

18BC202 WEB SCRIPTING THROUGH PHP & MYSQL

Course Description and Objectives:

This course offers the basic concepts used to develop static and dynamic web pages. It also provides the knowledge of a Web server, MYSQL, and form handling with PHP. The objective of this course is to build web applications with PHP and MYSQL database using XAMPP/WAMP tool.

Course Outcomes:

Student will be able to:

- Use different data types to design programs involving decisions, loops, and functions.
- Work with HTML forms and handling HTML forms using PHP.
- Familiar with MYSQL database and perform insert, update and delete operations on DBMS tables.
- Implement and debug programs in PHP and MYSQL for a specific application.

Skills:

- Apply control statements for decision making problems.
- Create the database tables with application related constraints (primary key, foreign key, candidate key etc...)
- Designing HTML forms with validations on them.

Activities:

- Design an application to perform various operations of a real world problem.
- Develop and design a user interface for web applications.
- Implement the Data Base-Oriented Projects like student management system, stock management systems, library management system etc...

Syllabus

UNIT – 1

12 Hours

ESSENTIALS OF PHP: Define PHP, WAMP/XAMP server installation, Creating & running first PHP script, Variables, Data types; Operators -Arithmetic Operators, Assignment Operators, Bitwise Operators, Comparison Operators, Incrementing /Decrementing Operators, Logical Operators, String Operators, Expressions, Constants.

UNIT – 2

12 Hours

DECISIONS AND LOOPS:if, if-else, else if and switch statements,Compact coding with the Ternary operator, while, do- while, for,break, continue; Strings - Creating and Accessing

Strings, Searching Strings, Replacing Text within Strings, Dealing with Upper case and Lowercase.

UNIT – 3

12 Hours

ARRAYS AND FUNCTIONS: Creating Arrays, Outputting an Entire Array with `print_r()`-Extracting a Range of Elements with `array_slice()`-Counting Elements in an Array, Arrays with `foreach` loops, Working with multidimensional arrays; Functions - Use of function, Calling functions, Writing your own functions, Defining parameters, Optional parameters and Default values, Returning values from your functions, Understanding variable scope, Writing recursive functions.

UNIT – 4

12 Hours

HANDLING HTML FORMS WITH PHP: HTML Forms, Capturing form data with PHP, Dealing with Multi-value fields, Creating file upload forms.

UNIT – 5

12 Hours

DATA BASE CONCEPTS: MySQL data types - Numeric data types, Date and Time data types, String data types; MySQL Commands - Creating a new database, Creating a table, Adding data to a table, Reading data from a table, Updating data in a table, Deleting data from a table, Deleting tables and databases, Retrieving data with `select`; Connecting to MySQL from PHP, Manipulating MySQL data with PHP - Inserting records, Updating records, Deleting records.

List of Experiments:

1. Create a PHP webpage and print “hello world”.
2. Write a PHP program to swap two numbers without using third variable.
3. Write a Program to check and print whether a given number is even or odd.
4. Write a program to compute net amount from the given quantity purchased and rate per quantity. Discount @10% is allowed if the quantity purchased exceeds 100.
5. Write a program to find largest among three numbers using conditional operator and ternary operators.
6. Write a program to print sum of digits of a given number. (using while loop)
7. Write a program to print Fibonacci series upto a given number.
8. Write a program to enter numbers till the user wants. At the end it should display the count of positive, negative and zeros entered. (Using do-while loop)
9. Write a PHP Program to demonstrate the variable function: `GetType()` and `Settype()`.
10. Write a PHP Program to demonstrate the variable unction: `isset()` and `unset()`.
11. Write a function `countWords ($str)` that takes any string of characters and finds the Number of times each word occurs. You should ignore the distinction between capital and lowercase letters.
12. Create a form with one text field and submit buttons for string length, string reverse and uppercase, lowercase, string replace. Display the result accordingly.
13. Write a Menu-Driven program to implement a calculator which performs only addition, subtraction, multiplication and division. The operation should happen based on the user choice. (use switch case).

14. Write a function to swap two string values using call by value and call by references.
15. Write a program that will accept an array of integers as input, and output an array where for each item in the source array, the new array will perform the following operations:
 - For even numbers divide by 2
 - For odd numbers multiply by 3
16. Write a program that create a file and write contents to it and display it. Then append some data to it.
17. Create a login form with two text fields called “login” and “password”. When user enters “Galgotias” as a user name and “university” as a password it should be redirected to a Welcome.HTML page or to Sorry.HTML in case of wrong username/password.
18. Write a PHP program using Java Script to convert the decimal number to its binary equivalent. You must use a form to accept the number from the user.
19. Write a PHP code that define class Student with attributes RollNo, Name, Branch, and Year, create 3 instances of it, sets the values of each instance appropriately and print the values of all attributes.
20. Write a function calculateAverage () which takes four int arguments which are marks for four courses in the semester and returns their average as a float. The calculateAverage () function should take only valid range for marks which is between 0 - 100. If the marks are out of range is should throw an OutOfRangeException and handles it.
21. Create a form with a text box asking to enter your favorite city with a submit button when the user enters the city and clicks the submit button another php page should be opened displaying “Welcome to the city”.
22. Write a PHP program that demonstrate form element(input elements).
23. Write a PHP program to create a database using MySQL.
24. Write a PHP program to drop a database using MySQL.
25. Write a PHP program to create a table in MySQL.
26. Write a PHP program to insert record into a table using MySQL.
27. Write a PHP program to drop table using MySQL.
28. Write a program to update table.
29. Write a PHP program to select data and show into table format.
30. Create a student Registration in PHP and Save and Display the student Records
31. Write a program to read customer information like c_no, c_name, item_purchased and mob_no from customer table and display all this information in table format on output screen.
32. Write PHP code to upload image.
33. Write a program that displays a different message based on time of day. For example page should display “Good Morning” if it is accessed in the morning.

Text Book:

Matt Doyle, “Beginning PHP 5.3”, 1st Edition, Wiley Publishing, Inc., 2010.

Reference Book:

Kevin Tatroe, Peter MacIntyre, and RasmusLerdorf, “Programming PHP”, 3rd Edition, 2013.