NUnit Pocket Reference Keith Alcock, TCS Member tcs@keithalcock.com

NUnit is "an easy-to-learn, open source framework... [that] automates unit tests for all .NET languages," according to this deceptively thin pocket reference. Unit testing "[t]ests the smallest testable element of software to verify that it performs according to its specification." It is a popular discussion topic at TCS Developers SIG meetings where we've seen JUnit for Java and SUnit for Smalltalk in action.

Despite the book's brevity, it is exceptionally thorough, providing

- an introduction to test-driven development and associated best practices,
- installation instructions,
- a step-by-step getting started guide,
- screen shots and descriptions of every dialog box,
- lists of command line parameters,
- links to related tools, and in general
- an abundant supply of reference materials that the title promises.

The content is well-organized. Example SetUp and TearDown code, for instance, provides at a single location the code needed to create a template unit test file, which my editor now produces at the click of a button. Another figure illustrates run-time behavior. Neither are UML diagrams, but they are just as understandable or even more so. All assertions are outlined in a single table, each is demonstrated in example code, and all overloaded method signatures are listed. Note that the examples and method signatures are written in C# and may be confusing for specialists of other languages, but the NUnit library should be accessible nevertheless. The book covers compatibility issues between the current version 2.2 and versions as far back as 1.X. Related tools include NUnitAddIn, VSNUnit, NUnitASP, NCover, NAnt, and Nantpad, which are described briefly before the reader is directed to a URL. The book is definitive at what it does.

It's difficult, but not impossible to find room for improvement. Don't let these minor issues distract from the greater goal of software reliability or process improvement. The book begins on page one by misspelling the name of my favorite programming language, Smalltalk. The step-by-step instructions include creation of a solution called "NPR," which is finally decrypted 43 pages later as "NUnit Pocket Reference" while the entire time I had imagined "National Public Radio" and you might be thinking "NitPicky Reader." No wonder search programs are being marketed that not only find files by name, but by content, and no wonder I've banned abbreviations in my code. If anything is not covered thoroughly in the book it is NUnit mock objects, which are described in a single paragraph with little to no detail. Finally, the book struggles somewhat to keep up with the rapid changes typical of open source projects. Specific content from configuration files no longer completely matches the distributed files. It also appears that NUnit documentation has recently been updated to include new HTML files, which may be enough to get one started.

The completeness of the book more than makes up for any shortcomings I can find. I highly recommend both the book and the programming practices it describes. With reference manuals this good and free tools for the downloading, there is little reason not to unit test software.

Title: NUnit Pocket Reference

Author: Bill Hamilton Publisher: O'Reilly

Pages: 94

Price: US \$9.95

ISBN: 0-596-00739-6

Website: http://www.oreilly.com/catalog/nunitpr