Course Catalog

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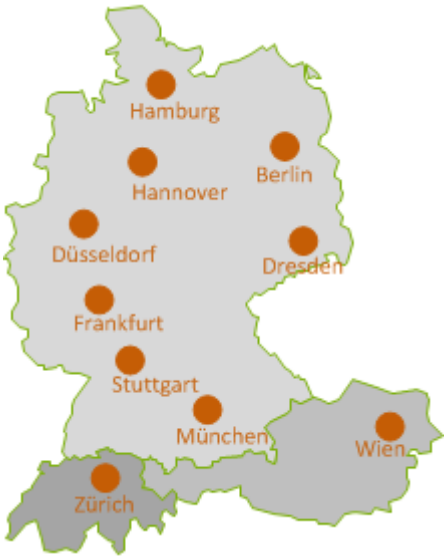

Our trainings take place at various locations in the German-speaking countries.

Public trainings:

You can enroll for public trainings at our training centers across Germany like in Berlin, Dresden, Hamburg, München / Munich, Düsseldorf, Frankfurt, and Stuttgart. Not all public trainings will be organized in all cities but you can still book a particular training for your team in one of our training and conference centers.

In Austria you can attend seminars and trainings in Wien / Vienna while we offer training dates in Switzerland in Zürich / Zurich.

On-site trainings:

We have mobile and flexible trainers / lecturers who like to visit you and your team for an on-site training or a training in a conference center or hotel near you.

USA

Chicago	Tel: Fax:
Miami	Tel:+1.305.395.7962 Fax:+1.305.395.7964
New York	Tel:+1.212.380.1181 Fax:+1.305.395.7964

1. Zend

A. PHP

(i) Boot Camp

Overview

Course ID	2020331
Language	en
Duration	5 D ys
Delivery mode	Classroom
Course Type	
Target Group	Programmers, Web developers
Prerequisites	HTML, knowledge of web design program
Method	Lecture with examples and exercises.
Course level	Beginning

Course Dates

Chicago	Miami	New York
2,700.00 USD	2,500.00 USD	2,700.00 USD
03-07 Aug 28 Sep - 02 Oct 23-27 Nov	07-11 Sep 02-06 Nov 28 Dec - 01 Jan	17-21 Aug 12-16 Oct 07-11 Dec

Prices plus local taxes.

Course Description

Dieses PHP-Seminar zeigt angehenden PHP-Programmierern die Grundlagen der Syntax, der Objektorientierung und erarbeitet die Anwendungsentwicklung in PHP mit einem Überblick über die PHP-Funktionsbibliothek, die XML-Verarbeitung und natürlich den Datenbankeinsatz mit MySQL. Im Gegensatz zum PHP-Grundkurs-Seminar richtet es sich an Teilnehmer, die bereits grundlegende Kenntnisse in einer Programmiersprache haben und fordert ein höheres Lerntempo. Dahe sind die Bereiche der allgemeinen Syntax von PHP und der PHP-Objektorientierung nicht in der Länge zu finden wie in einem gewöhnlichen Anfänger-Seminar. Auch sollen die Teilnehmer zum Seminarende in der Lage sein, Anwendungen in PHP mit Datenbank- und XML-Einsatz unter Verwendung gängiger Entwurfsmuster (Design Patterns) aus dem Standard- und Enterprise-Katalog zu programmieren.

Course Outline

A. Syntax

(0.75 Days) Basic Syntax - Types - Variables and Predefined Variables - Constants - Expressions - Operators - Control Structures - Functions - Arrays

B. Classes and Objects

(1 Day) Classes and Objects: Constructors and Destructors, Visibility, Inheritance, Class Abstraction, Interfaces - Magic Methods - Namespaces - Exceptions and Predefined Exceptions - Predefined Interfaces and Classes - Object Serialization

C. Forms

(0.25 Days) HTML Form Design - Validation - Data Transmission and Processing - File Upload - Master/Detail Forms - Tunneled and Branched Forms - Cookies - Session Handling

D. PHP Functions and Class Library

(0.5 Days) Date and Time - File System Operations - String Operations and Text Processing

E. Database Access

(0.5 Days) PHP Data Objects vs. DB-specific PHP Functions - Connections and Connection Management - Transactions and Auto-Commit - Prepared Statements and Stored Procedures - Errors and Error Handling

F. XML Handling

(0.5 Days) Processing and Creating XML using SimpleXML and DOM (Document Object Model) - XSLT and XPath in PHP - Validation using DTD and XML Schema in PHP - Reading and Writing XML using XMLWriter and XMLReader

G. Design Patterns and PHP

(1 Day) Behavioral Patterns: Command, Template Method, Strategy, Visitor, Chain of Responsibility, Iterator - Structural Patterns: Composite, Decorator, Front Controller - Creational Patterns: Singleton, Factory Method, Abstract Factory, Lazy Initialization

H. Enterprise Application Patterns and PHP

(0.5 Days) Domain Logic Patterns: Transaction Script, Domain Model Table Module, Service Layer - Data Source Architectural Patterns: Table Data Gateway, Row Data Gateway, Active Record, Data Mapper - Web Presentation Patterns: Model View Controller, Front Controller, Template View, Transform View, Application Controller

(ii) Design Patterns

Overview

Course ID	2020336
Language	en
Duration	2 D ys
Delivery mode	Classroom
Course Type	
Target Group	Programmers, Web developers
Prerequisites	PHP Basics
Method	Lecture with examples and exercises.
Course level	Advanced

Course Dates

Chicago	Miami	New York
1,400.00 USD	1,350.00 USD	1,400.00 USD
13-14 Aug 08-09 Oct 03-04 Dec	20-21 Aug 15-16 Oct 10-11 Dec	30-31 Jul 24-25 Sep 19-20 Nov

Prices plus local taxes.

Course Description

A design pattern is a general reusable solution to a commonly occurring problem within a given context in software design. A design pattern is not a finished design that can be transformed directly into source or machine code. It is a description or template for how to solve a problem that can be used in many different situations. Patterns are formalized best practices that the programmer must implement themselves in the application. Object-oriented design patterns typically show relationships and interactions between classes or objects, without specifying the final application classes or objects that are involved. This training presents a selection of the GoF (Gang of Four) patterns which can be used in PHP and for web application development. After the training you will be capable of defining the basic usage scenarios and situations where these patterns can be helpful and you will be able to apply these patterns to real-world design problems.

Course Outline

A. Creational Patterns

Singleton (Ensure a class has only one instance, and provide a global point of access to it.) - Factory Method (Define an interface for creating a single object, but let subclasses decide which class to instantiate. Factory Method lets a class defer instantiation to subclasses.) - Abstract Factory (Provide an interface for creating families of related or dependent objects without specifying their concrete classes.) - Prototype (Specify the kinds of objects to create using a prototypical instance, and create new objects by copying this prototype.)

B. Structural Patterns

Composite (Compose objects into tree structures to represent part-whole hierarchies. Composite lets clients treat individual objects and compositions of objects uniformly.) - Decorator (Attach additional responsibilities to an object dynamically keeping the same interface. Decorators provide a flexible alternative to subclassing for extending functionality.) - Facade (Provide a unified interface to a set of interfaces in a subsystem. Facade defines a higher-level interface that makes the subsystem easier to use.)

C. Behavioral Patterns

Strategy (Define a family of algorithms, encapsulate each one, and make them interchangeable.) - Chain of Responsibility (Avoid coupling the sender of a request to its receiver by giving more than one object a chance to handle the request.) - Command (Encapsulate a request as an object, thereby letting you parameterize clients with different requests.) - Iterator (Provide a way to access the elements of an aggregate object sequentially without exposing its underlying representation.) - Template Method (Define the skeleton of an algorithm in an operation, deferring some steps to subclasses.) - Visitor (Represent an operation to be performed on the elements of an object structure.)

(iii) Fundamentals

Overview

Course ID	2020287
Language	en
Duration	5 D ys
Delivery mode	Classroom
Course Type	
Target Group	Programmers, Web developers
Prerequisites	HTML basics, programming experience is an advantage
Method	Lecture with examples and exercises.
Course level	Beginning

Course Dates

Chicago	Miami	New York
2,850.00 USD	2,650.00 USD	2,850.00 USD
07-11 Sep 02-06 Nov 28 Dec - 01 Jan	03-07 Aug 28 Sep - 02 Oct 23-27 Nov	10-14 Aug 05-09 Oct 30 Nov - 04 Dec

Prices plus local taxes.

Course Description

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. PHP is now installed on more than 244 million websites and 2.1 million web servers. PHP code is interpreted by a web server with a PHP processor module which generates the resulting web page: PHP commands can be embedded directly into an HTML source document using both a procedural and an object-oriented programming style. This training makes heavily use of hands-on labs for teaching you all the necessary techniques to develop object-oriented web applications like designing the HTML front-end, accessing relational databases like MySQL or transforming XML data.

Course Outline

A. Syntax

(1 Day) Basic Syntax - Types - Variables and Predefined Variables - Constants - Expressions - Operators - Control Structures - Functions - Arrays

B. Classes and Objects

(1.5 Days) Classes and Objects: Constructors and Destructors, Visibility, Inheritance, Class Abstraction, Interfaces - Magic Methods - Namespaces - Exceptions and Predefined Exceptions - Predefined Interfaces and Classes - Object Serialization

C. Forms

(0.5 Days) HTML Form Design - Validation - Data Transmission and Processing - File Upload - Master/Detail Forms - Tunneled and Branched Forms - Cookies - Session Handling

D. PHP Functions and Class Library

(1 Day) Date and Time - File System Operations - String Operations and Text Processing - XML Handling

E. Database Access

(1 Day) PHP Data Objects vs. DB-specific PHP Functions - Connections and Connection Management - Transactions and Auto-Commit - Prepared Statements and Stored Procedures - Errors and Error Handling

(iv) Object-Oriented Programming (OOP)

Overview

Course ID	2020332
Language	en
Duration	2 D ys
Delivery mode	Classroom
Course Type	
Target Group	Programmers, Web developers
Prerequisites	PHP Basics
Method	Lecture with examples and exercises.
Course level	Advanced

Course Dates

Chicago	Miami	New York
1,400.00 USD	1,350.00 USD	1,400.00 USD
17-18 Sep 19-20 Nov	10-11 Sep 12-13 Nov	20-21 Aug 15-16 Oct 10-11 Dec

Prices plus local taxes.

Course Description

Object-oriented programming (OOP) is a programming paradigm that represents concepts as "objects" that have data fields (attributes that describe the object) and associated procedures known as methods. Objects, which are usually instances of classes, are used to interact with one another to design applications. PHP 5 introduced private and protected member variables and methods, along with abstract classes, final classes, abstract methods, and final methods. It also introduced a standard way of declaring constructors and destructors, and a standard exception handling model. Furthermore, PHP 5 added interfaces and allowed for multiple interfaces to be implemented. After completing this training you will understand the fundamental concepts of Object-oriented Programming and you will know how to use these concepts in your PHP code. After a short introduction into each OOP-feature hands-on labs with programming exercices will help you to understand how to program classes and how to use them in your application and you will see that object-oriented software development will facilitate and speed up your programming style.

Course Outline

A. Classes and Objects

(0.75 Days) Introduction - The OOP Basics - Classes and Objects - Properties and Methods - Class Constants - Constructors and Destructors - Visibility - Static Members - Namespaces - Objects and References - Cloning - Type Hinting - Relationships between Classes/Objects

B. Inheritance, Abstraction and Implementation

(0.5 Days) Object Inheritance - Class Abstraction - Object Interfaces - Polymorphism - Dynamic Dispatch - OOP Design Principles

C. Reflection in PHP

(0.125 Days) Dynamic Examination of Classes, Methods and Objects using PHP Functions - Reflection API - Dynamic Initialization of Objects and Invoking of Methods

D. Advanced PHP Techniques

(0.25 Days) Magic Methods - Overloading - Object Iteration - Comparing Objects - Autoloading Classes - Object Serialization

E. Planning and Documenting using UML

(0.125 Days) Overview of UML (Unified Modelling Language) - Class Diagrams for the Static and Structural View - Activity Diagrams and Sequence Diagrams or the Behavioral View

(v) XML Processing

Overview

Course ID	2020290
Language	en
Duration	2 D ys
Delivery mode	Classroom
Course Type	
Target Group	Programmers, Web developers
Prerequisites	PHP Basics
Method	Lecture with examples and exercises.
Course level	Advanced

Course Dates

Chicago	Miami	New York
1,600.00 USD	1,550.00 USD	1,600.00 USD
30-31 Jul 24-25 Sep 19-20 Nov	06-07 Aug 01-02 Oct 26-27 Nov	13-14 Aug 08-09 Oct 03-04 Dec

Prices plus local taxes.

Course Description

Extensible Markup Language (XML) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. It is defined in the XML 1.0 Specification produced by the W3C, and several other related specifications, all gratis open standards. Many application programming interfaces (APIs) have been developed to aid software developers with processing XML data, and several schema systems exist to aid in the definition of XML-based languages. After each training module you will be familiar with the fundamentals of such XML-related standards as DTD, XML Schema, XSLT or XPath. To build up your knowledge about using these technologies from a PHP application, the hands-on labs show you how to create, access, query and transform XML documents with the aid of built-in PHP functions and classes.

Course Outline

A. Overview of XML Standards and XML Technologies

(0.25 Days) XML Standards and XML Processing Options - Modelling and Validating using DTD and XML Schema - Navigation and Filtering using XPath

B. SimpleXML

(0.25 Days) Loading and Processing XML in PHP - Using XPath - Error Handling

C. SAX and PHP XML Parser

(0.25 Days) SAX Technology in PHP - SAX Events and Event Handlers for Elements, Attributes and other Nodes - Parsing Documents - Error Handling

D. DOM (Document Object Model)

(0.5 Days) Writing XML Documents using DOM in PHP - Processing and Querying XML - Validating using XML Schema and DTD - Filtering and Querying using XPath - Error Handling

E. XML Processing using XSLT

(0.5 Days) XSLT Fundamentals: Templates, Control Structures, Parameters - Transforming XML from PHP using XSLT Stylesheets - Configuring the XSLT Processor - Passing Parameters to Stylesheets - Error Handling

F. PHP Modules for XML Processing

(0.25 Days) Reading and Writing of XML Data using XML Reader and XML Writer

b. Disclaimer

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