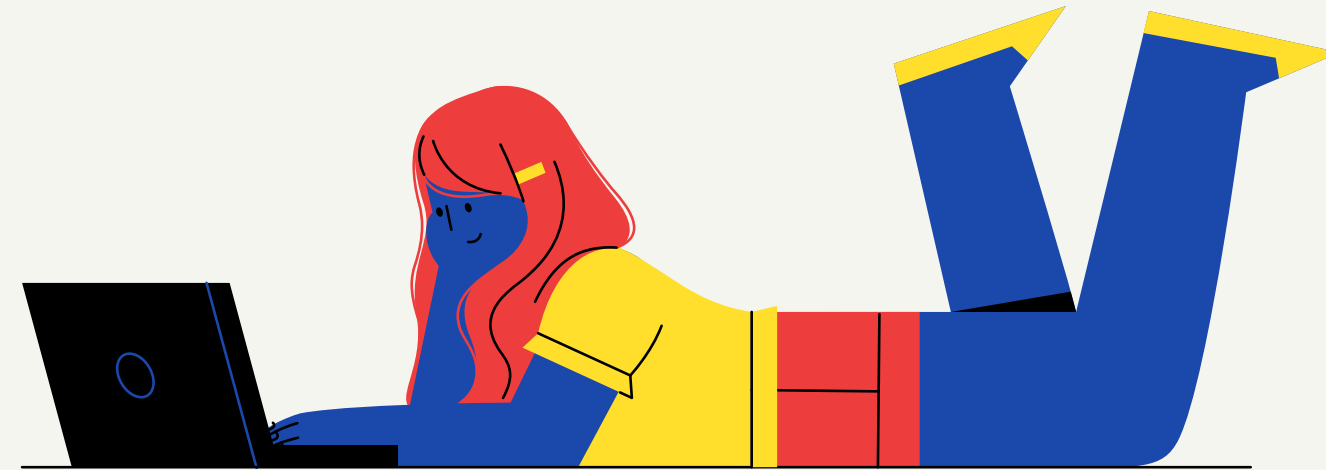


Less consumer

NGINX is designed to offer low memory usage, according to the next point, through asynchronous method

Asynchronous

Rather than creating new processes for each Web request, NGINX uses an asynchronous approach.



Installation

Let's live-coding !





Setting up a Database

3rd part





What is MySQL ?

General Presentation

It is one of the most widely used database management software in the world, both for the general public (mainly web applications) and for professionals applications.



An alternative to MySQL: MariaDB



Most open source

- The source code of the program parts under development is available via public repositories.
- All development steps are publicly documented.

Higher Flexibility

In the future, MariaDB wants to differentiate itself from MySQL primarily through its flexibility. In addition to the standard engines supported by MySQL, users have a growing number of alternative database engines for specific use cases.



Simplify database Usage

4th Part



What is phpMyAdmin ?

General Presentation

While many users need the functionality of a database management system like MySQL, they may not feel comfortable interacting with the system solely from the MySQL prompt.

Build with PHP, phpMyAdmin was created so that users can interact with MySQL through a web interface. In the following live coding, we'll discuss how to install and secure phpMyAdmin so that you can safely use it to manage your databases on a Linux system.



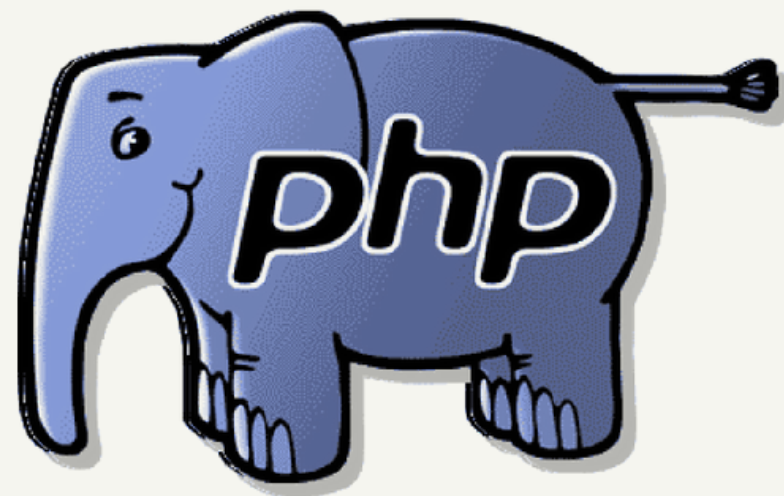


Prerequisite

A LAMP Stack !

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PHP

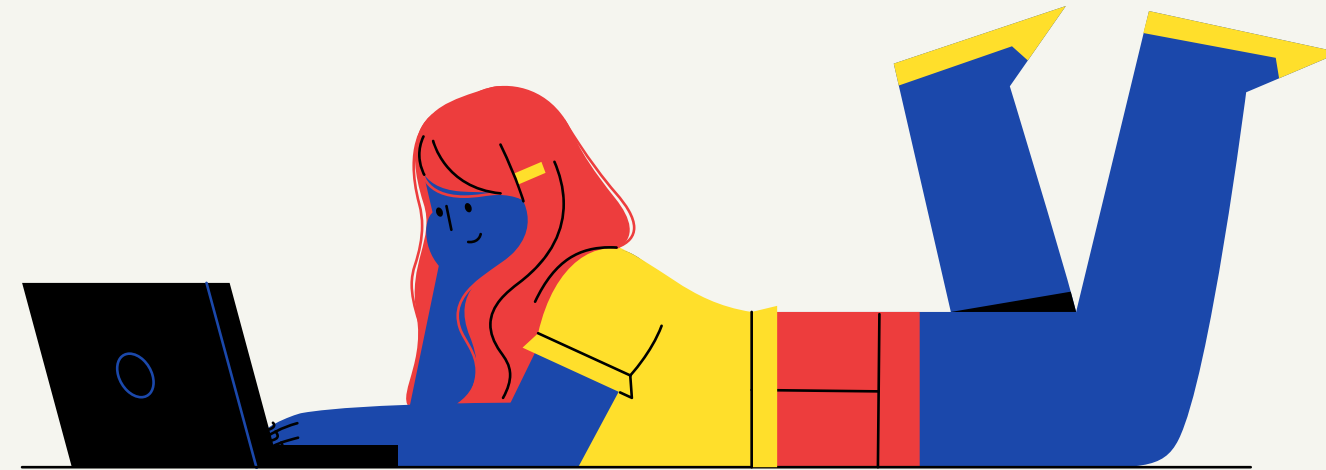


MySQL



Apache





Installation

Let's live-coding !

