



CIW Web Languages Series

Perl Fundamentals

Course ID#: 1250-651-02-W

18 Hrs

Course Content

Course Description:

Perl fundamentals is an 18-hour course that teaches students how to fully utilize the Perl programming language. Students learn the Perl syntax, the basics of using regular expression, how to use Perl data types, and how to access and manipulate files. Students are also introduced to database connectivity and debugging techniques. This is the second course in the Web Language Series.

Prerequisites:

CIW Foundations certification or equivalent experience. No programming experience is required.

Target Audience:

Webmasters, software developers, application programmers, client/server developers, and desktop publishers.

Topics:

Introduction to Perl

- Practical Extracting and Reporting
- Language (Perl)
- Getting Started with Perl
- Scalar Variables
- Numerical Variables
- String Variables
- Retrieving Data from STDIN

Flow Control in Perl

- Boolean Expressions in PERL
- The if statement
- The *for*, *while* and *do {} while* Loop Statements
- Loop-Control Commands
- I/O Redirection

Regular Expressions in Perl

- Introduction to Regular Expressions
- Character Classes
- Pattern Matching and Substitution

Arrays in Perl

- Introduction to Perl Arrays
- Accessing Array Elements
- The *sort* Function
- The *foreach* Statement
- The *push*, *pop*, *shift* and *unshift* Functions
- The *split* and *join* functions

Hashes in Perl

- Introduction to Perl Hashes
- Adding and Deleting Hash Elements
- The keys, values, each, and reverse Functions

Subroutines in Perl

- Introduction to Perl Subroutines
- Variable Scope
- References



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File Input and Output in Perl

- Introduction to Perl File Input and Output
- What is a Filehandle?
- The *open* Function
- Outputting Data to a File
- Opening Files for Reading
- Determining Information About Files
- The *stat* and *Istat* Functions

Environmental Variables and Command Line Arguments

- Environment Variables
- Command Lines Arguments

Packages and Modules in Perl

- Using Packages in Perl
- BEGIN and END Blocks
- Using Modules in Perl
- The *use* and *require* Statements

Object-Oriented Perl

- Introduction to Object-Oriented Perl
- Creating Objects in Perl
- Inheritance

Database Connectivity in Perl

- Introduction to Database Connectivity
- Database Programming with Perl
- Interacting with Databases
- Connecting to Databases
- Structured Query Language (SQL)
- Quoting Operations

Debugging Perl Programs

- Introduction to Debugging Perl Scripts
- Using the Print Command
- Using the *-w* Switch
- Using the strict Module
- The Perl Debugger
- Writing Bug-free Perl Code