

PHP - Introduction

PHP started out as a small open source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf released the first version of PHP way back in 1994. Initially, PHP was supposed to be an abbreviation for "Personal Home Page", but it now stands for the recursive initialism "PHP: Hypertext Preprocessor".

Lerdorf began PHP development in 1993 by writing several Common Gateway Interface (CGI) programs in C, which he used to maintain in his personal homepage. Later on, He extended them to work with web forms and to communicate with databases. This implementation of PHP was "Personal Home Page/Forms Interpreter" or PHP/FI.

Today, PHP is the world's most popular server-side programming language for building web applications. Over the years, it has gone through successive revisions and versions.

PHP Versions

PHP was developed by Rasmus Lerdorf in 1994 as a simple set of CGI binaries written in C. He called this suite of scripts "Personal Home Page Tools". It can be regarded as PHP version 1.0.

- In April 1996, Rasmus introduced PHP/FI. Included built-in support for DBM, mSQL, and Postgres95 databases, cookies, user-defined function support. PHP/FI was given the **version 2.0** status.
- PHP: Hypertext Preprocessor – **PHP 3.0** version came about when Zeev Suraski and Andi Gutmans rewrote the PHP parser and acquired the present-day acronym. It provided a mature interface for multiple databases, protocols and APIs, object-oriented programming support, and consistent language syntax.
- **PHP 4.0** was released in May 2000 powered by Zend Engine. It had support for many web servers, HTTP sessions, output buffering, secure ways of handling user input and several new language constructs.
- **PHP 5.0** was released in July 2004. It is mainly driven by its core, the Zend Engine 2.0 with a new object model and dozens of other new features. development team includes dozens of developers and others working on related and supporting projects such as PEAR, PECL, and documentation.



- **PHP 7.0** was released in Dec 2015. This was originally dubbed PHP next generation (phpng). Developers reworked Zend Engine is called Zend Engine 3. Some of the important features of PHP 7 include its improved performance, reduced memory usage, Return and Scalar Type Declarations and Anonymous Classes.
- **PHP 8.0** was released on 26 November 2020. This is a major version having many significant improvements from its previous versions. One standout feature is Just-in-time compilation (JIT) that can provide substantial performance improvements. The latest version of PHP is 8.2.8, released on July 4th, 2023.

PHP Application Areas

PHP is one of the most widely used language over the web. Here are some of the application areas of PHP –

- PHP is a server-side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites. Although it is especially suited to web development, you can also build desktop standalone applications as PHP also has a command-line interface. You can use PHP-GTK extension to build GUI applications in PHP.
- PHP is widely used for building web applications, but you are not limited to output only HTML. PHP's output abilities include rich file types, such as images or PDF files, encrypting data, and sending emails. You can also output easily any text, such as JSON or XML.
- PHP is a cross-platform language, capable of running on all major operating system platforms and with most of the web server programs such as Apache, IIS, lighttpd and nginx. PHP also supports other services using protocols such as LDAP, IMAP, SNMP, NNTP, POP3, HTTP, COM, etc.

Here are some more important features of PHP –

- PHP performs system functions. It can create, open, read, write, and close the files.
- PHP can handle forms. It can gather data from files, save data to a file, through email you can send data, return data to the user.
- You add, delete, modify elements within your database through PHP.
- Access cookies variables and set cookies.

- Using PHP, you can restrict users to access some pages of your website.
- It can encrypt data.

PHP provides a large number of reusable classes and libraries are available on "PEAR" and "Composer". PEAR (PHP Extension and Application Repository) is a distribution system for reusable PHP libraries or classes. "Composer" is a dependency management tool in PHP.