



# Perl

Improving Quality in Perl.

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# Quality via Consistency

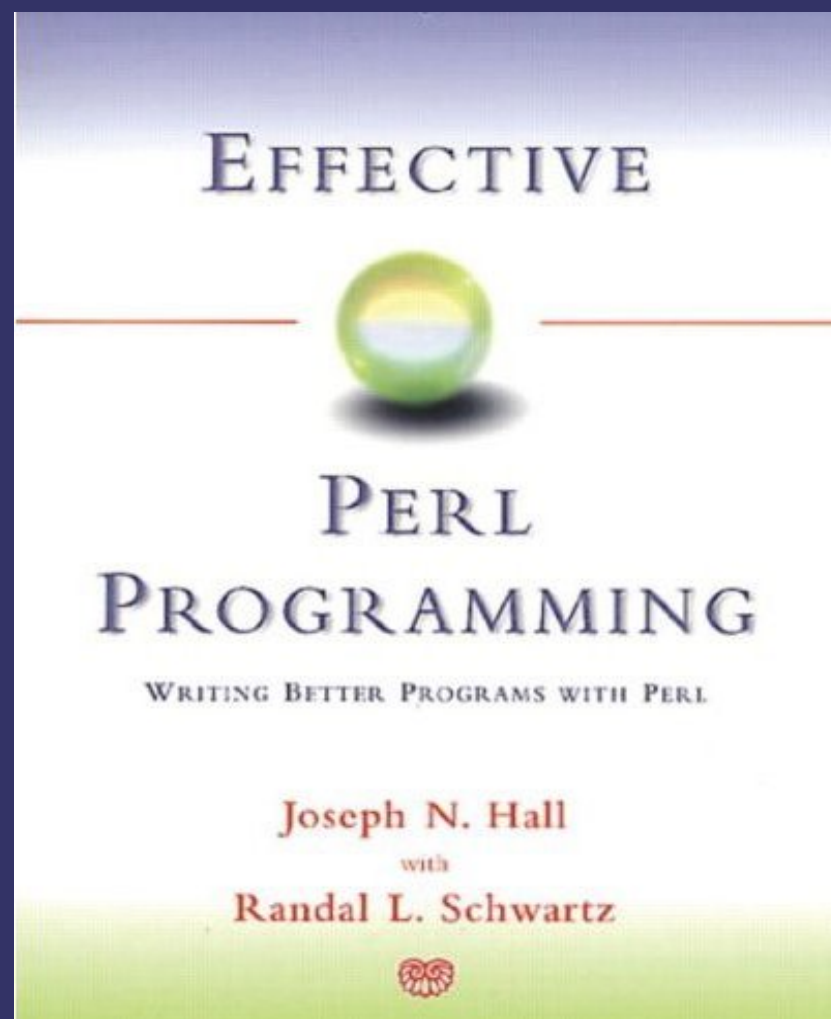
```
#!/usr/bin/perl  
our $global_standards;  
my $local_standards;  
use Test::More;  
use Software::Version::Control;
```

**Write a coding standard and stick to it!**



## use Perl;

- Write your Perl programs in Perl, NOT another programming language
- Write in idiomatic Perl
- Use built-ins and modules not external calls





## Low Hanging Fruit...

- There are things we can all agree that we should always do
- Always do the things everyone agrees we should do
- Aim to be 100% Perl Kwalitee compliant



# Quality and Kwalitee

- Quality is easy to understand... but...
  - Hard to measure
  - Hard to compare from one program to another
  - Therefore very hard to measure in an automated way
- Kwalitee
  - Easy to measure
  - Easy to compare
  - Easy to compare automatically



# Kwalitee

- Certain measurable features are correlated to good quality
- Therefore measure what can be measured and report kwalitee instead
- Most kwalitee markers are known good practices
- Calculated automatically when modules are uploaded to CPAN:
  - <http://cpants.perl.org/>



## Some Kwalitee Features

- extractable, extracts\_nicely
- has\_readme, has\_manifest, has\_buildtool
- no\_symlinks
- has\_tests
- has\_version, has\_proper\_version
- proper\_libs
- no\_pod\_errors, has\_test\_pod, has\_test\_pod\_coverage
- manifest\_matches\_dist



# My Kwalitee

CPANTS - CPAN Testing Service - Iceweasel

File Edit View History Bookmarks Tools Help

http://cpants.perl.org/author/ATRICKETT

Local Remote News Computing Personal Various Stuff Basingstoke Weather

CPANTS - CPAN Testing Service

### CPANTS - The CPAN Testing Service

Home | News | Kwalitee | The CPANTS game | Graphs || Distributions | Authors || ALPHA VERSION - Hic sunt dracones!

## Author: Adam John Trickett (ATRICKETT)

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 Average Kwalitee 100.000000000000000000  
 Liga   
 Rank 1

4 Dists:

Dist	Kwalitee	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
config-Trivial	108.33	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
config-Trivial-Storable	104.17	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Log-Trivial	100.00	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
XML-RSS-Tools	108.33	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

has\_working\_buildtool

Number of Dists ATRICKETT

http://cpants.perl.org/:kwalitee/shortcoming?name=has\_working\_buildtool Apache/2.2.4 S Adblock





# Best Practices

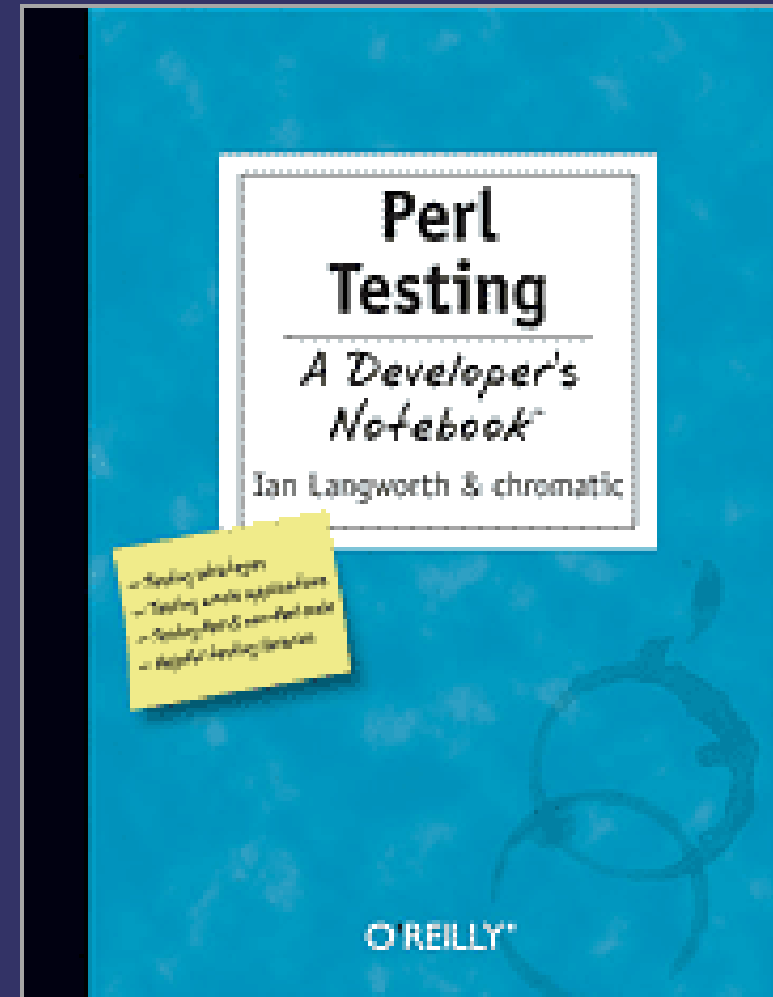
- Create a local list of coding rules AND stick to them
- Start with PBP but don't follow slavishly
- Use Perl Tidy to keep code looking standardised
- Use Perl::Critic to scan for deviations from PBP





# Include a Test Plan

- Test everything!
- Unit tests
- Integration tests
- Regression tests
- Test your tests
- Be “Test Driven”
- A **day** in development,  
a **week** in testing,  
**years** in production!





# Refactor

- Refactor old code
- Update to best practices
- Use tests to ensure functional compliance
- Remove dead and non functional code
- Remove **Red Flags**
- Improve documentation



# Use Source::Control

- Use revision control: CVS; SVN or whatever
- Always run your tests before committing
- Back-up your repository
- Use issue tracking software, e.g. RT



# Sites

- Red Flags Repair Shop
  - <http://www.perl.com/pub/a/2000/04/raceinfo.html>
  - <http://www.perl.com/pub/a/2000/11/repair3.html>
  - <http://www.perl.com/pub/a/2000/06/commify.html>
  - <http://perl.plover.com/flagbook/>
- The CPAN Testing Service
  - <http://cpants.perl.org/>
  - [http://schwern.org/~schwern/talks/CPANTS/full\\_slides/](http://schwern.org/~schwern/talks/CPANTS/full_slides/)



# Books

- Effective Perl Programming
  - Hall & Schwartz, Addison-Wesley, 0-201-41975-0
- Perl Best Practices
  - Conway, O'Reilly, 0-596-00173-8
- Perl Testing: A Developer's Notebook
  - Langworth & chromatic, O'Reilly, 0-596-10092-2
- *Perl Medic*
  - *Scott, Addison-Wesley, 0-201-79526-4*



Thank You.

Any Questions?