Web Application development II

Data type and variables

PHP is a Loosely Typed Language

- No need to define type of variable
- PHP automatically converts the variable to the correct data type depending its value.
- Eg :
- $x = 12;

Scope

- The scope of a variable is the part of the script where the variable can be referenced/used

- Scopes
  - Local
  - Global
  - Static

Example

```php
<?php
$x = 5; // global scope

function myTest() {
    // using x inside this function will generate an error
    echo "<p>Variable x inside function is: $x</p>";

    $v =12;

    echo "<p>local variables value : $v</p>"
}
myTest();

echo "<p>Variable x outside function is: $x</p>";
?>
```

Static

```php
<?php
function myTest() {
    static $x = 0;
    echo $x;
    $x++;
}

myTest();
myTest();
myTest();
?>
```

Data Types

- PHP supports the following data types:
  - String
  - Integer
  - Float (floating point numbers - also called double)
  - Boolean
  - Array
  - Object
  - NULL
  - Resource

Example

```php
<?php
$x = 5985;
var_dump($x);
?>
```

Constants

- Constants are like variables except that once they are defined they cannot be changed or undefined.
- Syntax
  - define(*name*, *value*, *case-insensitive*)
- Constants are automatically global and can be used across the entire script.

Example

- ```php
  <?php
  define("GREETING", "Welcome to W3Schools.com!", true);
  echo greeting;
  ?>
  ```

OR

- ```php
  <?php
  define("GREETING", "Welcome to W3Schools.com!");
  echo GREETING;
  ?>
  ```