

PHP PROGRAMMING COURSE OUTLINE AND MODULE

WEEK 1 :

1. Getting Started With PHP

1.1 Introduction and Overview

1.2 Installing Local Host

1.3 Lexical Structure Of PHP

1.3.1 PHP Syntax

1.3.2 PHP Comments

2. PHP Variables

2.1 Variables

2.2 Constants

2.3 Static Variables

3. PHP Data Types

3.1 Introduction & Overview

3.2 PHP Strings

3.3 PHP String Operations & Functions (strlen(), substr(), strpos(), replace(), implode(), explode(), trim(), strtoupper(), strtolower())

3.4 PHP Numbers

3.5 Performing Arithmetic Operation in PHP

3.6 Heredoc

3.7 Nowdoc

3.8 Type Casting & Juggling

4. PHP Operators/Operations

4.1 Arithmetic Operators

4.2 Assignment Operators

4.3 Logical Operators

4.4 Comparison Operators

4.5 Conditional Assignment Operators

4.5.1 Ternary Operator(?:)

4.5.2 Null Coalescing Operator(??)

4.5.3 Spaceship Operator(↔)

5.PHP Control Flow

5.1 if

5.2 if else

5.3 if elseif

5.4 switch

5.5 Loops

5.5.1 while

5.5.2 for

5.5.3 do while

5.5.4 foreach

5.5.5 break

5.5.6 continue

WEEK 2 :

6.PHP Functions

6.1 Introduction & Overview

6.2 Function Parameters

6.3 Scope of Variables

6.3.1 Local Scope

6.3.2 Global Scope

6.4 Default Parameters

6.5 Named Arguments

6.6 Type Hints

6.7 Strict Typing

6.8 Variadic Functions

6.9 Anonymous Functions

6.10 Arrow Functions

6.11 Variable Function

6.12 Splat Operator

7.PHP Arrays

7.1 Introduction & Overview

7.2 Associative Arrays

7.3 Iterating Through Arrays

7.4 Multidimensional Arrays

7.5 Sorting Arrays(sort(), rsort(), asort(), usort(), ksort(), etc)

7.6 Array Methods

7.6.1 Manipulating Array Methods(array_push(), array_pop(), array_shift(), array_unshift(), array_shift(), array_reverse(), array_merge(), array_key_count() etc.)

7.6.2 Map Array Elements : array_map()

7.6.3 Filter Array Elements : array_filter()

7.6.4 Reduce Array Elements : array_reduce()

7.7 PHP Array Destructuring

8.PHP Date & Time

WEEK 3:

9.Regular Expressions(REGEX)

9.1 Introduction & Overview

- 9.2 preg_match()
- 9.3 preg_match_all()
- 9.4 preg_replace()
- 9.5 REGEX Character Classes
- 9.6 REGEX Modifiers
- 9.7 Set & Ranges
- 9.8 REGEX Quantifiers
- 9.9 REGEX Grouping
- 9.10 REGEX Alternation
- 9.11 REGEX Lookahead & Lookbehind

10.PHP State Management

- 10.1 Session
- 10.2 Cookies

11.PHP Super Global Variables

- 11.1 \$GLOBALS
- 11.2 \$_SERVER
- 11.3 \$_REQUEST
- 11.4 \$_POST
- 11.5 \$_GET
- 11.6 \$_FILES
- 11.7 \$_ENV
- 11.8 \$_COOKIE
- 11.9 \$_SESSION

WEEK 4 :

12.PHP FORMS

12.1 PHP Form Handling

12.1.1 \$_GET

12.1.2 \$_POST

12.1.3 \$_REQUEST

12.1.4 \$_SERVER

12.1.5 PHP Filter Operation (filter_var(), filter_input(), filter_has_var())

12.2 PHP Form Validation

12.3 A Typical Signup Page With PHP

12.4 A Typical Login Page With PHP

WEEK 5 & 6:

13. PHP FILE OPERATIONS

13.1 Introduction & Overview

13.2 Include & Require Files

13.3 PHP File Handling

13.3.1 Open A File : fopen()

13.3.2 Read A File(readFile(), fgets(), file_get_contents(), fread())

13.3.3 Create File – Create/Write

13.4 Download File

13.5 Delete A File

13.6 File Upload

14. PHP Object Oriented Programming(OOP)

14.1 Introduction & Overview

14.2 Objects & Classes

14.3 Access Modifiers

14.4 Constructor & Modifiers

14.5 Typed & ReadOnly Properties

14.6 Inheritance

14.7 Abstract Classes

14.8 Interfaces

14.9 Polymorphism

14.10 Traits

14.11 Static Methods & Properties

14.12 PHP Magic Methods

14.13 Namespaces

14.14 PHP Exceptions & Exception Handling

14.14.1 try....catch statement

14.14.2 Throw an Exception

14.14.3 PHP Built-in Exception Classes(ErrorException, Logic Exception, InvalidArgumentException)

14.14.4 Exception Object Properties & Methods(getCode(),getFile(),getMessage())

14.14.5 Set an Exception Handler

WEEK 7 & 8 :

15.PHP Data Object(PDO) & Database Management

15.1 Introduction & Overview

15.2 Connect MySQL

15.3 Working with MySQL

15.3.1 Create Data Base(Create DB)

15.3.2 Create Table

15.3.3 Statements(Select, Select Distinct, Delete, Group By, Select Into, Case, Update)

15.3.4 Clause(Where, Join, Having)

15.3.5 Operators(And, Or, Not, Like, In, Not, Union, All)

15.3.6 Functions(count(), avg(), sum(), null, cast(), substring_index, substr, str(), repeat(), reverse, rtrim(), locate(), left(), field() etc)

15.3.7 CRUD Operation

15.4 Fetching Data

15.5 Managing Transactions in PDO

WEEK 9:

16. Bringing It All Together, Real-Life Application Classes & Project Assessment

16.1 Create A Fully Functional Students Portal for A School

16.2 Create an Offline Web Application : This Web Application will have a functionality for recording new supplies, Expenses, daily sales, compute daily, weekly, monthly, quarterly and yearly profit/loss and perform other basic Accounting/bookkeeping operations.

17.A Basic Introduction to Laravel

