## Training Objectives: -

This training is designed so that participants will effectively learn to use both PHP and MySql in creating advanced web applications that are efficient and secure. The MySql database and PHP programming language provide a powerful, open, and free platform for developing database-driven Web sites.

DURATION: 4 WEEKS (80 Hours) FEE : RS. 6000/-(Inclusive of Service .Tax)\* ELIGIBILITY: B.E / B.TECH. in CS/IT/EC/EI/ IInd/ IIIrd/ IVth Year Students or MCA/M.Sc (IT/CS/Electronics), Diploma in any Stream Form Fee Rs 50.00 Extra

#### How to Apply:

For Admission, submit your college reference/training letter along with fee of Rs 6000 (either in Cash or Demand Draft in favour of "**NIELIT, Gorakhpur**". The application form may be downloaded from our website or collected from reception

## Accommodation:

Hostel accommodation is available for Male candidates only.

**Training Highlights:** 

- Well Managed Course pattern
- Daily Handouts & Lab Exercise
- Industry Compliant Syllabus
- Use of Latest Tools & Technology
- LAB Assistance

## **Course Contents (Syllabus of Training)**

## Module I

Introducing PHP and MySQL, Server-Side, Applications, The PHP Story, History, Features, The MySQL Story, History, Features, PHP and MySQL: Architecture, Sample Applications.

## **Module II**

Setting Up a PHP-MySQL Development Environment, Installing and Configuring the Software, Installing on UNIX, Installing on Windows, Testing the Software, Testing MySQL, Testing Apache, Testing Apache and PHP,Performing Postinstallation Steps, Setting the MySQL Super-User Password.

## **Module III**

Using Variables, Statements, and Operators, Embedding PHP in HTML, Writing Statements and Comments, Storing Values in Variables, Assigning and Using Variable Values, Saving Form Input in Variables, Understanding Simple Data Types, Detecting the Data Type of a Variable, Using Operators to Manipulate and Compare Variables, Using Arithmetic Operators, Using String Operators, Using Comparison Operators, Using Logical Operators, Using the Auto-Increment and Auto-Decrement Operators, Understanding Operator Precedence.

#### Module IV:

Using Conditional Statements and Loops, Adding Decision-Making Capabilities with Conditional Statements, Using the if() Statement, Using the switch() Statement, Nesting Conditional Statements, Merging Forms and Their Result Pages with Conditional Statements, Repeating Actions with Loops, Using the while() Loop, Using the do() Loop, Using the for() Loop, Controlling Loop Iteration with break and continue.

## Module V:

Using Arrays and Custom Functions, Using Arrays to Group Related Values, Creating an Array, Modifying Array Elements, Processing Arrays with Loops, Grouping Form Selections with Arrays, Using Array Functions, Creating User-Defined Functions, Defining and Invoking Functions, Using Arguments and Return Values, Defining Global and Local Variables, Importing Function Definitions.

## **Module VI**

Using Files, Sessions, Cookies, and External Programs, Reading and Writing Files, Reading Data from a File, Writing Data to a File, Testing File

Attributes, Obtaining Directory Listings, Managing Sessions and Using Session Variables, Creating a Session and Registering Session Variables, Destroying a Session, Storing Data in Cookies, Setting Cookies, Retrieving Cookie Data, Deleting Cookies, Dealing with Dates and Times, Executing External Programs.

## Module VII

Sample Application: Session-Based Shopping Cart, Understanding Requirements, Retrieving Catalog Data, Creating the Shopping Cart, Calculating Costs, Handling Cart Updates.

## **Module VIII**

Understanding an RDBMS, Understanding a Relational Database, Understanding Tables, Records, and Fields, Understanding Primary and Foreign Keys, Understanding SQL and SQL Queries, Understanding Database Normalization, Using the MySQL Command-Line Client, Interacting with MySQL Through a Graphical Client.

## **Module IX**

Working with Databases and Tables, Creating Databases, Creating Tables, Specifying Field Data Types, Selecting the Most Appropriate Data Type, Adding Field Modifiers and Keys, Selecting a Table Type, Altering Tables, Altering Table and Field Names, Altering Field Properties, Adding and Removing Fields and Keys, Altering Table Types, Backing Up and Restoring Databases and Tables, Backing Up Databases and Tables, Restoring Databases and Tables from Backup, Dropping Databases and Tables, Viewing Database, Table, and Field Information.

## **Module X**

Editing Records and Performing Queries, Inserting Records, Editing and Deleting Records, Performing Queries, Retrieving Specific Columns, Filtering Records with a WHERE Clause, Using Operators, Sorting Records and Eliminating Duplicates, Limiting Results, Using Built-In Functions, Grouping Records, Joining Tables, Using Subqueries.

## Module XI

Using the MySQL Security System, Understanding the Need for Access Control, Understanding How MySQL Access Control Works, Assigning, Revoking, and Viewing User Privileges, Working with User Accounts and Password, Creating and Removing User Accounts, Altering User Passwords.

## **Module XII**

Sample Application: Order Tracking System, Understanding Requirements, Creating an Optimized Database Design, Designing the Customer Tables, Designing the Product Tables, Designing the Order Table, Creating and Populating the Tables, Querying the Database.

## **Module XIII**

Using PHP with MySQL, Querying a MySQL Database with PHP, Using MySQL and PHP Together, Managing Database Connections, Performing Queries, Processing Result Sets. Module XIV

Validating User Input, Setting Input Constraints at the Database Layer, Using the NULL Modifier, Using the UNIQUE Modifier, Using Field Data Types, Validating Input at the Application Layer, Checking for Required Values, Restricting the Size of Input Data, Checking the Type of Input Data, Checking for Illegal Input Values, Validating Dates, Validating Multiple-Choice Input, Matching Patterns.

Module XV (Project)

**CONTACT FOR INFORMATION:** 

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# SUMMER TRAINING in "Web Development using PHP and MySQL (WAMP)"



## **ORGANIZED BY**

राष्ट्रीय इलेक्ट्रॉनिकी एवं सूचना प्रौदयोगिकी संस्थान,

गोरखपुर

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Project