

# Rapid Software Testing by James Bach and Michael Bolton

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- Are you finding it difficult to assess how much time and effort you're going to need to test effectively?
- Are you overwhelmed by or uncertain about approaches to test planning, design and execution?
- Are you working in an environment where certain people aren't following "the rules"?
- Are you having trouble finding the right balance between planning, documentation, and testing?
- Are you interested in learning skills and techniques that will help you to become a better tester?
- Are you finding that "industry best practices" are infeasible and a poor fit for your organization?
- Do you want to get *very good* at software testing?

## About the Course

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Rapid Software Testing is a 3-day, hands-on class that teaches testing as a sophisticated thinking art. Rapid testing is a complete methodology designed for a world of barely sufficient resources, information, and time. This class presents an approach to testing that begins with developing personal skills and extends to the ultimate mission of software testing: lighting the way of the project by evaluating the product. The approach is consistent with and a follow-on to many of the concepts and principles introduced in the book Lessons Learned in Software Testing: a Context-Driven Approach by Kaner, Bach, and Pettichord.

The philosophy presented in this class is not like traditional approaches to testing, which ignore the *thinking* part of testing and instead advocate never-ending paperwork. Products have become too complex for that, time is too short, and testers are too expensive. Rapid testing uses a cyclic approach and heuristic methods to constantly re-optimize testing to fit the needs of your clients. The Rapid approach isn't just testing with a speed or sense of urgency; it's mission-focused testing that eliminates unnecessary work, assures that everything necessary gets done, and constantly asks what testing can do to speed the project as a whole.

One important tool of rapid testing is the discipline of exploratory testing—essentially a testing martial art. Exploratory testing combines test design, test execution, and learning into a seamless process that finds a lot of problems quickly. If you are an experienced tester, you'll find out how to articulate those intellectual processes of testing that you already practice intuitively. If you're a new tester, hands-on testing exercises help you gain critical experience.

## If you outsource development or testing...

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We have taught this class all over the world to offshore and outsource organizations on behalf of clients who want their testers to do a better job of testing without needing detailed test procedures. The rapid testing methodology is about getting a lot of value for the testing dollar (value that simply can't be reproduced by throwing untrained bodies at the problem) so that your top management won't see testing as a rote activity that any stranger can do as well as you can. Even if you outsource, you will need a core team of testers back at headquarters who can rapidly test products to check the "testing" done by outsource firms.

## If you are burdened with clerical requirements...

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We have taught this class in organizations pursuing the CMM and organizations subject to FDA and other regulatory requirements. Rapid testing is about *thinking*. As long as the project owners still want you to think well and find important problems quickly, this is a class that applies to you. However, we do advocate a lean form of test documentation, to the extent you can possibly trim it. We also teach session-based test management, which allows you to measure and document exploratory testing in a manner compatible with more "formal" process cultures.

## About The Instructor

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Michael Bolton has over 15 years of experience in the computer industry testing, developing, managing, and writing about software. He is the founder of DevelopSense, a Toronto-based consultancy established in 1998 to provide services in program management, testing, configuration management, and professional and personal coaching. He was with Quarterdeck Corporation for eight years, during which he delivered the company's flagship products and directed project teams both in-house and around the world. Canadians still remember his educational, informative, and entertaining presentations at trade shows and seminars across the country.

Michael has delivered workshops, tutorials, and conference presentations on Rapid Software Testing and other aspects of testing methodology on five continents (and one subcontinent!). He has been writing a regular column in Better Software Magazine (formerly Software Testing and Quality Engineering) since 2005. He was an invited participant at the 2003, 2005, 2006, and 2007 Workshops on Teaching Software Testing in Melbourne, Florida (hosted by Cem Kaner and James Bach). He is a founding member (with Fiona Charles) of the annual Toronto Workshops on Software Testing. He is a member of Gerald M. Weinberg's SHAPE Forum. He is also the Program Chair for TASSQ, the Toronto Association of System and Software Quality.

## Comments About The Instructor

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*"Michael is a bright and engaging thinker with a passion for professional development."*

[Cem Kaner](#), Author of [Testing Computer Software](#) and [Lessons Learned in Software Testing](#)

*Last week I took Rapid Software Testing from Michael Bolton. The three days of stuffing my brain in the beautiful downtown campus of the University of Toronto was loads of fun...If you don't go to play each day, or you don't think you can break the rules, or you simply want to become a better tester, give [Rapid Software Testing](#) a try. I think you will find, as I did, that it is three days well spent!*

Michael Hunter, Microsoft (<http://blogs.msdn.com/micahel/archive/2007/01/17/ThisIsYourBrainOnRst.aspx>)

*"Michael is a born teacher. He is VERY engaging and an effective speaker who knows his topic inside and out -- a rare combination!"*  
QA Manager, Boulder, CO

## Course Outline

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In this course, you will learn:

- Concise, universal heuristics and models for instant test design
- How to tackle any product or product idea instantly
- How to analyze a test heuristic or practice
- How to test despite ambiguous or missing specifications
- How to deal with overwhelming complexity or confusion
- How to know when to stop or suspend the test process
- How to prepare and deliver a credible test report at any time

## Key Ideas

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### The Themes of Rapid Testing

Put the tester's mind at the center of testing.  
Learn to deal with complexity and ambiguity.  
Develop testing skills through practice, not just talk.  
Use heuristics to guide and structure your process.  
Be a service to the project community, not an obstacle.  
Consider cost vs. value in all your testing activity.  
Diversify your team and your tactics.  
Dynamically manage the focus of your work.  
Your context should drive your choices, both of which evolve over time.

### Rapid Testing Starts With You

Identifying your context  
Testing under time pressure  
Excellent rapid technical work begins with you...  
...but you don't have to be good at everything  
Skills vs. alternatives

### Scientific Thinking

How do we know what we know?  
Confronting complexity with general systems thinking  
Linking observations and inference  
Introducing heuristics

### Finding and Recognizing Bugs

Know your oracles  
Consistency as a theme for oracles  
Coping with difficult oracle problems  
Know your coverage  
Handling coverage disputes  
Solving coverage problems with testability

### Exploratory Strategies and Procedures

Focusing and defocusing  
Exploiting variation  
Telling the testing story  
The process of test design  
Testing to search vs. testing to learn  
Blending scripted and exploratory approaches

### Diversifying Your Strategy and Your Tactics

Considering cost vs. value  
Quick tests vs. careful tests  
Focusing on risk  
The role of repetition

### Rapid Recording and Reporting

Session based test management for high accountability  
Rapid estimation  
Reporting progress in a test cycle

### Selected Exercises (throughout the class)

Test The Famous Triangle  
Find the Bug in a Calendar Program  
Test the Mysterious Sphere  
The Wason Selection Task  
The Simplest Possible User Interface  
Testing a Wine Glass  
What Does It Mean To Save a File?  
Use Exploratory Modelling on a Small App  
Discover the Role of Repetition in Test Strategy  
Report on the Completeness of Testing  
Exploratory Testing with Playing Cards  
Exploratory Testing with Dice

## Comments on the Course

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“..the training was a great exposure to a lot of different concepts and methods of attacking problems, and the rapid testing strategy looks to be very useful. On Thursday a support issue came into the group that fell in one of my feature areas, so I replied. I did a little work before lunch, and while out at lunch I thought that this would be a time to try some of the rapid testing methods. Took about 10 minutes, noted steps and thoughts as I was going, and arrived at a cause and possible solution much quicker than I would have in the past.”

“Excellent material—well seasoned from tried and true practices. This material is useful to develop individual test skills and would be effective to deliver to whole teams together. I am not exactly sure how I will successfully disseminate the wealth of information back to the organization when I return, but I will try my best. Very worthwhile—an understatement. Thank you for challenging us and being generous with your experience and knowledge.”

“Now, will I be able to put the concepts to good use? I believe so, although it will require practice. After 15 years of highly structured development and testing, not to mention a lifetime of linear thinking, such “anarchy” makes me uncomfortable, and it will take me some time to get good at this style of testing. Thanks for presenting it as an alternative, and teaching us how to decide when to take advantage of it (instead of a more biased view).”

“I had taken James' Exploratory Testing class already, so this was somewhat of a review for me. However, the impact was more effective this time around because I had more experience. The new material really solidified the basic principles for me.”

## Contact Information

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