# **Objectives**

By the end of this lab session you will be able to:

☐ Familiar with PHP basics.

## **Introduction to PHP**

- PHP is a server side scripting language. That is used to develop Static websites or Dynamic websites. PHP stands for Hypertext Pre-processor
- A PHP file can be saved with the extension ".php".
- PHP files can contain text, HTML, CSS, JavaScript, and PHP code
- PHP code are executed on the server, and the result is returned to the browser as plain HTML
- PHP can generate dynamic page content and collect form data
- PHP can create, open, read, write, delete, and close files on the server
- PHP can add, delete, modify data in your database and can be used to control user-access

# First program using PHP

```
<html>
<head>
<title>My First Program</title>
</head>
<body>
<? php

#This is a comment
echo "Hello, Welcome to PHP!!!";
?>
</body>
</html>
```

# BSc (Hons) in Information Technology Year 1, Semester II, 2018 IT1100 – Internet and Web Technologies

#### Lab Exercise 06- Introduction to PHP

## Variables in PHP

- A variable start with the \$ sign, followed by the name of the variable
- A variable name must start with a letter or the underscore character (cannot start with a number)
- Variable names are case-sensitive (\$age and \$AGE are two different variables) □ Variables can store data of different types such as integer, string and etc..
  - A string can be any text inside single or double quotes An integer data type is a non-decimal number (must have at least one digit) An integer can be either positive or negative

```
<!php
    $name = 'Saman';
    $age = 24;
    $salary = 2500.50;
    $num1 = 10;
    $num2 = 20;
    $num3 = $num1 + $num2;

print("My name is $name <br>");
print("$num1 + $num2 = $num3 <br>");
?>
```

# Php Comments.

// this is a single-line comment

# this is also a single-line comment

/\*in php

this is a multiple-lines comment block that spans over multiple lines.\*/



# **Conditional Statements Arrays in PHP**

#### If - elseif -else

# #\$d = date("D"); \$d = "Sun"; if (\$d == "Fri") echo "Have a nice weekend!"; elseif (\$d == "Sun") echo "Have a nice Sunday!"; echo "Have a nice day!";

#### For each

```
<?php
num = array(1, 2, 3, 4, 5);
foreach( $num as $value ) {
echo "Value is $value <br />";
    }
?>
```

#### Do - while

```
<?php
$x = 1;
do {
    echo "The number is: $x <br>";
    $x++;
} while ($x <= 5);
```

#### Switch - case

```
$d = date("D");
switch ($d){
case "Mon":
        echo "Today is Monday";
        break;
case "Tue":
        echo "Today is Tuesday";
        break;
        case "Wed":
        echo "Today is Wednesday";
        break;
case "Thu":
        echo "Today is Thursday";
        break;
        case "Fri":
        echo "Today is Friday";
        break:
case "Sat":
        echo "Today is Saturday";
        break;
case "Sun":
        echo "Today is Sunday";
        break:
        echo "Wonder which day is this ?";
```

In PHP, there are three types of arrays:

1. **Indexed arrays** - Arrays with a numeric index

 $\Box$  The index can be assigned automatically (index always starts at 0)  $\Box$ 

The index can be assigned manually

2. **Associative arrays** - Arrays with named keys

```
$\text{sphp}
$age = array("Bob"=>35, "Sally"=>37);
echo "Bob is " . $age["Bob"] . " years old"."<br />";
echo "Sally is " . $age["Sally"] . " years old"."<br />";
echo "<br />";

$\text{salaries}["Bob"] = 2000;
$\text{salaries}["Sally"] = 4000;

echo "Bob is being paid - " . $\text{salaries}["Bob"] . "<br />";
echo "Sally is being paid - " . $\text{salaries}["Sally"] . "<br />";
?>
```

3. **Multidimensional arrays** - Arrays containing one or more arrays

A multi-dimensional array each element in the main array can also be an array. And each element in the sub-array can be an array, and so on. Values in the multi-dimensional array are accessed using multiple index.

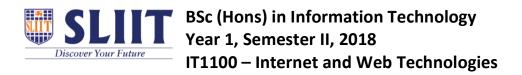
## **Functions in PHP**

- Function name should start with keyword "function" and all the PHP code should be put inside "{" and "}" braces.
- A function will not execute immediately when a page loads. A function will be executed by a call to the function.
- Function names are **NOT case-sensitive**.

#### Exercise 01:

```
<?php function student_info($student_name, $subject, $grade,)
{
echo "The Name of the student is : $student_name <br />";
echo "Subject is : $subject and $grade is : $grade";
}
?>
```

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- I. Create a php file, name it as 'gradeCreater.php', and add above code and save it.
- II. Call the function to display below output.

#### The Name of the student is Saman

### Subject is iwt and Grade is 'A'

- III. Create a global variable "classSize" and assign value 40. Change above function to print "His class size is 40", using that global variable.
- IV. Define a constant name **sliit**, change the function to print "He studies at Srilanka institute of information and technology"
- V. Write a switch statement to display students mark range. In this case it should print "He got more than 85 to IWT'.

#### Exercise 02:

Name	IWT Marks
Gamage	78
Perera	85
Vithanage	92
Wasala	55
Somarathna	77
nawarathna	82
Kalpage	33
Uduwaka	45

- Create an associated array name iwt\_marks to store above details.
- Write a function in a separate php file, with if else statements to return students grade. Call that function to display Wasla's and Kalpages grades.
- Use for loop to iterate your array and generate below output.
   (Output: Gamage: 78 marks and grade: 'A'....to Uduwaka: 45 marks and grade: 'C')

**Exercise 03:** Write a functions to convert temperature from Celsius to Fahrenheit and Fahrenheit to Celsius.

Exercise 04: Write a function to calculate the area and perimeter when the length and width are given as the input parameters. Identify whether it is a square or a rectangle.