PRL1

Basic Perl Programming

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PRL1 - Version: 2

🕐 3 days Course

Description:

The scripting language Perl is has extensive features but is easy-to-use. This makes it easy to write concise yet powerful scripts for complex data manipulation and administration. This course gives an introduction to the Perl programming language. In addition, Perl's GUI Tool Kit (TK) will be introduced.

Intended audience:

The course is meant for users, administrators and programmers who want to learn the basics of Perl programming.

Prerequisites:

A basic Programming Introduction
Experience in writing shell scripts - Not mandatory

Objectives:

Enabling participant to write full-scale Perl scripts

Topics:

Basic Concepts in Perl

- What Perl?
- Getting Perl
- Running Perl programs
- Writing a simple Perl program
- The difference between interpretive and compiled programming languages

Understanding Scalar Values

- Understanding Scalar Values
- What Is a Scalar Value?
- All Numbers Use the Same Format Internally
- Float Literals
- Integer Literals
- Character Strings
- Single-Quoted Strings
- Double-Quoted Strings

Basic Operators and Control Flow

- scalar variables
- The basic arithmetic operators
- Expression
- More operators
- if statement
- else and elsif
- while and until statements
- The do {} while/until Statement
- The for Statement

Lists and Array Variables Key features

- Introducing Lists
- Literal Representation
- Storing Lists in Array Variables
- Array Operators
- Array Element Access
- Exceeding limits
- Negative Index
- The push and pop Functions
- The shift and unshift Functions
- The reverse Function
- The sort Function
- The chomp Function
- <STDIN> as an Array

Reading from and Writing to Files

- What is a Filehandle?
- Opening and Closing a Filehandle
- A Slight Diversion: die
- Using Filehandles
- File Tests and Their Meanings
- Manipulating the file pointer

Regular expressions

- Concepts About Regular Expressions
- Simple Uses of Regular Expressions
- substitute operator
- Single-Character Patterns
- Multipliers

- General multiplier
- Alternation
- ^ and $
- The =~ Operator
- The split Function
- The Join Function

Using Subroutines

- Defining a User Function
- Invoking a User Function
- Return Values
- Arguments
- Private Variables in Functions

Hash (Associative Array)

- What Is a Hash?
- Hash Variables
- Literal Representation of a Hash
- Hash Functions
- Hash Slices

References

- Making References
- Basic Usage of references
- Nested Structures
- Hash Reference