



## Core PHP

### Introducing

- The origin of PHP
- PHP for web Development & Web Application
- PHP History
- Features of PHP
- How PHP works with the server
- What is server & how it works

### Installing & Configuring PHP

- PHP installation
- MySQL installation
- Apache installation
- WAMP/ Xampp installation
- Installing & Configuring PHP on windows
- How to design PHP application using Dreamweaver/Notepad++
- Creating variables
- Working with data types
- Working with Arrays
- Creating & using Functions
- Creating & clients-side validations

### PHP input mechanism

- From interpretations
- Understanding GET, POST, REQUEST master child page concept

### PHP output mechanism

- Working with ECHO, PRINTO, PRINTFO

### Language basics

- Creating a simple PHP script
- Naming variables
- Assigning and displaying variables values
- Crating variables
- Displaying variable values
- Writing your first script that uses variables
- Using variable variables
- Removing variables
- Understanding DATA types
- Assigning DATA types

### Introducing of PHP keywords

- Comments

### Operators & expressions

- Airthmetic, assignment, comparison, logical operators
- Connection, bitwise, error, suppression, increment & decrement operators

### Working with flow control through control statement



- Ternary operator
- If-else
- If-else ladder
- If-elseif-else
- Switch

### **Working with flow control through loop statement**

- For
- While
- Do-while
- For each
- Nesting of loops

### **Array with PHP**

- What is an array?
- Creating & working with arrays
- Creating arrays
- Viewing arrays
- Modifying arrays
- Removing values from arrays
- Sorting arrays
- Walking through an arrays
- Traversing an array manually
- Using for each to walkthrough an array
- Finding array size
- Converting arrays into strings(and vice versa)
- Splitting & merging arrays
- Exchanging keys and values
- Multidimensional arrays

- Creating multidimensional arrays
- Viewing multidimensional Arrays
- Using multidimensional arrays in statements
- Walking through a multi-dimensional array
- Built-in PHP arrays

### **Using string in PHP**

- Introduction to strings
- Creating and working with strings
- Creating strings
- Viewing strings
- Modifying
- Introduction of function
- Working with string function

### **PHP function**

- Defining functions
- Using variables in functions
- Passing values to functions
- Nesting of functions
- Anonymous functions
- Recursion
- Returning a value from function
- Using built-in functions
- Defining user functions



- Passing parameter (call by value & call by reference) & return value
- Trends of PHP functions (missing parameter formal parameter declaration)
- Importing content of one page into another

- Triggers
- SQL Injections
- Prevention of SQL Injections
- MINI TASK? Creating Registration form
- MINI TASK? Creating Login & Profile page
- MINI TASK? Creating Update & Delete page

## Database management (MySQL)

- Introduction to DBMS
- DBMS Vs RDBMS keys
- Normalization
- DML, DDL, DCL
- Introduction to MySQL
- Database engines in MySQL
- Performing dynamic functions using MySQL
- Using MySQL on the web
- Adding table to a database
- Creating a table
- Connecting to a database server
- Using database queries for accessing & manipulating data from database
- Opening database connecting/ closing database connection
- Select/insert/Delete and Update
- Database from forms
- Database Functions
- Joins
- Constraints

## State management

- Introduction to Query Strings
- Working With Query Strings
- Receiving data from Query String
- MINI TASK? Fetching data from Database by Query String
- Introduction to COOKIES
- Creating Cookies
- Using Cookies
- MINI TASK? Creating Cookies based authentication module
- Introduction to Session
- Starting a Session.
- Working With Session Variables.
- Destroying Session
- Passing Session Ids
- MINI TASK? Creating a Session based Login form

## Advance PHP

### File handling in PHP





- File Streams(Input, Output, Temp)
- Creating and deleting a file.
- Reading and writing test files.
- Checking for existence of file.
- Determining file size
- Opening a file for writing, reading or appending
- Writing data to the file.
- Reading characters.
- Checking existence of file
- Sending the pointer to a particular location in a file
- Finding the current location of a pointer
- Check whether file contents end or not
- Locate the pointer at the beginning of file
- File locking
- MINI TASK? Creating PDF with PHP

### **Creating web features**

- Redirecting users to other pages
- Creating an Email
- Sending an Email
- Configuring Email
- File Uploading and file Downloading
- MINI TASK? Creating a Mail Interface with PHP

### **Object oriented programming**

- Introduction Object-Oriented programming
- Objects and classes
- Properties & Methods
- Encapsulation
- Inheritance(Single, Multilevel, Multiple, Hybrid, Hierarchical)
- Developing an Object-Oriented program
- Selecting properties and methods for each object
- Defining a class
- Using \$this
- Adding methods
- Destroying Objects
- Constructor & Destructor
- Final class
- Using Access Specifies(public, private & protected)
- Polymorphism(Over Loading & Over Riding)
- Abstraction
- Abstract class
- Traits
- Magic Methods
- MINI TASK? Creating a OOPs based simple PHP Application

### **Error & exception handling**

- Introduction to error



- Types of error
- Introduction to Exception handling
- Using try/catch/throw
- Checked & Unchecked Exception
- Creating Custom exception
- MINII TASK? Creating a secure web page

### Creating Security Using PHP

- Introduction to ENCRYPTION
- Encrypting Functions
- Key Encryption
- Creating Header Authentication
- HTTP Authentication
- MINI TASK? Create a secure web page

### Regular expression

- Introduction to Regular Expression
- Prig & erg function
- Email validation
- String pattern matching
- PCRE expression
- POSIX expression
- MINI TASK? Creating Searching or validation programs

### Ajax

- Introduction to AJAX
- Understanding XMLHTTPREQUEST object
- Working with Ajax function
- Integrating AJAX with HTML
- Integrating AJAX with PHP
- MINI TASK? Fetching data from database using Ajax

### Payment gateway integration

- Introduction to payment Gateways
- How to integrate payment Gateway with PHP application
- MINI TASK? Integrating Dummy payment Gateway

### Web services in PHP

- Introduction to web services
- Introduction to XML
- Creating XML pages
- Introduction to JSON
- Creating SOAP based web service
- Consuming REST based web service
- MINI TASK? Database manipulation using web services