

# Server Side Languages 1

## Static vs. Dynamic

### Static

- Never (or rarely) change.
- Mostly handled by web server.
- Examples:
  - RAW HTML.
  - JavaScript
  - CSS
  - Media (Images/Video).

### Dynamic (Interactive)

- Changing content.
  - User
  - Time
  - Requests (Interactivity)
- ALWAYS (I think) passed to a server side language by the web server.

## PHP

- PHP: Hypertext Preprocessor.
- General-purpose programming language.
- First appeared in 1995 (22 years ago).
- 7.1.9 is the current stable release.
- Dynamic, weakly typed language.
- <http://php.net/>
- <https://en.wikipedia.org/wiki/PHP>
- <https://www.w3schools.com/php/default.asp>

## How do we know what to process in PHP?

```
<?php /* anything in here is php*/ ?>
```

## Variables

```
1 <?php
2 $string = "This is a string!";
3 $number = 5;
4 $array = [1, 2, 3];
5 $dictionary = ["key1" => "value1", "key2" => "value2"];
6 ?>
```

## Functions

```
1 <?php
2 function ThisIsAFunction($p1, $p2) {
3     return $p1 + $p2;
4 }
5 ?>
```

## Classes

```
1 <?php
2 class ThisIsAClass extends ParentClass {
3     public $name = "Name"; // Name.
4     protected $number = 5; // Number.
5     private $count = 0; // Count.
6
7     public __construct() {
8         parent::__construct();
9     }
10
11    public __destruct() {
12        parent::__destruct();
13    }
14
15    /**
16     * Return the count.
17     */
```

```
18 public function get_count() {
19     return $this->$count;
20 }
21 ?>
```

## Global variables

```
1 <?php
2 // ALL variables here are dictionaries.
3
4 $_GET; // Has variables passed via querystring.
5 $_POST; // Has data passed in via POST from client.
6 $_COOKIES; // Set/Get cookies. Data here is sent to/from client.
7 $_SESSION; // Set/Get session data (user's session). Data here is NEVER sent to user.
8 $_SERVER; // Environment + User information.
```

## Including files

```
1 <?php
2 require_once "path/to/file.php";
3
4 //...
5 ?>
```