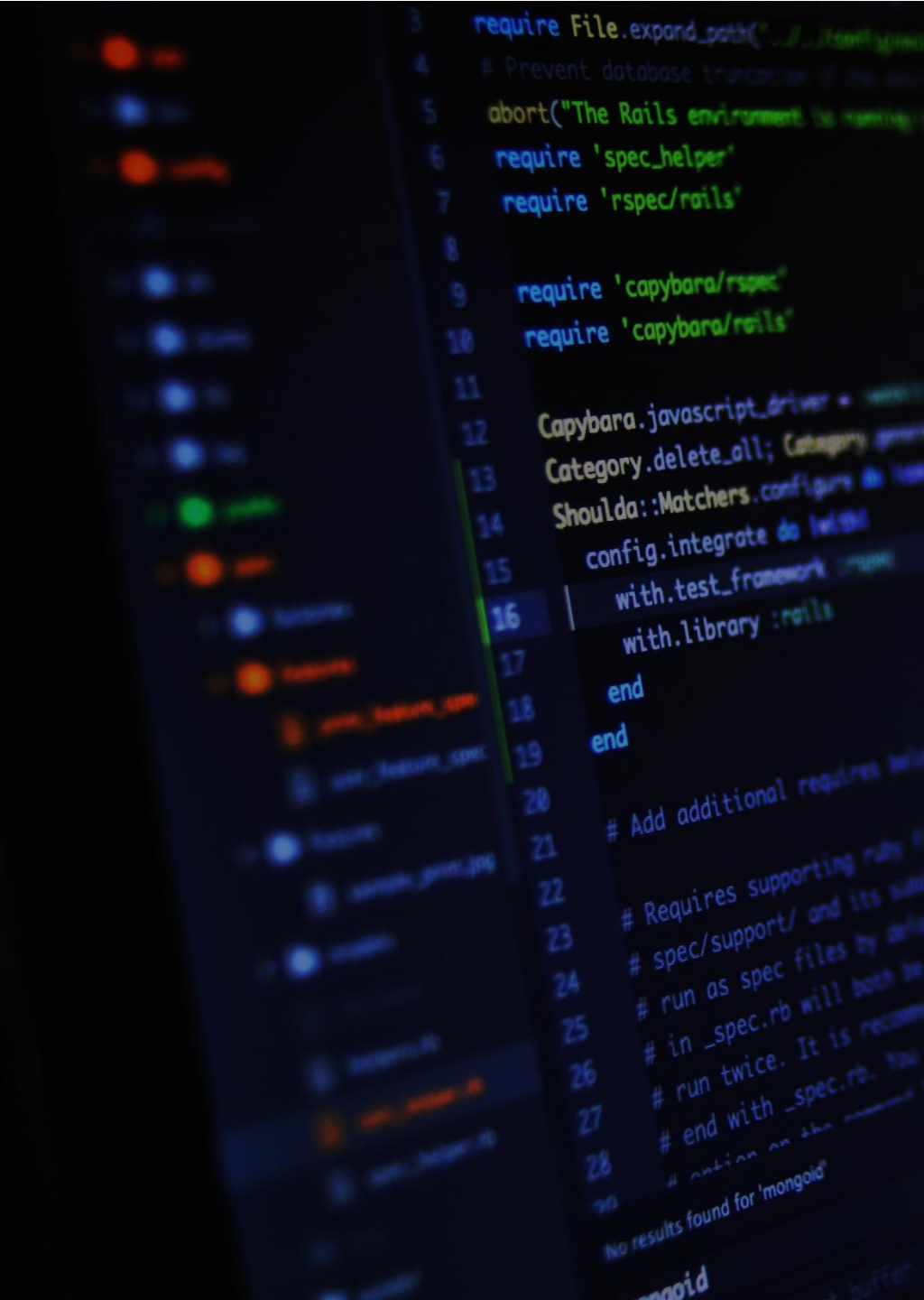


LECTURE 4

Built In Functions

WEB DEVELOPMENT 2



String Built in functions

- **strlen()**
- **Definition:** Returns the length of a string.

Example

```
$str = "Hello, World!";  
$length = strlen($str);  
echo $length; // Output: 13
```

String Built in functions

- **strpos()**
- **Definition:** Finds the position of the first occurrence of a substring in a string.

Example

```
$str = "Hello, World!";  
$position = strpos($str, "World");  
echo $position; // Output: 7
```

String Built in functions

- **substr()**
- **Definition:** Returns a part of a string.

Example

```
$str = "Hello, World!";  
$substring = substr($str, 7, 5);  
echo $substring; // Output: World
```

String Built in functions

- `str_replace()`
- **Definition:** Replaces all occurrences of a search string with a replacement string

Example

```
$str = "Hello, World!";  
$newStr = str_replace("World", "Universe", $str);  
echo $newStr; // Output: Hello, Universe!
```

String Built in functions

- **strtolower()**
- **Definition:** Converts a string to lowercase.

Example

```
$str = "Hello, World!";  
$lowercaseStr = strtolower($str);  
echo $lowercaseStr; // Output: hello, world!
```

String Built in functions

- **strtoupper()**
- **Definition:** Converts a string to uppercase.

Example

```
$str = "Hello, World!";  
$uppercaseStr = strtoupper($str);  
echo $uppercaseStr; // Output: HELLO, WORLD!
```

String Built in functions

- **trim()**
- **Definition:** Removes whitespace or other specified characters from both ends of a string.

Example

```
$str = " Hello, World! ";  
$trimmedStr = trim($str);  
echo $trimmedStr; // Output: Hello, World!
```

String Built in functions

- `md5()`
- **Definition:** Calculates the MD5 hash of a string

Example

```
$str = "Hello, World!";  
$md5Hash = md5($str);  
echo $md5Hash; // Output: b10a8db164e0754105b7a99be72e3fe5
```

String Built in functions

- `filter_var()`
- **Definition:** Filters a variable with a specified filter.

Example

```
$email = "user@example.com";
$filteredEmail = filter_var($email, FILTER_VALIDATE_EMAIL);

if ($filteredEmail !== false) {
    echo "Valid email: $filteredEmail";
} else {
    echo "Invalid email";
}
```

String Built in functions

Assignment 1:

1- search for another filters and study at least 4 validate filter

2- self learn php filter sanitize and write the different between filter sanitize and validate into a report and support your answer with examples

Arrays Built in functions

- `count()`
- **Definition:** Counts the number of elements in an array..

Example

```
$arr = [1, 2, 3, 4, 5];  
$count = count($arr);  
echo $count; // Output: 5
```

Arrays Built in functions

- `array_push()`
- **Definition:** Pushes one or more elements onto the end of an array.

Example

```
$arr = [1, 2, 3];  
array_push($arr, 4, 5);  
print_r($arr); // Output: Array ( [0] => 1 [1] => 2 [2] => 3 [3] => 4 [4] => 5 )
```

Arrays Built in functions

- `array_pop()`
- **Definition:** Pops the element off the end of an array..

Example

```
$arr = [1, 2, 3];  
$poppedElement = array_pop($arr);  
echo $poppedElement; // Output: 3
```

Arrays Built in functions

- `array_shift()`
- Definition: Shifts an element off the beginning of an array.

Example

```
$arr = [1, 2, 3];  
$shiftedElement = array_shift($arr);  
echo $shiftedElement; // Output: 1
```

Arrays Built in functions

- **array_unshift()**
- Definition: Prepends one or more elements to the beginning of an array.

Example

```
$arr = [2, 3, 4];  
array_unshift($arr, 1);  
print_r($arr); // Output: Array ( [0] => 1 [1] => 2 [2] => 3 [3] => 4 )
```

Arrays Built in functions

- `array_merge()`
- Definition: Merges two or more arrays.

Example

```
$arr1 = [1, 2];  
$arr2 = [3, 4];  
$mergedArray = array_merge($arr1, $arr2);  
print_r($mergedArray); // Output: Array ( [0] => 1 [1] => 2 [2] => 3 [3] => 4 )
```

Arrays Built in functions

- `array_reverse()`
- Definition: Reverses the order of elements in an array.

Example

```
$arr = [1, 2, 3];  
$reversedArray = array_reverse($arr);  
print_r($reversedArray); // Output: Array ( [0] => 3 [1] => 2 [2] => 1 )
```

Arrays Built in functions

- `in_array()`
- Definition: Checks if a value exists in an array.

Example

```
$arr = [1, 2, 3, 4, 5];  
$valueToCheck = 3;  
$isInArray = in_array($valueToCheck, $arr);  
echo $isInArray ? 'Yes' : 'No'; // Output: Yes
```

Assignment2: PHP Number Functions Exploration

Research and familiarize yourself with the following PHP number-related functions:

- 1.abs()
- 2.ceil()
- 3.floor()
- 4.round()
- 5.max()
- 6.min()
- 7.rand()
- 8.sqrt()

1. For each function, write a brief definition explaining its purpose and functionality.
2. Create a PHP file and implement a practical example for each function

HTML Uniform Resource Locators

A URL is another word for a web address.

A Uniform Resource Locator (URL) is used to address a document (or other data) on the web.

scheme://prefix.domain:port/path/filename

Explanation:

- **scheme** - defines the type of Internet service (most common is http or https)
- **prefix** - defines a domain prefix (default for http is www)
- **domain** - defines the Internet domain name (like w3schools.com)
- **port** - defines the port number at the host (default for http is 80)
- **path** - defines a path at the server (If omitted: the root directory of the site)
- **filename** - defines the name of a document or resource

Resources

- <https://www.w3schools.com/>
- <https://www.php.net/manual/en/index.php>
- <https://developer.mozilla.org/en-US/docs/Web/HTTP>