

An Introduction to Perl

```
perl -ne 'm/ 404 / and print'
```

What is Perl?

- Scripting Language
- Useful
- Can be used to write just about anything
- A few things I've written
 - A very simple server
 - An IRC bot (glitch)
 - A logfile parser
- A few other things written in perl
 - SpamAssassin - Open-Source Spam Filter
 - Frozen-Bubble - A Puzzle Bubble clone

What is it good at?

- Quick Scripts
 - Simple tasks that are too complex for shell scripting
- Text Processing
- Anything you can get a module for
 - XML parsing
 - Manipulating ID3 tags
 - Dynamic web pages

Basic Data Types

- Perl is dynamically typed
 - This is different from C/Java
 - Any scalar can be (re)used to hold any type of data
- Scalar
 - a number, string or reference
 - conversion is mostly transparent
- Array
 - A list of scalars
 - can grow or shrink as needed
- Hash
 - An unordered collection of scalars indexed by an associated key.

Context

- The context defines what type of variable is expected
- Most common contexts are scalar and array
- The same function can return different results in each context

Variable Syntax

Scalars:

- \$scalar

Arrays:

- @array
- \$array[0]
- \$#array

Hashes

- %hash
- \$hash{"left"}
- keys %hash

Program Flow

The usual crowd

- `if () {} else {}`
- `while () {}`
- `for (;;) {}`
- `foreach var (list) {}`

Other useful constructs

- `unless () {}`
- `do {} while ()`
- `do {} unless ()`
- `until () {}`

Regular Expressions

Examples

'404' - matches the literal string "404"

'[Tt]he' - matches "The" or "the"

'[0-9]+' - matches a sequence of digits, "200811031900"

'\d{8}' - matches a sequence of 8 digits

'chuck\$' - matches a line ending with "chuck"

'^man (.*)' - matches a line beginning with "man " and followed by anything, which is saved in \$1

Resources

Documentation

- <http://perldoc.perl.org/> -The official perl documentation site
- <http://perldoc.perl.org/perlre.html> - THE REGEX PAGE

Modules

- <http://www.cpan.org/> - The place for perl modules

Enough Talk. Let's Write some
Perl!

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