Web Architecture, Tools, and Introduction to PHP

Objectives

- To understand the history of PHP
- To know the advantages of PHP as a server side scripting language
- To know what are the software's needed in developing web application using PHP.
- To run PHP application on a web browser.
- To know the basic syntax of PHP for outputting to browser.
- To know the datatypes that are available on PHP and on how these datatypes are being used.
- To know some predefined type function for data manipulation.
- To know the proper casting values of a given variables.

PHP 1 (1994-95)

- Developed by Rasmus Lerdorf
- To know how many visitors were reading his online resume based on PERL/CGI script
- Personal Home Page (PHP)

PHP 2.0 (1997)

- PHP is based on C rather than PERL
- Personal Home Page/Form Interpreter

PHP 3.0 (1998)

- 50,000 users were using PHP to enhance their Web pages
- Developers joined Lerdorf

1999 (PHP 4.0)

- With core developers Zeev Suraski and Andi Gutmans
- PHP makes the most popular scripting language with morethan one million user base by Netcraff
- Hundreds of functions being added
- Dubbed the Zend scripting engine

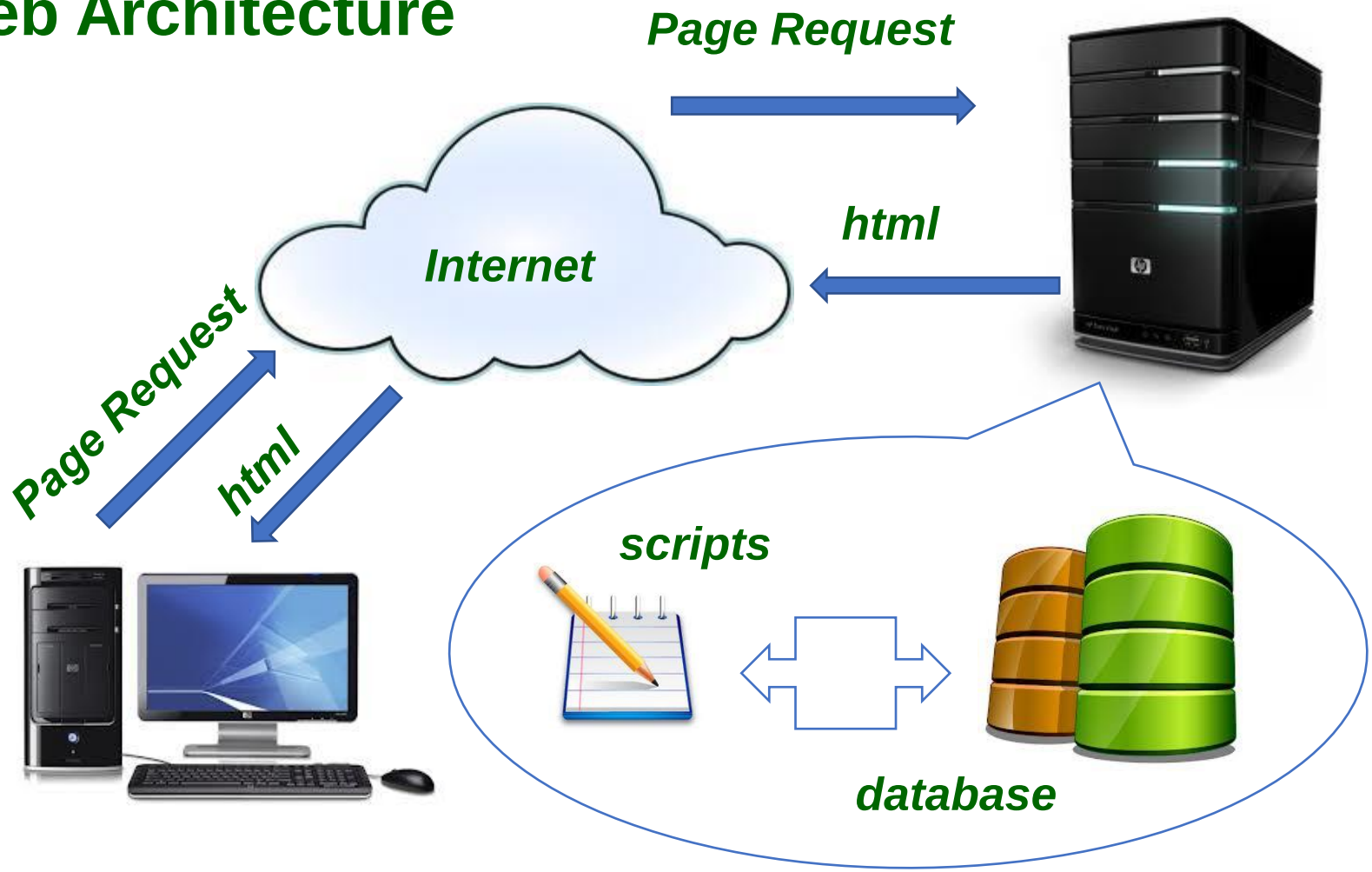
1999 (PHP 4.0)	• PHP: Hypertext Preprocessor (recursive acronym) • 3.6 million domain PHP installed • Enterprise development • Improved resource handling (scalability) • Object-oriented support (Classes and Objects) • Native session-handling support (session) • Encryption (encryption algoritms) • ISAPI Support (for IIS) • Native COM/DOM (Windows applications) • Native Java Support: (binding to java objects) • PERL Compatible Regular Expressions • New features, power, and scalabilty
PHP 5 (July 13, 2004)	• Vastly improved object-oriented capabilities: OOP improvement • Try/catch exception handling • Improved XML and Web Services support (Simple XML Support, using SOAP) • Native support for SQLite • Installed on 19 million domains • 54 percent on all Apache module
PHP 7	• Current version as of 2018

HISTORY (Con't.)

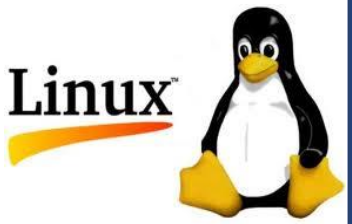
PHP Key categories

- *Practicality*
  - *PHP is a loosely type language (no explicitly create, typecast, or destroy a variable)*
- *Power*
  - *More libraries and thousands of functions*
- *Possibility*
  - *Native support is offered for more than 25 database products, including Adabas D, dBase, Empress, FilePro, FrontBase, Hyperwave, IBM DB2, Informix, Ingres, InterBase, mSQL, Microsoft SQL Server, MySQL, Oracle, Ovrimos, PostgreSQL, Solid, Sybase, Unix dbm, and Velocis.*
  - *Both structured and Object Oriented approach*
- *Price*
  - *Free of charge*

Web Architecture



Software Requirements
Operating System: Linux



Software Requirements
Operating System: Windows

Software Requirements
Operating System: Mac

Cheetah

Panther

Puma

Jaguar

Tiger

Leopard

Snow leopard

Lion

Software Requirements
Internet browser

Google Chrome

Mozilla Firefox

Internet Explorer

Opera

Safari

Rockmelt

Deepnet Explorer

Avant Browser

Maxthon

SeaMonkey

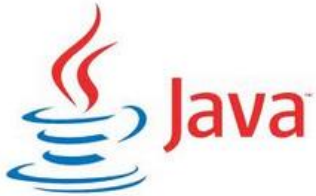
Software Requirements
Web Server

Apache

NGINX™

Google Web Server (GWS)

Software Requirements
Server side scripting language



Java
(JavaServer Pages: JSP)

Ruby (Ruby on Rails)

Active Server Pages
(ASP)

Python
(Django)

PERL CGI

Software Requirements
Database

Software Requirements
Code editor

Bluefish

Dreamweaver

Software Requirements
Other

CSS

HTML

Software Requirements
Other

Operating System
Windows 7 / Windows 8

Web Server
Apache

Language Script
PHP

Database
MySQL

XAMPP / WAMP

Code Editor
Notepad++ / Eclipse / Netbeans / Dreamweaver

Running PHP Scripts

XAMPP

1. Download XAMPP
   http://www.apachefriends.org/en/xampp.html
2. Install XAMPP
3. Run XAMPP Control
   - c:\xampp (by default)
   - Start the Apache and MySQL(for database)
4. Create a folder under c:\xampp\htdocs\ (by default)
   Note: All php files must be save on that folder
5. Test PHP script sample file.
   5. Open some internet browser
   6. Type localhost/[folder name] (by default)
   7. Select file from the directory list (if there's