PHP
Chapter 7 & 8

What is PHP file?

It contains text, HTML, CSS, JS, and PHP code.

Executed on the **server**, and the result is returned to the browser **as plain HTML**.

2. What can PHP do?

- **Generate** dynamic page **content**.
- **Create**, **open**, **read**, **write**, **delete**, and close **files** on the server.
- **Send** and **receive cookies**
- **Add**, **delete**, and **modify data** in the database
- **Control** user **access**
- **Encrypt** data

1. What is PHP?

- ☐ An **open source** scripting language.
- ☐ PHP **scripts** are **executed** on the **server**.
- ☐ **Free** to download and use.

3. Why PHP?

- ☐ **Runs on various platforms** (Windows, Linux, Unix, Mac OS X, etc.).
- ☐ **Compatible** with almost all **servers** used today (Apache, IIS, etc.).
- ☐ **Supports** a wide range of **databases**.
- ☐ Free.
- ☐ **Easy to learn** and runs efficiently on the server side.

PHP Header Function

The header() function sends a raw HTTP header to a client.

```php
<?php
    header('Location: http://www.example.com/');
?>
<html>
...
```

PHP include Examples

```php
// This file called footer.php
<?php
    $color='red';
    $car='BMW';

    echo "<p>Copyright &copy; 1999-" . date("Y") . " W3Schools.com</p>";
?>
```

```php
<html>
    <body>
        <h1>Welcome to my home page!</h1>
        <p>Some text.</p>
        <p>Some more text.</p>
        <?php
            include'footer.php';
            echo "I have a $color $car.";
            // after include 'footer.php' we can use the variables
        ?>
    </body>
</html>
```

include VS require

require: produces **fatal error** (E_COMPILE_ERROR), and **stops** the script

include: produces a **warning** (E_WARNING), and **continue** the script

7. The PHP Include Files

Very useful when you want to include the **same** PHP, HTML, or text **on multiple pages** in a website.

Including files **saves** a **lot of work**.

PHP
Hypertext Preprocessor

4. Alternatives to PHP

- ☐ Active Server Pages (ASP)
- ☐ Python
- ☐ Node.js
- ☐ JavaScript
- ☐ Practical extraction and Report Language (Perl)

5. PHP is an amazing and popular language!

It is powerful enough to be at the core of the biggest blogging system on the web (WordPress)!

It is deep enough to run the largest social network (Facebook)!

6. PHP Code

5. Rules for PHP Variables

- ☐ Variables start with $ sign, followed by the name of the variable.
- ☐ Variables must start with a letter or the underscore.
- ☐ Variable names are case-sensitive.

```php
<?php
    $txt = "Saudi Arabia";
    echo "I love $txt!";
    // output: I love Saudi Arabia

    $x = 5;
    $y = 4;
    echo $x + $y; // output: 9

    $x = 10.365;
    var_dump($x);
    // var_dump() return variable type, output: float

    $x = true; // boolean example
?>
```

4. PHP String and String Functions

A string is a sequence of characters, like "Hello world!".

A string can be any text inside quotes. You can use single or double quotes

```php
<?php
    $x = "Helloworld!"; // double quotes
    $y = 'Helloworld!'; // single quotes

    echo $x;
    echo "<br>";
    echo $y;

    echo strlen("Hello world!"); // output: 12
    echo str_word_count("Hello world!"); // output: 2
    echo strrev("Helloworld!"); // output: !dlrow olleH
    echo strpos("Hello world!", "world"); // output: 6
    echo str_replace("world", "Dolly", "Hello world!");
    // output: Hello Dolly!
?>
```

1. Basic PHP Syntax

A PHP script can be placed anywhere in the document.

A PHP file normally contains HTML tags, and some PHP scripting code.

```php
<!DOCTYPE html>
<html>
    <body>
        <h1>My first PHP page</h1>
        <?php
            echo "Hello World!";
        ?>
    </body>
</html>
```

2. PHP Comments

A comment in code is a line that is not read or executed as part of the program.

Purpose: to be read by someone looking at the code.

```php
<?php
    // This is a single-line comment
    # This is also a single-line comment

    /*
    This is a multiple-lines comment block
    that spans over multiple lines
    */

    // You can also use comments as part of a line
    $x = 5 /* + 15 */ + 5;
    echo $x;
?>
```

3. PHP Case Sensitivity

All keywords (like if, else, while, echo), classes, functions, **are NOT case sensitive**.

However, **variables** are **case sensitive**.

```php
<?php
    // Below are legal statements ✓
    ECHO "Hello World!<br>";
    echo "Hello World!<br>";
    EcHo "Hello World!<br>";

    $color ="red";
    echo"My car is ". $color ."<br>";  ✓
    echo"My house is ". $COLOR ."<br>";  ✗
?>
```

When to use $_GET?

When the information sent from the form can be **visible** to everyone (all variable names and values are displayed in the URL).

GET **has a limitation** on the amount of information to send; about 2000 characters.

Get VS Post

$_GET is an array of variables, passed to the current script, **via the URL parameters**.

$_POST is an array of variables, passed to the current script, **via the HTTP POST method**.

When to use $_POST?

When the information sent from the form should be **invisible** to others (all names or values are embedded within the body of the HTTP request)

Has no limits on the amount of information to send

Designed by: Soft Conclusion
YouTube link: Soft Conclusion - YouTube
Miro link: SWE-444 Miro Link