

IT350 Web and Internet Programming

Fall 2005

SlideSet #15: Perl

(from Chapter 25 of the text)

Why Perl?

- Practical Extraction and Report Language (Perl)
 - One of the most widely used language for Web programming
- Common Uses
 - “Shell scripts”
 - CGI
- Advantages vs. C++ (for CGI)

Perl Basics

```
use CGI qw( :standard );
print( header() );

$x = 2 + 3;
$y = $x * 4;

if ($x == 5.0) {
    print ("x is five");
}

for ($i = 0; $i < 3; $i++) {
    $squared = $i * $i;
    print ("<br> $i = $i, squared is $squared");
}

$pet1 = "dog";
$pet2 = "ll" . "ama";

# Single quotes vs. double quotes
print ("<br/>I have a $pet1 and a $pet2.");
print ('<br/>I have a $pet1 and a $pet2.');

$comp1 = ($pet1 eq "dog");
print ("<br/> comp1: $comp1");
```

Perl and CGI

```
use CGI qw( :standard );

print( header() );
print( start_html() );

$userName    = param("name");
$userAge     = param("age");

if ($userName eq "") {
    print "Go back and enter a name";
}
else {
    print ( h1("Welcome", $userName) );

    if ($age < 8) {
        print ("Sorry, too young to play.");
    }
    else {
        print ( h2( {"style" => "color: red"}, 
                    "Let's play!") );
    }
}

print ( end_html() );
```

File I/O

```
use CGI qw( :standard );
print( header() );
print( start_html() );

$redCount = 0;
open ( INFILE, "input.txt" );
while ( $aVal = <INFILE> ) {

    chomp ( $aVal );

    if ( $aVal =~ /red/i ) {
        $redCount++;
    }
}
close ( INFILE );

$result = "Found $redCount matches for 'red'.";
print h2($result);
print p("Writing this result to file.");

open ( OUTFILE, ">count.txt" );
print OUTFILE $result . "\n";
close ( OUTFILE );

print ( end_html() );
```

What does this do?

```
use CGI qw( :standard );
print( header() );
print( start_html() );

$index = 0;    $sum    = 0;

open ( MYFILE, "numbers.txt" );
while ( $aNum = <MYFILE> ) {
    if ( $aNum > 0 ) {
        $myArray[$index] = $aNum;
        $sum           += $aNum;
        $index++;
    }
}
close ( MYFILE );

$myArray[$index] = $sum;
$index++;

$size = @myArray;
open ( MYFILE, ">numbers.txt" );
for ( $i = 0; $i < $size; $i++ ) {
    print br() . $myArray[$i];
    print MYFILE $myArray[$i] . "\n";
}
close ( MYFILE );
print ( end_html() );
```