

Introduction to Perl/CGI

Course length: 2 days

Course Description

Web development is a complex task. With your strong base in HTML, you know how the web works. Now you want to write programs to interact with web servers by retrieving or uploading data. This course will introduce you to programming in Perl and then to using Perl in web development.

Course Objective: You will create a web application using the Perl programming language.

Target Student: Individuals with some programming and web communications programming expertise. They may also be looking for a quick entry into Perl for the purpose of code maintenance and understanding.

Prerequisites: A solid knowledge of HTML 4.0, including forms and form properties, is assumed. In addition, students should be familiar with the process of uploading files to a web server via FTP.

- Web Design with XHTML, HTML, and CSS: Level 1
- Web Design with XHTML, HTML, and CSS: Level 2.
- Web Design with XHTML, HTML, and CSS: Level 3

Delivery Method: Instructor led, group-paced, classroom-delivery learning model with structured hands-on activities.

Performance-Based Objectives

Upon successful completion of this course, students will be able to:

- Structure data.
- Write programs with conditional and loop statements.
- Work with regular expressions.
- Implement subroutines.
- Work with files.
- Work with modules.
- Describe CGI.
- Maintain state with sessions and cookies.
- Implement CGI techniques in their programs.
- Work with databases.

Course Content

Lesson 1: Structuring Data

Topic 1A: Store Data in Scalars and Lists

Topic 1B: Store Data in Arrays

Topic 1C: Store Data in Hashes

Topic 1D: Manipulate Data Using Operators

Lesson 2: Programming with Conditional and Loop Statements

Topic 2A: Control Program Flow Using Conditional Statements

Topic 2B: Perform Program Iterations Using Loop Statements



Lesson 3: Searching for Text Patterns with Regular Expressions

Topic 3A: Create Pattern Match Expressions
Topic 3B: Precompile Regular Expressions
Topic 3C: Manipulate Strings

Lesson 4: Implementing Subroutines

Topic 4A: Incorporate Built-In Functions
Topic 4B: Create Subroutines

Lesson 5: Accessing Data in Files

Topic 5A: Administer Files
Topic 5B: Read from and Write to a File

Lesson 6: Implementing Modules

Topic 6A: Apply the OOPs Concept
Topic 6B: Incorporate Modules
Topic 6C: Manage Modules

Lesson 7: Communicating with the Server Using CGI

Topic 7A: Send Information to the Server
Topic 7B: Send Information to the Server Using CGI.pm
Topic 7C: Debug Using CGI::Carp.pm
Topic 7D: Embed JavaScript in CGI

Lesson 8: Maintaining State with Sessions and Cookies

Topic 8A: Create Cookies
Topic 8B: Create Sessions

Lesson 9: Implementing CGI Techniques

Topic 9A: Display Non-Text Elements
Topic 9B: Send Email Using Modules
Topic 9C: Include HTML Templates

Lesson 10: Accessing Databases

Topic 10A: Interact with Databases
Topic 10B: Update a Database Using Forms
Topic 10C: Query from a Database

