

# **Perl Programming**

#### **Audience Course Perl Programming**

The course Perl Programming is intended for System administrators, Web masters and developers who want to learn to program in Perl or who want to understand Perl code.

#### **Prerequisites Course Perl Programming**

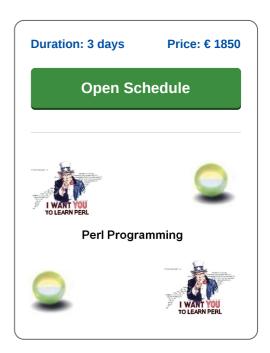
Knowledge and experience with programming is not strictly required to participate in this course but is beneficial to a proper understanding.

#### **Realization Training Perl Programming**

The theory is treated on the basis of presentation slides and is interspersed with exercises. Illustrative demo programs further clarify the concepts covered. The course contents covers the topics of the CIW Perl exam (1D0-437). The course material is in English.

#### **Certificate Perl Programming**

Participants receive an official Perl Programming certificate after successful completion of the course.



# **Content Course Perl Programming**

In the course Perl Programming the principles of the Perl programming language are discussed.

#### **Perl Intro**

After an introduction on the characteristics of Perl, Perl modules and the typical usages of Perl, it is shown how a typical Perl script is executed.

#### **Data Types and Control Flow**

Subsequently, attention is paid to the syntax and use of scalar types, variables, operators and control structures. The use of Perl data structures like arrays, lists and hashes is also discussed.

#### Perl I/O

Part of the course is also the interaction between scripts and input and output devices such as keyboard and console and also attention is paid to the dealing with files and directories. In this respect the diamond and chomp operator are discussed.

### **Subroutines**

Using subroutines in Perl is part of the subject matter as well. On the basis of a number of structured exercises, participants learn how regular expressions in Perl can be used to validate data and to search for specific string patterns.

## **Perl Classes and Modules**

Finally, an introduction to object oriented programming in Perl is given and it is discussed how additional Perl modules can be installed and used. Several Perl modules can be used as examples such as modules for Graphical User Interfaces or database access.

#### **Debugging Perl**

Interspersed in other subjects the debugging of Perl scripts with the Perl debugger is also treated.



# **Modules Course Perl Programming**

Module 1 : Perl Introduction	Module 2 : Scalar Types and Variables	Module 3 : Control Flow
What is Perl?	Scalar Variables	Conditional Statements
Perl Characteristics	Numbers and Numeric Operators	if elsif and else
Hello World in Perl	Strings and String Literals	unless and unless else
Typical Perl Script	String Number Conversions	Logical AND and OR
strict Pragma	Scalar Variable Interpolation	Conditional Expression Operator
Perl Modules	Reading from STDIN	given when
Installation	Comparison Operators	Loop Statements
Perl IDE's	if and while control structures	while and dowhile
Interactive Perl	Boolean Values	until and dountil
Resources for Perl	chomp Operator	for and foreach
Usages of Perl	undef Value and defined Function	Jump Statements
Perl Script reading Input	Special Scalar Variables	next and last
Perl CGI Script	References and dereferencing	redo and goto
Module 4 : Lists and Arrays	Module 5 : Subroutines	Module 6 : Input and Output
What are Arrays and Lists?	Subroutines	Reading from STDIN
Accessing Array Elements	Defining a Subroutine	Input from Diamond Operator
Array Operations	Invoking a Subroutine	Invocation Arguments
Special Array Indices	Return Values	Formatted Output
gw Shortcut	Arguments	Arrays and printf
List Assignment	Private Variables	File Handles
pop, push, shift and unshift	my Variables	Reading from a File
sort and reverse	Variable-Length Parameter Lists	Changing Default File Handle
Interpolating Arrays into Strings	return Operator	Reading Whole File
foreach Control Structure	Non Scalar Return Values	File Tests Operators
Default Variable \$	State Variables	Manipulate Files/Directories
Scalar and List Context	More on Parameter Passing	Listing Directories
Multidimensional Arrays	Another Subroutine Example	Executing External Programs
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Module 7 : Hashes	Module 8 : Regular Expressions	Module 9 : Perl Modules
Benefits of Hashes	Simple Patterns	What are Perl Modules?
Hash Element Access	Meta Characters	Packages
Hash as a Whole	Quantifiers and Character Classes	my versus our Variables
Hash Assignment	Regular Expression Delimiters	Module Naming
More Hash Syntax	Subgrouping and Backreferences	Module Namespace
Hash Element Interpolation	Regular Expression Modifiers	Creating and Using Modules
Hash Functions	split and join	Modules in Subdirectories
More Hash Functions	Named Captures	Accessing Module Variables
The %ENV Hash	Named Backreferences	Exporting from Modules
Counting with Hash	Automatic Match Variables	Importing Modules
Merging Hashes	Substitutions with s///	Recommended CPAN Modules
Module 10 : Object Orientation		1

## **Module 10 : Object Orientation**

Object Oriented Programming
Object Oriented Programming in Perl
Classes and Objects
Example Class and Objects
Class Constructor
Properties or Fields
Methods and Accessors
Using Objects
Inheritance
Inheritance with @ISA Array
Overridden Methods

Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online