CGI Programming with Perl

Course Summary

Description

This course teaches students to set up a web site that provides dynamic content using Perl-based CGI scripts

Topics

- Perl refresher
- Using CGI.pm
- Calling CGI programs
- CGI Output
- Form Processing in Detail
- Working with JavaScript
- Saving State
- Working with Images
- Beyond CGI

Audience

This course is designed for web site developers who need the simple, free and flexible approach of CGI for creating dynamic content.

Prerequisites

Students should have a user-level knowledge of an operating system such as UNIX/Linux or Windows as well as a basic familiarity with Perl programming.

Duration

Two Days

Due to the nature of this material, this document refers to numerous hardware and software products by their trade names. References to other companies and their products are for informational purposes only, and all trademarks are the properties of their respective companies. It is not the intent of ProTech Professional Technical Services, Inc. to use any of these names generically

CGI Programming with Perl

Course Outline

I. Perl Refresher
- A. Data types
- B. Using split( )
- C. References
- D. References to lists
- E. References to hashes
- F. Using object-oriented modules

II. Using CGI.pm
- A. Creating a CGI object
- B. Processing a form
- C. Non O-O CGI.pm

III. Calling CGI Programs
- A. Absolute and relative paths
- B. Calling from a URL
- C. Calling from a form
- D. The <FORM> tag
- E. The <INPUT> tag
- F. The SUBMIT and CLEAR buttons

IV. CGI Output
- A. Emitting headers
- B. Outputting raw HTML
- C. Using CGI.pm methods
- D. Non-HTML output
- E. Auto-redirects

V. Form Processing in Detail
- A. The TEXT input type
- B. The SUBMIT and IMAGE input types
- C. The RESET input type
- D. The CHECKBOX input type
- E. The RADIO input type
- F. The TEXTAREA input type
- G. The PASSWORD
- H. The <SELECT> tag
- I. Multiple selections
- J. Processing a form by hand

VI. Working with JavaScript
- A. Simple JavaScript
- B. Shared functions
- C. Generating JavaScript on-the-fly

VII. Saving State
- A. The HIDDEN input type
- B. About cookies
- C. Creating a cookie
- D. Using a cookie to save info
- E. Saving state with CGI.pm
- F. Redisplaying a form after invalid entry

VIII. Working with Images
- A. Displaying images
- B. Creating imagemaps
- C. Imagemap tools
- D. CGI to handle imagemaps
- E. HTML templates
- F. Why use templates?
- G. The template module
- H. Processing a template
- I. Basic template syntax
- J. Loops and conditionals
- K. Linking to a DBMS

IX. Appendix A: Beyond CGI
- A. Using JavaScript
- B. Alternatives to CGI
- C. PHP
- D. Servlets
- E. Cold Fusion
- F. ASP.NET

X. Lab Exercises:
- A. Chapter 1: Splitting into a hash
- B. Chapter 2: Processing a page
- C. Chapter 3: Call same script from URL and form
- D. Chapter 4: Outputting HTML with CGI.pm methods
- E. Chapter 5: Make a complex form with multiple selections
- F. Chapter 6: Filling out a form w/ error checking
- G. Chapter 7: Picture browser
- H. Chapter 8: PHP example
- I. Chapter 9: Same example as Chapter 8, but with TT rather than PHP

Due to the nature of this material, this document refers to numerous hardware and software products by their trade names. References to other companies and their products are for informational purposes only, and all trademarks are the properties of their respective companies. It is not the intent of ProTech Professional Technical Services, Inc. to use any of these names generically