

## Course 581: Advanced Perl Programming (3 days)

### Course Description...

A fast-paced course designed for programmers who need to learn how to build modules, use regular expression, do network and database programming. Advanced techniques of closures and prevention of runtime exceptions are covered.

### Learning objectives...

- Build a package
- Build an OO package
- Use non-greedy regular expressions and assertions
- Use dynamic text replacement
- Do network programming
- Interact with RDMS
- Use coderefs and closures
- Use exception handling to prevent run time errors

### Who should attend...

Perl programmers who need to master building packages, regular expressions, how to prevent run-time errors, and do work across the net and with a database.

### Prerequisites...

- Mastery of a text editor.
- Prior Perl programming experience as provided by **ROI course 580, Introduction to Perl.**

See next page for course outline...



## Course Outline...

### Perl Review

- ❑ Arrays, hashes, and references
- ❑ Perl debugger
- ❑ Using packages and OO techniques
- ❑ Regular Expressions

### Advance Regular Expressions

- ❑ Assertions look-ahead and look-behind
- ❑ Non-greedy quantifiers
- ❑ Single/many line strings
- ❑ Dynamic replacement text

### Building Packages

- ❑ Creating packages and files
- ❑ Defining functions
- ❑ Exporting functions
- ❑ Variables in modules
- ❑ When you should create a package

### Building OO Packages

- ❑ Building an OO Package
- ❑ Using inheritance
- ❑ Using AUTOLOAD
- ❑ Using tie
- ❑ Operator overload

### Network Programming

- ❑ Modules for network clients
- ❑ Modules for network servers
- ❑ Monitoring network operations
- ❑ Net::FTP, LWP

### Databases with Perl

- ❑ Using DBI
- ❑ Connecting/disconnecting, login and logout
- ❑ Retrieving records
- ❑ Update and insert queries
- ❑ Using ODBC

### Exception-Handling

- ❑ Trapping run-time errors
- ❑ Passing the exception

### Subroutine References

- ❑ Coderefs
- ❑ Anonymous subroutines
- ❑ Closures
- ❑ Closures, BEGIN and END blocks

### Odds and Ends

- ❑ Sending and receiving email
- ❑ Accessing DNS
- ❑ Suid perl programs
- ❑ Scheduling events
- ❑ Connecting to other programs
- ❑ Monitoring file operations

*Please contact your ROI representative to discuss course tailoring!!!*