PHP Course Outline for Beginners

PHP is a server-side scripting language designed for web development. It was originally created by Rasmus Lerdorf in 1994. The name "PHP" stands for "Hypertext Preprocessor". PHP is popular for its simplicity and ease of use. It has been used in many large websites, such as Facebook, Google and Yahoo!

Course Description

PHP is a popular scripting language that enables developers to create dynamic web applications. PHP is used by millions of websites and is a widely-used language for creating dynamic web content. In this course, you will learn how to create a basic PHP web application.

This course will cover the basic syntax of PHP up to the different types of loops supported by the language.

Why PHP?

There are many reasons why students should study PHP. PHP is a popular language for web development and can be used to create dynamic and interactive websites. PHP is also a relatively easy language to learn, making it a good choice for beginners. Finally, PHP is versatile and can be used to create a wide range of applications. All of which make it an ideal language for students looking to pursue a career in web development or software development.

Check out the following reason why you should learn PHP:

- Compatible with almost all servers used nowadays
- PHP will run on most platforms
- PHP supports such a wide range of databases
- PHP is free to download and open source
- Easy to learn & large community

Course Objectives and Goals

- Explain the importance of computer programming
- Enumerate the tools for computer programming;
- Differentiate between compiler and interpreter;
- Enumerate the features of PHP and how it works
- Explain each part of a PHP Program Basic Structure
- Demonstrate essential understanding on PHP decision control structures
- Demonstrate essential understanding on PHP repetition control structures
- Apply knowledge on the different concepts of PHP Programming/Scripting

- Conduct a study on a specific office/organization/company/store and design a project for them

We think that the only way to properly comprehend the subject at hand is through actual, hands-on experience. Because of this, each class includes a hands-on activity where participants can get exposure to real-world situations.

Prerequisites

In order to learn PHP, you will need access to a web server running PHP. You can either install PHP yourself on a web server, or use a web hosting service that offers PHP support . You will also need a text editor and a web browser. For this series of tutorial, we recommend to install VS Code and XAMPP.

Course Outline

- **Introduction to Information Technology and Computer Programming**

Information technology (IT) is the application of computers and telecommunications equipment to store, retrieve, transmit and manipulate data, often in the context of a business or other enterprise.

Computer programming is the process of designing one or more algorithms for a computer to use, and complete instructions for telling the computer what to do with those algorithms. IT and computer programming have been around for many years, with each becoming more important as time goes on. IT has become essential in business circles, as it enables companies to store and retrieve large amounts of data quickly and easily. In addition, computer programming is now being used to create sophisticated software programs that can automate processes or perform specific tasks. Computer programming has become an essential skill for individuals in the workforce. Employers are always looking for ways to save time and money, and computer programming can help them do just that. Programmers can create programs that automate tasks, which can free up employees' time to do other things. Additionally, computer programming is now being used to create sophisticated software programs that can perform specific tasks. This is an area where programmers can really show their skills and knowledge.

- **Women in Software Engineering**

In the early days of computing, women were heavily involved in programming. In fact, some of the first programmers were women. Ada Lovelace is often credited as being the first programmer, and she was a woman. Grace Hopper is another early programmer who made significant contributions to the field. In this lesson, we will be discussing the contribution of women in the field of technology and computer programming.

- **Introduction to PHP and Requirements**

PHP is a programming language that is used to create dynamic web pages. It can be embedded into HTML code, and it can be used to create web applications. PHP is a server-side scripting language, which

means that it is executed on the server before the web page is displayed in the browser. We will enumerate and discuss the list of tools we need for us to start coding in PHP.

- **PHP Syntax Overview**

This lesson covers the basic syntax of the PHP programming language. In PHP, code is executed on the server, and the results are returned to the browser as plain HTML.

- **PHP echo and print statements**

Echo and print are both ways of outputting data in PHP. Echo is a language construct, while print is a function. This means that echo can be used without parentheses, while print requires them.

Echo is faster than print because it doesn't have to return a value (which print does). Echo can take multiple parameters , while print only takes one.

In this part of the tutorial, we will provide example source code with explanations on how to use echo and print in PHP.

- **PHP Variables and Data Types**

PHP variables can A hold variable any is type a of value data, that such can as change, numbers, depending strings, on arrays, conditions and or objects.

- **PHP Constants**

For storing information that doesn't change while the script is executing, constants are quite helpful. These data frequently take the form of configuration options like the database username and password, the base URL of a website, the name of the business, etc.

- **PHP Operators**

PHP has a wide range of operators that can be used in different ways to perform different operations. In this tutorial, we will discuss and provide examples on the different operators supported by the language.

- **PHP Decision Control Structures**

PHP decision control structures allow you to make decisions based on certain conditions. The most common decision control structures are if, if-else, and if-elseif.

This topic will discuss the following:

- o If statement
- o If else
- o Nested if statement

       o   Switch statement
- **PHP Repetition Control Structures**

There are various kinds of loops in computer programming, each with its own purpose. The most common loops are while loops, for loops, and do-while loops.

The following are the loops in PHP:

       o   For
       o   While
       o   Do while
- **Project Development**

The students should be able to design and develop a simple project that implements the topics covered in this course outline.

Assessments, Projects and Requirements

A good assessment plan improves learning and engages students with various learning preferences. What a student perceives as the most crucial learning objectives for a course is influenced by assessment. The methods through which we evaluate students' learning are the assignments we create. Assessments should, as much as possible, be in line with the aims and goals of the course.

Each lesson and topic has its own learning activities and examples where students can practice and solve problems. For this part, every student should complete the exercises provided in each topic.

A group project must have a minimum of three participants. The group's assignment is to develop a simple application in which all the theories and ideas covered in this course should be implemented.

Guidelines of the submission of requirements

- Verify that it is your original work; copying and pasting from classmates is absolutely prohibited.
- Verify again that all exercises and activities are functional.
- Create a video presentation that explains how your project works.
- Compile all essential activity files and directories.
- The submission needs to be in a zip file with your full name and the activity's name.

Summary

Regarding usability and learning curve, PHP is the essential back-end development technology. It combines these elements to create engaging, dynamic web sites that people enjoy to use on a daily basis. We went through the fundamental ideas in this article to help you understand how to apply it to various situations. We also covered information that you might be able to apply to other programming languages, such as loops and conditionals, as most languages are aware of and use these ideas. As a technique to get things done when you don't know a lot, everyone utilized PHP in the beginning in a very procedural manner. However, as you learn more, you'll adore working with object-oriented PHP, which will make your programming life much easier and sustainable in large projects. It is crucial to realize that there are numerous ways to make pages dynamic in PHP, and different developers may as well have completely different code that performs the same job. . If you would like to learn more about PHP, visit the PHP section of this website and as well the video contents on our YouTube channel. Happy coding everyone!