

LAB-6
WEB TECHNOLOGY

NAME:ELLURU AMRUTHA
REDG NUMBER : 21BCE8405

1. Design a web page to use various filters in PHP for server-side validation.

- a. Validate an integer**
- b. Validate a float variable**
- c. Validate a Boolean variable**
- d. Validate an IP address**
- e. Validate an URL**
- f. Sanitize an integer**
- g. Sanitize an IP address**
- h. Sanitize an URL**
- i. Sanitize a float variable**
- j. Sanitize a Boolean variable**

CODE:

FOR SANITIZATION:

Sanitize.html:

```
<!DOCTYPE html>

<html>

<head>

    <title>PHP Filter Validation</title>

<h1>NAME:ELLURU AMRUTHA </h1>

<h1>RED NUMBER : 21BCE8405 </h1>

<style>

    body {

        font-family: Arial, sans-serif;
```

```
margin: 0;

padding: 0;

background-color: #f2f2f2;
}

.container {

    max-width: 500px;

    margin: 0 auto;

    padding: 20px;

    background-color: #fff;

    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
}

h1 {

    text-align: center;

    margin-bottom: 20px;
}

form label {

    display: block;

    margin-bottom: 10px;
}

form input[type="text"],
form input[type="submit"] {

    width: 100%;

    padding: 10px;

    margin-bottom: 15px;

    border: 1px solid #ccc;

    border-radius: 5px;
```

```
}

form input[type="submit"] {

    background-color: #4CAF50;

    color: #fff;

    cursor: pointer;

}

form input[type="submit"]:hover {

    background-color: #45a049;

}

.error-message {

    color: #f00;

    margin-bottom: 10px;

}

.valid-message {

    color: #0a0;

    margin-bottom: 10px;

}

</style>

</head>

<body>

<h2>Enter Data to be Sanitized:</h2>

<form action="process_form_1.php" method="post">

    <label for="integer_input">Integer:</label>

    <input type="text" id="integer_input" name="integer_input" required><br>

    <label for="ip_address_input">IP Address:</label>

    <input type="text" id="ip_address_input" name="ip_address_input" required><br>
```

```
<label for="url_input">URL:</label>
```

```
<input type="text" id="url_input" name="url_input" required><br>
```

```
<label for="float_input">Float:</label>
```

```
<input type="text" id="float_input" name="float_input" required><br>
```

```
<label for="boolean_input">Boolean:</label>
```

```
<input type="text" id="boolean_input" name="boolean_input" required><br>
```

```
<input type="submit" value="Submit">
```

```
</form>
```

```
</body>
```

```
</html>
```

process_form_1.php:

```
<?php
```

```
function sanitize_integer($input_str) {
```

```
    return preg_replace('/^[^0-9]/', '', $input_str);
```

```
}
```

```
function sanitize_ip_address($ip_address) {
```

```
    preg_match('/^\b\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}\b/', $ip_address, $matches);
```

```
    return isset($matches[0]) ? $matches[0] : null;
```

```
}
```

```
function sanitize_url($url) {
```

```
    preg_match('/(https?:\\W\\S+)/', $url, $matches);
```

```
    return isset($matches[0]) ? $matches[0] : null;
```

```
}
```

```
function sanitize_float($input_str) {
```

```
    return preg_replace('/^[^0-9.]/', '', $input_str);
```

```
}
```

```
function sanitize_boolean($input_str) {  
    return strtolower($input_str) === 'true' || strtolower($input_str) === 'yes' || $input_str === '1';  
}  
  
// Check if the form was submitted  
if ($_SERVER["REQUEST_METHOD"] == "POST") {  
    // Sanitize the inputs  
    $sanitized_integer = sanitize_integer($_POST["integer_input"]);  
    $sanitized_ip_address = sanitize_ip_address($_POST["ip_address_input"]);  
    $sanitized_url = sanitize_url($_POST["url_input"]);  
    $sanitized_float = sanitize_float($_POST["float_input"]);  
    $sanitized_boolean = sanitize_boolean($_POST["boolean_input"]);  
  
    // Display the sanitized data  
    echo "<h2>Sanitized Data:</h2>";  
    echo "Sanitized Integer: " . $sanitized_integer . "<br>";  
    echo "Sanitized IP Address: " . $sanitized_ip_address . "<br>";  
    echo "Sanitized URL: " . $sanitized_url . "<br>";  
    echo "Sanitized Float: " . $sanitized_float . "<br>";  
    echo "Sanitized Boolean: " . var_export($sanitized_boolean, true) . "<br>";  
} else {  
    // If the form was not submitted, display an error message  
    echo "<h2>Error:</h2>";  
    echo "Please submit the form.";  
}  
?>
```

FOR VALIDATION:

Valid_sanitization.php:

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
  <title>PHP Filters</title>
```

```
<h1>NAME:ELLURU AMRUTHA</h1>
```

```
<h1>RED NUMBER : 21BCE8405</h1>
```

```
<style>
```

```
  body {
```

```
    font-family: Arial, sans-serif;
```

```
    margin: 0;
```

```
    padding: 0;
```

```
    background-color: #f2f2f2;
```

```
  }
```

```
  .container {
```

```
    max-width: 500px;
```

```
    margin: 0 auto;
```

```
    padding: 20px;
```

```
    background-color: #fff;
```

```
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
```

```
  }
```

```
  h1 {
```

```
text-align: center;

margin-bottom: 20px;

}
```

```
form label {

display: block;

margin-bottom: 10px;

}
```

```
form input[type="text"],
form input[type="submit"] {

width: 100%;

padding: 10px;

margin-bottom: 15px;

border: 1px solid #ccc;

border-radius: 5px;

}
```

```
form input[type="submit"] {

background-color: #4CAF50;

color: #fff;

cursor: pointer;

}
```

```
form input[type="submit"]:hover {

background-color: #45a049;
```

```
}
```

```
.error-message {
```

```
    color: #f00;
```

```
    margin-bottom: 10px;
```

```
}
```

```
.valid-message {
```

```
    color: #0a0;
```

```
    margin-bottom: 10px;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
    <div class="container">
```

```
        <h1>PHP Filters Example</h1>
```

```
        <form method="post" action="<?php echo  
htmlspecialchars($_SERVER["PHP_SELF"]); ?>">
```

```
            <label>Integer:</label>
```

```
            <input type="text" name="integer_input"><br>
```

```
            <label>Float:</label>
```

```
            <input type="text" name="float_input"><br>
```

```
            <label>Boolean:</label>
```

```
            <input type="text" name="boolean_input"><br>
```



```
<label>IP Address:</label>
```

```
<input type="text" name="ip_input"><br>
```

```
<label>URL:</label>
```

```
<input type="text" name="url_input"><br>
```

```
<input type="submit" value="Submit"><br>
```

```
</form>
```

```
<?php
```

```
if ($_SERVER["REQUEST_METHOD"] == "POST") {
```

```
    // Validate and Sanitize an integer
```

```
    if (isset($_POST['integer_input'])) {
```

```
        $integer = filter_var($_POST['integer_input'], FILTER_VALIDATE_INT);
```

```
        if ($integer === false) {
```

```
            echo "<div class='error-message'>Invalid integer input!</div>";
```

```
        } else {
```

```
            $sanitizedInteger = filter_var($integer, FILTER_SANITIZE_NUMBER_INT);
```

```
            echo "<div class='valid-message'>Valid integer: " . $sanitizedInteger . "</div>";
```

```
        }
```

```
    }
```

```
    // Validate and Sanitize a float
```

```
    if (isset($_POST['float_input'])) {
```

```
        $float = filter_var($_POST['float_input'], FILTER_VALIDATE_FLOAT);
```

```
if ($float === false) {

    echo "<div class='error-message'>Invalid float input!</div>";

} else {

    $sanitizedFloat = filter_var($float, FILTER_SANITIZE_NUMBER_FLOAT,
FILTER_FLAG_ALLOW_FRACTION);

    echo "<div class='valid-message'>Valid float: " . $sanitizedFloat . "</div>";

}

}

// Validate and Sanitize a boolean

if (isset($_POST['boolean_input'])) {

    $boolean = filter_var($_POST['boolean_input'], FILTER_VALIDATE_BOOLEAN,
FILTER_NULL_ON_FAILURE);

    if ($boolean === null) {

        echo "<div class='error-message'>Invalid boolean input!</div>";

    } else {

        echo "<div class='valid-message'>Valid boolean: " . var_export($boolean, true) .
"</div>";

    }

}

// Validate and Sanitize an IP address

if (isset($_POST['ip_input'])) {

    $ip = filter_var($_POST['ip_input'], FILTER_VALIDATE_IP);
```

```
if ($ip === false) {  
    echo "<div class='error-message'>Invalid IP address input!</div>";  
} else {  
    $sanitizedIP = filter_var($ip, FILTER_SANITIZE_STRING);  
    echo "<div class='valid-message'>Valid IP address: " . $sanitizedIP . "</div>";  
}  
}
```

// Validate and Sanitize a URL

```
if (isset($_POST['url_input'])) {  
    $url = filter_var($_POST['url_input'], FILTER_VALIDATE_URL);  
  
    if ($url === false) {  
        echo "<div class='error-message'>Invalid URL input!</div>";  
    } else {  
        $sanitizedURL = filter_var($url, FILTER_SANITIZE_URL);  
        echo "<div class='valid-message'>Valid URL: " . $sanitizedURL . "</div>";  
    }  
}  
}
```

?>

</div>

</body>

</html>

SCREENSHOT:

FOR VALIDATION:

NAME: ELLURU AMRUTHA

RED NUMBER : 21BCE8405

PHP Filters Example

Integer:

Float:

Boolean:

IP Address:

URL:

Submit

Valid integer: 123

Valid float: 8.9

Valid boolean: true

Valid IP address: 1.2.4.4

Valid URL: http://localhost/valid_sanitize.html

PHP Filters Example

Integer:

Float:

Boolean:

IP Address:

URL:

Valid integer: 123

Valid float: 8.9

Valid boolean: true

Valid IP address: 1.2.4.4

Valid URL: http://localhost/valid_sanitize.html

FOR SANITIZATION:

NAME:ELLURU AMRUTHA

RED NUMBER : 21BCE8405

Enter Data to be Sanitized:

Integer:

IP Address:

URL:

Float:

Boolean:

Sanitized Data:

Sanitized Integer: 8405

Sanitized IP Address: 1.2.3.4

Sanitized URL: http://localhost/Filter.html"

Sanitized Float: 8.9

Sanitized Boolean: true

2. Develop an web page to use various file handling function available in PHP.

CODE:

file_handler.php:

```
<?php
```

```
if (isset($_POST["submit"])) {
```

```
    $file = $_FILES["file"];
```

```
    // Check for errors during file upload
```

```
    if ($file["error"] > 0) {
```

```
        echo "Error: " . $file["error"];
```

```
    } else {
```

```
        // Move the uploaded file to a specific directory
```

```
        $targetDir = "uploads/";
```

```
        $targetFile = $targetDir . basename($file["name"]);
```

```
        move_uploaded_file($file["tmp_name"], $targetFile);
```

```
        echo "File uploaded successfully!<br>";
```

```
    // File Reading
```

```
echo "File Content:<br>";

$content = file_get_contents($targetFile);

echo nl2br($content); // nl2br to preserve line breaks in HTML
```

```
// File Writing
```

```
$newContent = "This is some new content written to the file.";

file_put_contents($targetFile, $newContent);

echo "<br>New content written to the file successfully!<br>";
```

```
// File Appending
```

```
$appendContent = "This is additional content appended to the file.";

file_put_contents($targetFile, $appendContent, FILE_APPEND);

echo "Additional content appended to the file!<br>";
```

```
}
```

```
}
```

```
?>
```

Index.html:

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>PHP File Handling</title>
```

```
<style>
```

```
body {  
  
font-family: Arial, sans-serif;  
  
background-color: #f2f2f2;  
  
margin: 0;  
  
padding: 0;  
  
}  
  
h1 {  
  
text-align: center;  
  
margin: 40px 0;  
  
color: #333;  
  
}  
  
form {  
  
max-width: 500px;  
  
margin: 0 auto;  
  
padding: 20px;  
  
background-color: #fff;  
  
border: 1px solid #ccc;  
  
border-radius: 5px;  
  
box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);  
  
}  
  
label {  
  
display: block;  
  
margin-bottom: 10px;
```



```
font-weight: bold;

color: #555;

}


input[type="file"] {

    margin-bottom: 20px;

}


input[type="submit"] {

    background-color: #4CAF50;

    color: #fff;

    padding: 10px 20px;

    border: none;

    border-radius: 4px;

    cursor: pointer;

}


input[type="submit"]:hover {

    background-color: #45a049;

}


pre {

    max-width: 500px;

    margin: 20px auto;

    padding: 20px;

    background-color: #fff;
```

```
border: 1px solid #ccc;

border-radius: 5px;

box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);

white-space: pre-wrap;

font-weight: bold;

color: #333;

}

.success {

    color: #4CAF50;

    font-weight: bold;

}

.error {

    color: #f44336;

    font-weight: bold;

}

</style>

</head>

<body>

    <h1>File Handling in PHP</h1>

    <form action="file_handler.php" method="post" enctype="multipart/form-data">

        <label for="file">Select File:</label>

        <input type="file" name="file" id="file">

        <input type="submit" value="Upload File" name="submit">

    </form>

</body>

</html>
```

</form>

</body>

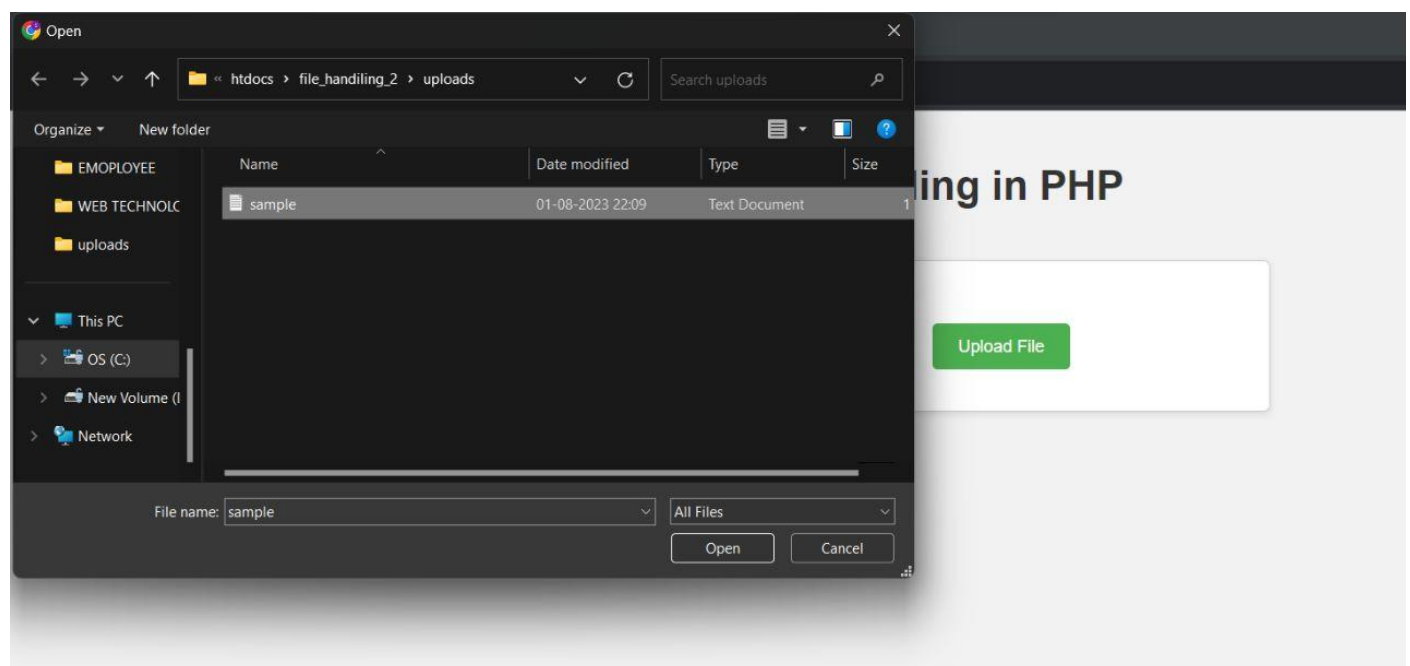
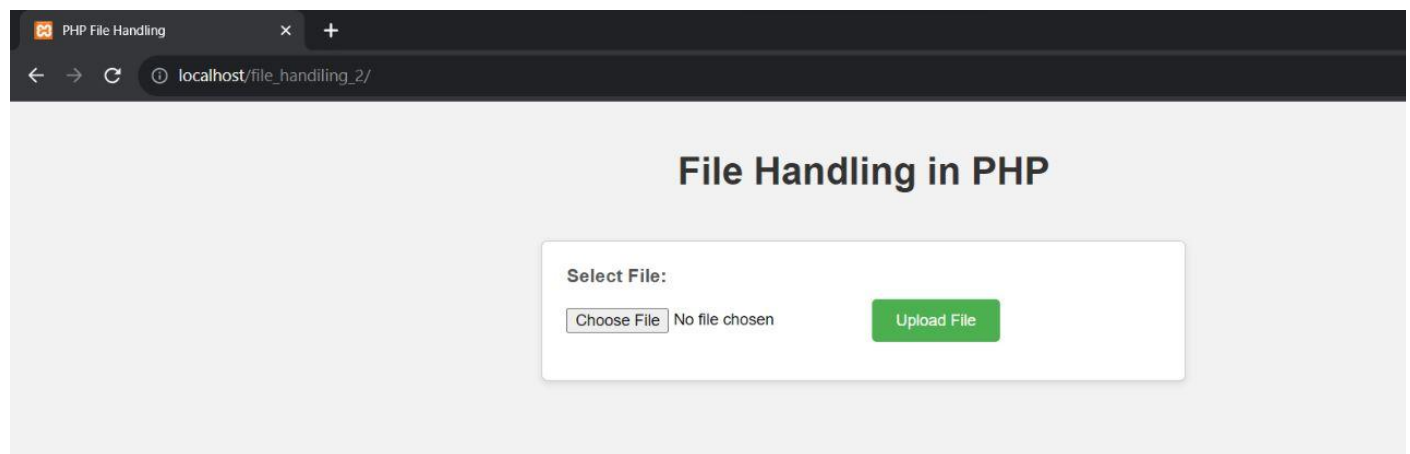
</html>

SAMPLE.TEXT:

NAME : ELLURU AMRUTHA

REDG NUMBER : 21BCE8405

SCREENSHOT:



File Handling in PHP

Select File:

Choose File sample.txt

Upload File



localhost/file_handling_2/file_handl



localhost/file_handling_2/file_handler.php

File uploaded successfully!

File Content:

NAME : ELLURU AMRUTHA

REDG NUMBER : 21BCE8405


New content written to the file successfully!

Additional content appended to the file!

> This PC > OS (C:) > xampp > htdocs > file_handling_2

Name	Date modified	Type	Size
uploads	31-07-2023 15:41	File folder	
file_handler	01-08-2023 22:09	PHP Source File	2 KB
index	01-08-2023 22:07	Chrome HTML Do...	2 KB


> This PC > OS (C:) > xampp > htdocs > file_handling_2 > uploads

 Name ^

Date modified

Type

Size

 sample

01-08-2023 22:12

Text Document

1 KB