

PHP: Software Training Employability Programme

Duration: 300Hours

Prerequisites

- There are no Pre-requisites for this course.
- A Basic Knowledge of Programming Language is Advantageous.

Basic Foundation Course

1. Programming Basics

- Fundamentals of Computer
- Understanding Applications
- Using Windows Explorer & File Structure
- Number Systems
- Application Software

2. C Language

- Introduction to C
- Keywords, Constants and Variables
- Data Types in C
- Operator and Expressions
- Control Structure
- Functions
- Pointers
- Arrays
- Structure
- String Handling
- Preprocessor Directives
- File Management in C
- Dynamic Memory Allocation

3. Object Oriented Concepts using C++

- Introduction to OOPs
- Beginning with C++
- Class, Objects Basics
- Constructor, Data Members
- Operator Overloading
- Inheritance
- Polymorphism
- Overriding

4. Operating System & Networking

- Need for operating system

- Functions of Operating System
- Process Management
- Memory Management
- File Management and
- Device Management
- Types of operating system
- TCP/IP fundamentals
- Networks and computer networks
- 2 tier, 3 tier and n-tier architecture

5. Linux Foundations

- Introduction to UNIX and its flavors
- UNIX architecture
- File System
- User and Group Policies
- Unix general commands
- Concept of Files and Directories in Unix
- File Permission and related commands
- Filter Commands and their options
- Vi Editor

6. Introduction to Database Management Systems

- Introduction to Database
- DBMS, RDBMS, ORDBMS
- DDL, DML, DCL, TCL
- Data types
- SELECT Statement
- Restricting and Sorting Data
- Aggregating Data using Group Functions
- Manipulating Data
- Sub queries
- Important Functions
- Joins and different types

Front End Technology

HTML

1. Introduction and Basic Structure of HTML
2. Basics, Elements, Attributes
3. Paragraphs and Formatting
4. HTML Skeleton, Links, Images
5. HTML Tables, Blocks
6. HTML Lists, Quick List

7. HTML Blocks
8. HTML Layouts & Forms, IFrames
9. HTML Colors
10. HTML5 Intro
11. HTML5 Video&HTML5 Audio
12. HTML5 Input Types
13. HTML5 Form Attributes

CSS

1. Introduction
2. Syntax
3. Id & Class
4. Backgrounds
5. Text and Fonts
6. Links and Lists
7. Box Model

8. Advanced Topics
 - Dimensions, Display
 - Positioning, Floating
 - Align
9. CSS3 Borders
10. CSS3 Backgrounds
11. CSS3 Text Effects
12. CSS3 Fonts

JavaScript& JQuery

1. JavaScript
 - Introduction
 - Statements & Comments
 - Variables
 - Operators and Comparisons
 - Conditional Statements and Loops
 - User Defined Functions
 - JS Objects
 - JS Validations
2. JQuery
 - Introduction
 - JQuery Syntax

- jquery Selectors
3. jquery Events
4. jquery Effects
 - jquery Hide/Show
 - jquery Fade
 - jquery Slide
 - jquery Stop()
 - jquery callback
5. jquery HTML
 - jquery Get/Set
 - jquery Add/Remove
 - jquery CSS Classes

Bootstrap

1. What is Bootstrap and its Setup
2. How to Create a Layout in Bootstrap
 - Grid Classes
3. Basic Tags in Bootstrap
 - Contextual colors and backgrounds
4. Table in Bootstrap
 - Bootstrap Basic Tables
 - Striped Rows, Hover Rows
 - Bordered Table, Condensed Table
 - Contextual Classes
 - Responsive Tables
5. Navigation bar in Bootstrap
 - Inverted Navigation Bar
 - Fixed Navigation Bar
 - Navigation Bar with Dropdown

- Right-aligned Navigation Bar
- Collapsing the Navigation Bar
6. Form in Bootstrap
 - Vertical Form
 - Horizontal Form
 - Inline Form
7. Buttons in Bootstrap
 - Button Styles
 - Button Sizes
 - Block Level Buttons
 - Active/Disabled Buttons
8. Images in Bootstrap
 - Rounded Corners Image
 - Circle Image
 - Thumbnail Image

Back End Technology

Core PHP

1. PHP Introduction

- Introduction of Web Application
- Client-Server Architecture
- What is Open source ?
- Why PHP ?

2. installation

- Installation Of PHP, MySQL And Apache. (XAMPP Tool)
- Installation Of Adobe Dreamweaver.

3. PHP Fundamentals

- Syntax Overview
- Data types
- Variables
- Constants
- Expressions
- Operator Types

4. Control structures

- Conditional statements
- Loops

5. PHP Functions

- What is Function ?
- Function syntax
- Built in Functions
- Include and Include_once
- Require and require_once
- Header Function
- DateFunations
- User defined Functions

6. Arrays

- Array Introduction
- Syntax of Array
- Types of Array
- Predefined Array Functions

7. Strings

- Syntax of String
- Predefined String Functions

8. Working with Forms and Validations

- Retrieve value of form – PHP GET & PHP POST
- PHP Form Validation

9. Working with Sessions

- introduction
- Create session
- Retrieve session
- Destroy session

10. Working with Cookies

- Introduction
- Create cookies
- Retrieve cookies
- Delete cookies

11. OOPS with PHP overview

- Introduction
- Objects
- Class
- \$this Keyword
- Access Modifiers (Public , private,protected)
- Constructor
- Destructor
- Parent:: and self:: keyword
- Static properties and methods
- Constant datamenbrs
- Inheritance
- Polymorphism
- Interface
- Abstract class and method
- Final
- Magic methods
 - set
 - get
 - call
 - autoload

12. AJAX

- Introduction
- XMLHttpRequest
- Create Object
- Request
- Response
- readyState

13. File Handling & Emails

- File Handling, File uploading
- Open , read and closing file
- Create and write file
- Sending mails using PHP

14. PHP and XML

Database MYSQL

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| 1. Introduction of DBMS and RDBMS | 7. Handling Query Results |
| 2. Connection with Database | 8. Handling Query Errors |
| 3. DDL Operations (create ,alter , drop ,truncate/empty) | 9. Joins |
| 4. DML Operations (insert,update,delete) | 10. order By and Groupby |
| 5. DQL Operations (select) | 11. Like Patterns |
| 6. Executing queries | 12. Stored Procedure |
| | 13. Practice Application with Database Integration |

Content Management System (CMS)

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|--|---|
| 1. Joomla | 2. Wordpress |
| <ul style="list-style-type: none">• What is CMS?• What is Joomla?• Installation of Joomla• How to create menus and submenus?• Joomla Modules<ul style="list-style-type: none">▪ How to install ready-made Modules?▪ How to create own module using Blank Module?• Joomla Components<ul style="list-style-type: none">▪ How to use Component?▪ How to create own component using Blank Component?• How to install Template? | <ul style="list-style-type: none">• What is CMS?• What is Wordpress?• Features Of Wordpress• What is Plugins? What is Widgets ?• Installation Of Wordpress• How to install pages and posts?• How to Active widgets?• How to install plugins?• How to install wordpress theme? |

PHP Framework

1. **CODEIGNITER Framework**
 - Introduction and MVC Architecture
 - CodeIgniter URLs
 - Creating a Controller
 - Creating a View
 - Creating a Model
 - Working with Helpers
 - URL Helper
 - Form Helper
 - Download Helper
 - Cookie Helper
 - Email Helper
 - Working With Libraries
 - Database Library
 - Session Library
 - File Upload Library
 - Ajax Implementation

ProjectWork

- ❖ User Login and Registration site
- ❖ Create a Blogging site using CMS
- ❖ Building an E commerce site in PHP

Aptitude & Reasoning

1. Quantitative Aptitude

- Number Systems
- LCM and HCF
- Percentages
- Profit, Loss and Discount
- Interest (Simple and Compound)
- Speed, Time and Distance
- Ratio and Proportion
- Probability
- Permutation & Combination
- Time and Work

2. Logical Reasoning

- Number and Letter Series
- Calendars
- Clocks
- Logical Sequence
- Blood Relations

3. Algebra

- Linear Equations
- Calendars
- Clocks
- Logical Sequence
- Blood Relations

Soft Skills

1. Self-Analysis

- Know yourself
- Personality types
- Areas of interest

2. Self-Discovery

- SWOT Analysis – strength, weakness, opportunities, threats

3. Goal Setting

- Short-term plan
- Long-term plan
- Effective Time Management

4. Effective Self Presentation

- Personal grooming
- Dressing,
- Hygiene

5. Effective Communication

- Verbal – Language
- Voice modulation - Tone, Pitch
- Clarity of Speech
- Listening skills
- Written communication – general business correspondence

6. Email Etiquette

7. Body Language

- Understanding non-verbal communication
- Postures, Gestures, Eye contact

8. Resume Writing

9. Tips for Group Discussion

10. Handling Telephonic interview

11. Mock – Technical interview

12. Mock – Personal interview (PI)

13. Office Etiquettes and Mannerisms
