

Book Reviews

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Java Tools for Extreme Programming

Mastering Open Source Tools
including Ant, JUnit, and Cactus
John Wiley & Sons, Inc.,
2002. ISBN 0-471-20708-X

Maybe the best way to describe what this book is about is to cite the author's first sentence of the book: "This book describes techniques for implementing the Extreme Programming practices of automated testing and continuous integration using open source tools". This book actually tackles the technical, not ideological issue of extreme programming. Extreme programming (XP) is a paradigm that is human centric, meaning that it focuses on coding process of software development, in particular: code review, frequent testing, and continuous integration to discover the bugs as they appear. Now, that is great, but how do you actually manage to implement these practices? This is the point where this book comes into play. It describes the tools that help you to automate the process of testing and continuous integration. The latter means that every time you add something new, you run the full test suite against the whole application to be sure that it does correctly what it is supposed to do.

I will try to briefly describe the main tools presented. Ant is a tool that helps achieve continuous integration. It is actually a tool written in Java that automates the build and deploy processes. It is a *de facto* standard for automating Java builds and it becomes very powerful in combination with JUnit. JUnit enables you to automatically execute test cases on part of your code to verify that it works correctly. So, for every class that you write you provide a set of test cases. Ant and JUnit together automate deploy build and test process. HttpUnit tries to automate functional testing of Web applications. This means that it is not oriented toward testing the parts of code, but toward the whole application. It is very important for application to pass

functional tests, because these tests are usually written by customers and they demand that a system behaves as expected. Finally, JMeter is oriented toward performance measurement. Measuring performance of the application as it is developed can ease the process of finding potential bottlenecks.

All the tools described are open source and oriented toward Java2 Enterprise Edition platform, so some level of familiarity with J2EE is assumed. This book can also be of interest to those that do not practice the XP ideology as a whole, but just want to utilize some XP details.

I found the book interesting. Everything is demonstrated on case studies. The authors found the right balance between examples that are too simple (far from real world problems) and those that are too complex (difficult to follow). The one thing that is lacking, which I usually find useful, is the further reading section at the end of chapters.

The book and the code are clearly written in an easily understandable manner. It consists of 16 chapters grouped in 3 parts. The first part describes basic concepts of XP and J2EE deployment. The second is focused on the tools themselves and the third part is the API reference of the tools. This makes total of 516 pages but API itself takes the last 150 pages.

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