

Transitioning from Standard V&V to Rapid Testing Practices in a Chaotic Project Environment

By

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“How Session-Based Exploratory
Testing Saved My Life”

Situation December 2003

- Small (100 employees) ISV
- 1 product
- 4 Releases per year (Quarterly)
- 4 SQA and 10 developers

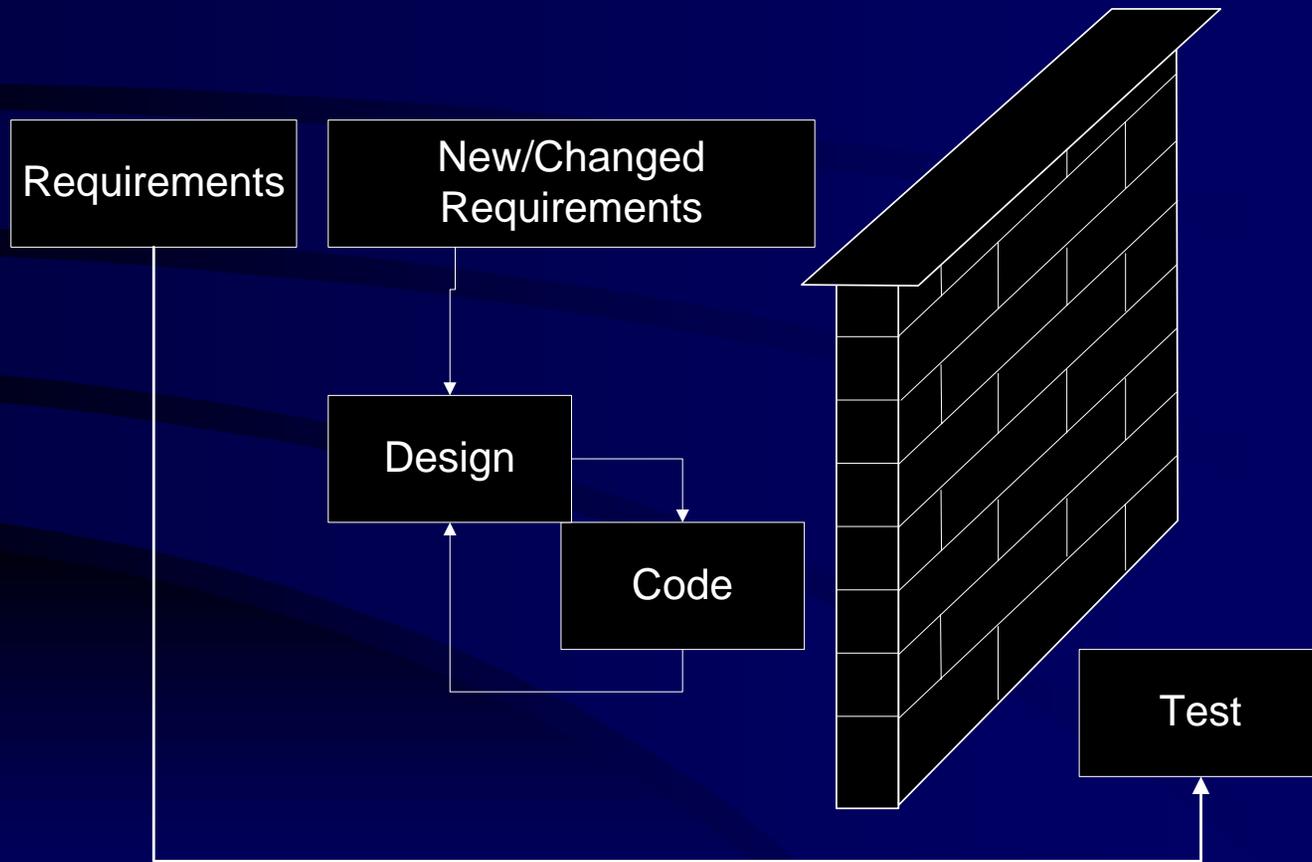
Situation January 2004

- Small (100 employees) ISV
- 1 product
- 4 Releases per year (Quarterly)
- 10 SQA and 21 developers
- 1 ASP version of the product under development.

Situation June 2006

- Small (100 employees) ISV
- 6 products
- 8-13 Releases per year (Customer Led)
- 6 SQA and 19 developers

SDLC up to June 2004



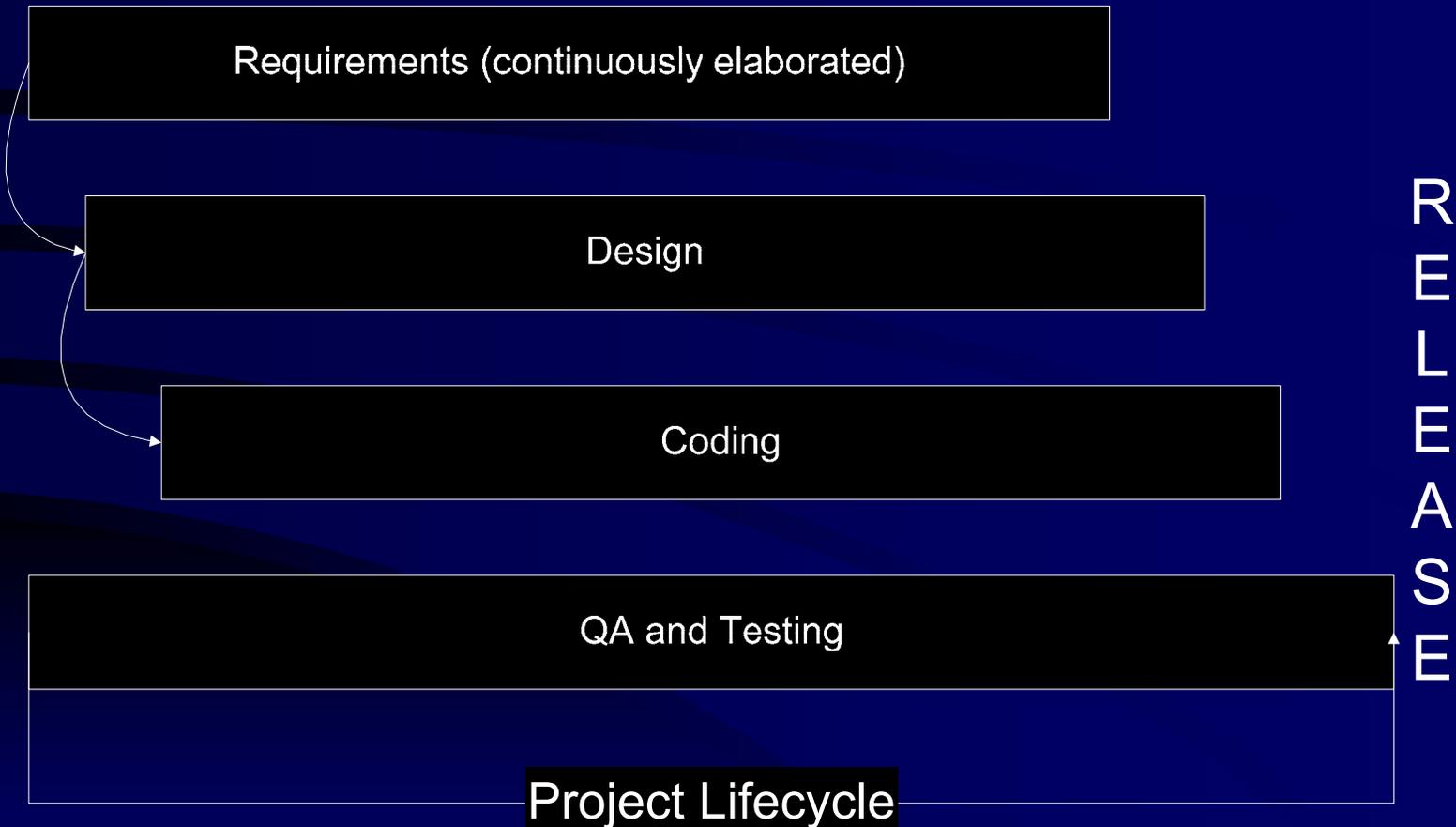
What is a QA Team to do?

- Move QC up to the front of the process and carry on throughout to kill bugs at all phases (Requirements, Design, etc.)
- Emphasis on interactions and not on “complete” documentation.
- Adapt to rapid changes in requirements, designs, and delivery dates.

What We Gave Up.

- Lengthy, time-consuming, and ultimately useless IEEE 829-1998 Test Plans
- “Hiding out” and feeling like a mushroom.
- Volumes of paper and disk space that once held test plans and some test case documentation that could now be used for storing data we use.

SDLC June 2006



What We Did

- SQA as a “service” to R&D department.
- Switched to Exploratory testing almost entirely. (Performance and some automated Functional testing augments). [Cem Kaner]
- Charters are generated using risk-based heuristics and prioritized by impact and probability.
- Session-based ET (James & Jonathan Bach)

What We Did

- SBET Management [Jonathan Bach]
- Mini-Test Plans [Jonathan Bach]
- Pair testing [Cem Kaner & James Bach]
- “Feature Teams” Dev+SQA
- Automated daily builds of SUT (continuous integration)
- SQA deploys any build they wish to test

What Happened

- Morale improved significantly
- Defect rates for NEW development were kept on par with maintenance projects.
- More “Critical” bugs found faster.
- Major bugs found after code freeze reduced.
- Almost steady defect ratios of 50% Critical, 28% Moderate, and 22% Minor across all releases
- 90% reduction in “Non-Bug” Bugs.
- 300% increase in number of test cases performed
- Fewer late nights for SQA.

The amount of structure
necessary in any testing
project is inversely
proportional to the skill of
the testers involved.