



# **MMGD0204**

## **Web Application Technology**

### **Chapter 9**

# **SERVER-SIDE SCRIPTING LANGUAGE**

# Chapter 9 – Server-Side Scripting Language

## Server-Side Scripting Language

- A web server technology in which a user's request is fulfilled by running a script directly on the web server to generate dynamic web pages.
- Used to provide interactive web sites that interface to databases or other data stores.
- It has ability to highly customize the response based on the user's requirements, access rights, or queries into data stores.

# Chapter 9 – Server-Side Scripting Language

## Static vs. Dynamic Website

- A **static website** is one that is written in HTML only.
- It has no connection to any database.
- A **dynamic website** is written using more complex code and can do a lot more.
- It can read and send data into a database in the server.



# Chapter 9 – Server-Side Scripting Language

## What It Can Do?

- Dynamically edit, change, or add any content of a Web page
- Respond to user queries and form data
- Access databases and return the result to a browser
- Access files and return the result to a browser
- Transform XML data to HTML data and return the results to a browser

# Chapter 9 – Server-Side Scripting Language

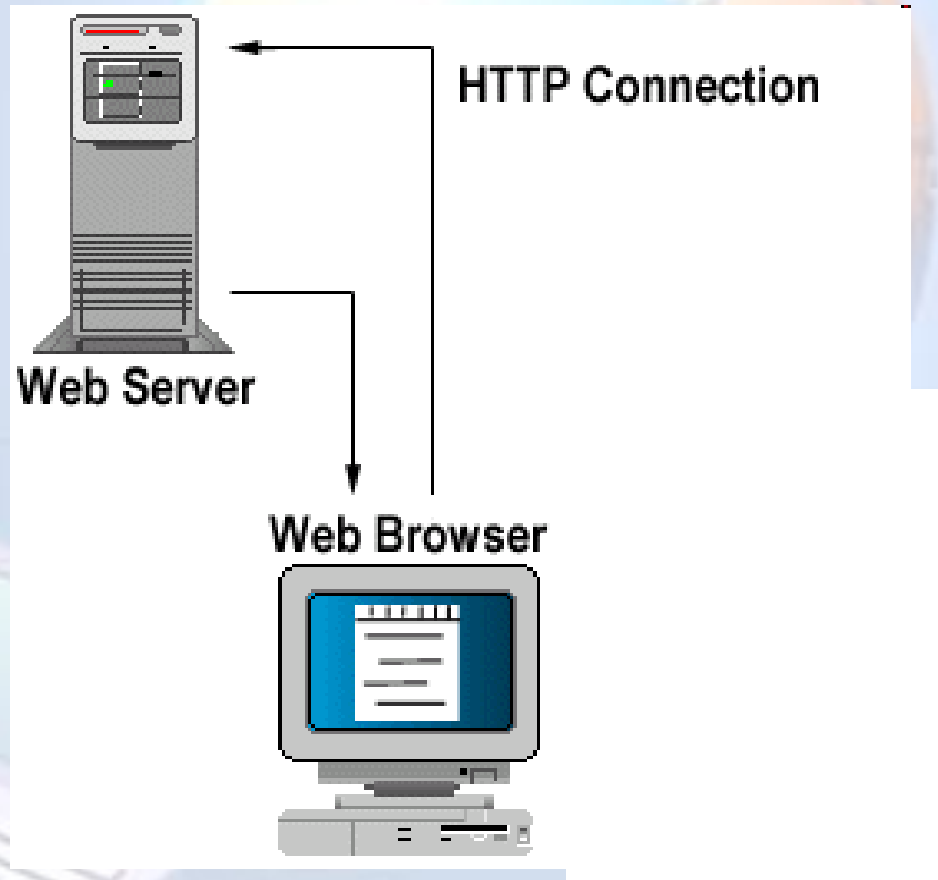
## What It Can Do?

- Customize a Web page to make it more useful for individual users
- Provide security and access control to Web pages
- Tailor your output to different types of browsers
- Minimize network traffic



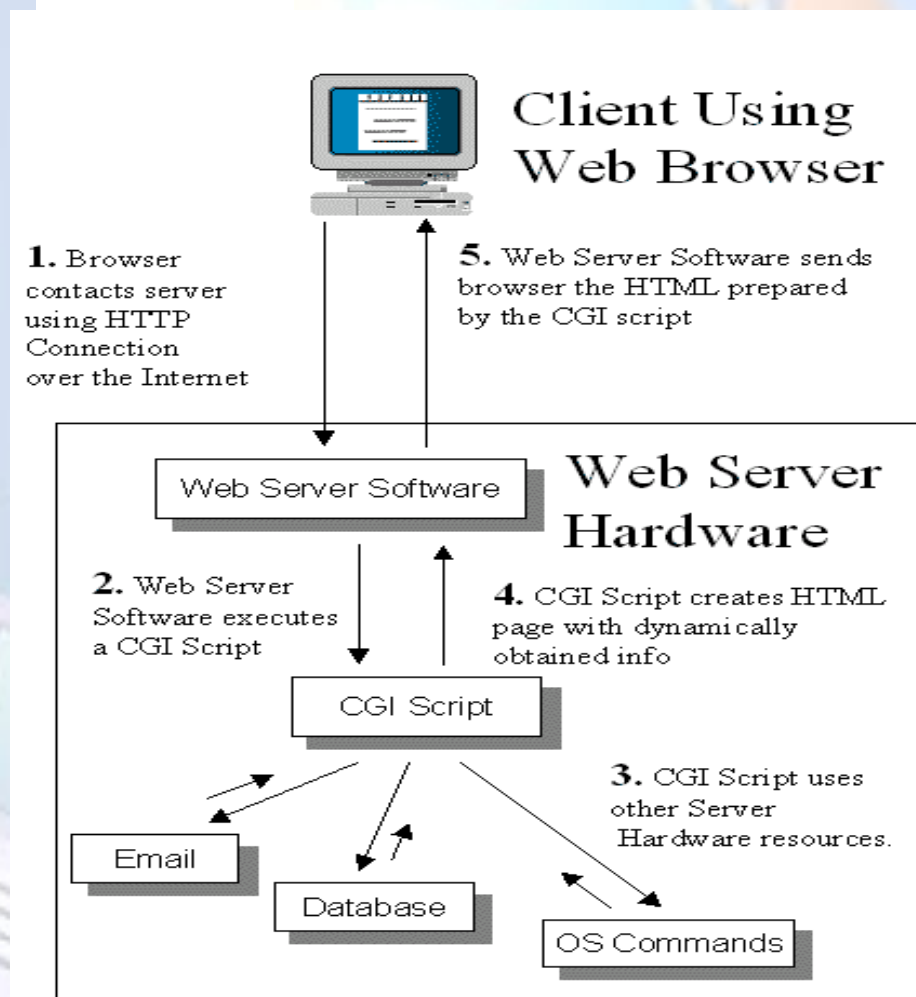
# Chapter 9 – Server-Side Scripting Language

## How It Works?



# Chapter 9 – Server-Side Scripting Language

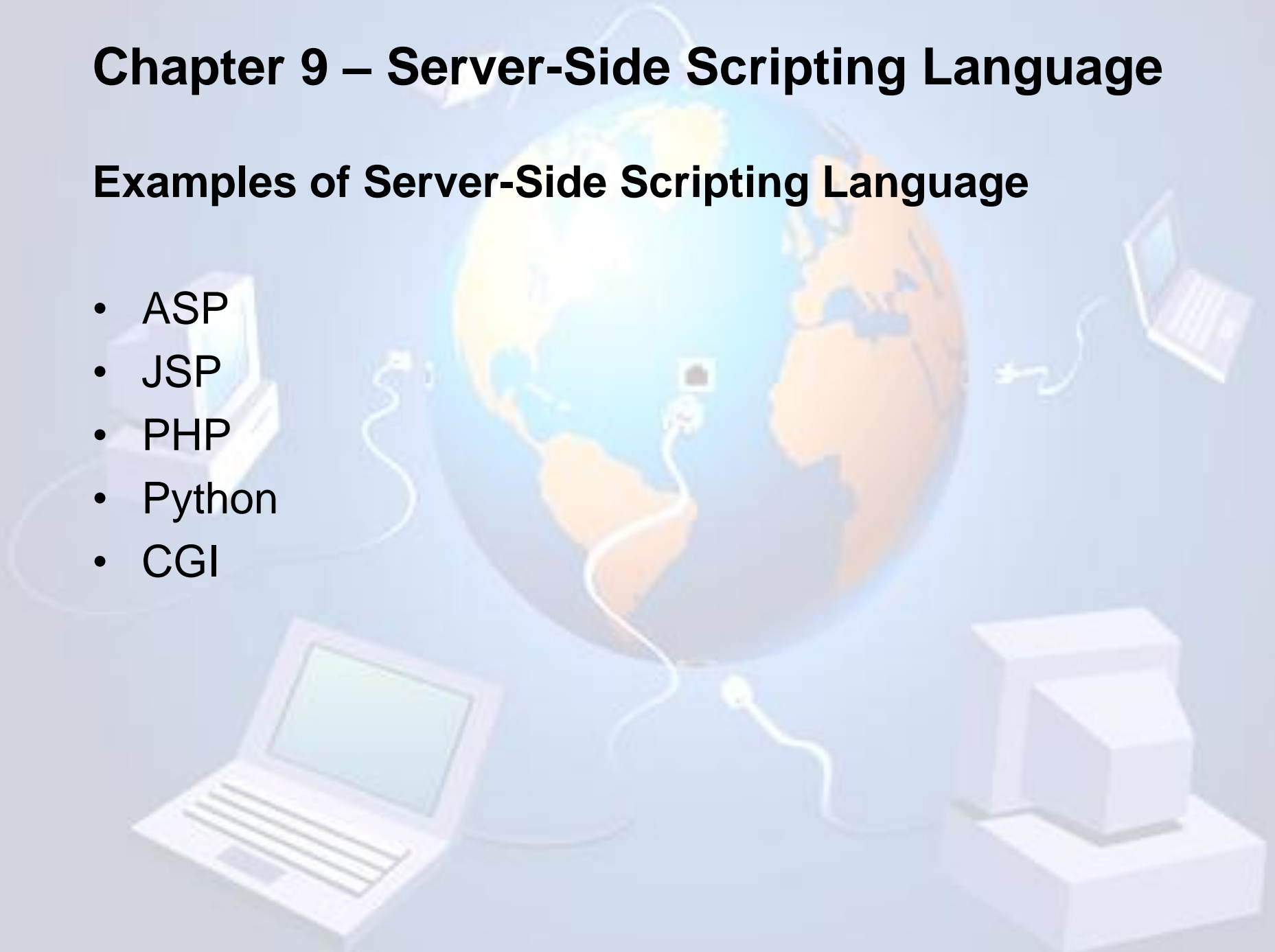
## How It Works?



# Chapter 9 – Server-Side Scripting Language

## Examples of Server-Side Scripting Language

- ASP
- JSP
- PHP
- Python
- CGI





# Chapter 9 – Server-Side Scripting Language

## PHP

- PHP stands for **PHP: Hypertext Preprocessor**
- PHP scripts are executed on the server
- PHP supports many databases
- PHP is an open source software: free to download and use.
- The syntax of PHP is almost similar to C and Java.
- The goal of PHP is to allow web developers to write dynamically generated pages quickly.

# Chapter 9 – Server-Side Scripting Language

## PHP Files

- PHP files can contain text, HTML tags and scripts
- PHP files are returned to the browser as plain HTML
- PHP files have a file extension of ".php", ".php3", or ".phtml"



# Chapter 9 – Server-Side Scripting Language

## PHP Requirements

- PHP Program
- MySQL Database
- Apache Server



# Chapter 9 – Server-Side Scripting Language

## Basic PHP Syntax

- A PHP scripting block always starts with **<?php** and ends with **?>**.
- A PHP scripting block can be placed anywhere in the document.
- There are two basic statements to output text with PHP: **echo** and **print**.
- Each code line in PHP must end with a semicolon.
- The semicolon is a separator and is used to distinguish one set of instructions from another.

# Chapter 9 – Server-Side Scripting Language

## Example PHP Syntax

```
<html>  
<body>  
  
<?php  
echo "Hello World";  
?>  
  
</body>  
</html>
```

# Chapter 9 – Server-Side Scripting Language

## ASP

- ASP stands for Active Server Pages.
- ASP is a Microsoft Technology.
- ASP is a program that runs inside IIS (Internet Information Services).
- It based on visual basic syntax.
- ASP allows us to edit, change or add any content of a web page.
- It responds to user queries or data given from HTML forms.

# Chapter 9 – Server-Side Scripting Language

## ASP File

- An ASP file is just the same as an HTML file
- An ASP file can contain text, HTML, XML, and scripts
- Scripts in an ASP file are executed on the server
- An ASP file has the file extension ".asp"



# Chapter 9 – Server-Side Scripting Language

## How Does ASP Differ from HTML?

- When a browser requests an HTML file, the server returns the file
- When a browser requests an ASP file, IIS passes the request to the ASP engine. The ASP engine reads the ASP file, line by line, and executes the scripts in the file. Finally, the ASP file is returned to the browser as plain HTML



# Chapter 9 – Server-Side Scripting Language

## What Can ASP Do?

- Dynamically edit, change, or add any content of a Web page
- Respond to user queries or data submitted from HTML forms
- Access any data or databases and return the results to a browser
- Customize a Web page to make it more useful for individual users

# Chapter 9 – Server-Side Scripting Language

## What Can ASP Do?

- The advantages of using ASP instead of CGI and Perl, are those of simplicity and speed
- Provide security - since ASP code cannot be viewed from the browser
- Clever ASP programming can minimize the network traffic

# Chapter 9 – Server-Side Scripting Language

## Basic ASP Syntax

- An ASP file normally contains HTML tags, just like an HTML file.
- However, an ASP file can also contain server scripts, surrounded by the delimiters `<%` and `%>`.
- Server scripts are executed on the server, and can contain any expressions, statements, procedures, or operators valid for the scripting language you prefer to use.

# Chapter 9 – Server-Side Scripting Language

## Example ASP Syntax

```
<html>  
<body>  
  
<%  
response.write("Hello World!")  
%>  
  
</body>  
</html>
```

# Chapter 9 – Server-Side Scripting Language



## Difference between PHP and ASP

### 1. Cost

- To run ASP programs one needs IIS installed on a Windows platform server, which is not free.
- PHP programs run on Linux, which is free.

### 2. Speed

- PHP code runs faster than ASP.

# Chapter 9 – Server-Side Scripting Language

## Difference between PHP and ASP

### 3. Platform Compatibility

- PHP programs can run on various platforms like Linux, Unix, Windows and Solaris.
- ASP is mainly associated with Windows platforms.

### 4. Base Language

- PHP is based on C++ language and the syntax.
- ASP is based on Visual Basic syntax.

# Chapter 9 – Server-Side Scripting Language

## Difference between PHP and ASP

### 5. Database Connectivity

- PHP, being extremely flexible, can connect to various databases, the most popular being MySQL.
- ASP mainly uses MS-SQL.