



# Building a Testing Strategy

Karen N. Johnson

# Who am I?

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# About this presentation

- There are many ways to build a test strategy.
- Take these ideas as ideas not as absolutes.
- A look at the principles of the context-driven school of software testing and how the principles apply to building a strategy.
- A list of components you might include in your strategy.

# The Seven Basic Principles of the Context-Driven School

- The value of any practice depends on its context.
- There are good practices in context, but there are no best practices.
- People, working together, are the most important part of any project's context.
- Projects unfold over time in ways that are often not predictable.
- The product is a solution. If the problem isn't solved, the product doesn't work.
- Good software testing is a challenging intellectual process.
- Only through judgment and skill, exercised cooperatively throughout the entire project, are we able to do the right things at the right times to effectively test our products.

# Checklist

- Project scope
- Product
- Context
- Project Stakeholders
- Risk analysis
- Types of Testing
- Test environment
- Test data
- Resources
- Estimates
- Project plans & milestones

# Project Scope



- Testing objectives
- Testing in/out for release
- Features in/out for the release
- Communicating the testing scope

# Product

- Features
- Regression
- Product documentation
- Interfaces with other applications
- Components outside of the core product

# Context

- The product
- The release
- Constraints
- Formal vs. informal
- Initial product release or subsequent release

# Project Stakeholders



- Who are they?
- Collect opinions
- Assumptions
- Enlist support

# Risk Analysis

- Regulations
- Compliance
- Formal (FMEA)
- Informal
- Areas for consideration: functional, content, security, data, load, performance, privacy

# Types of Testing

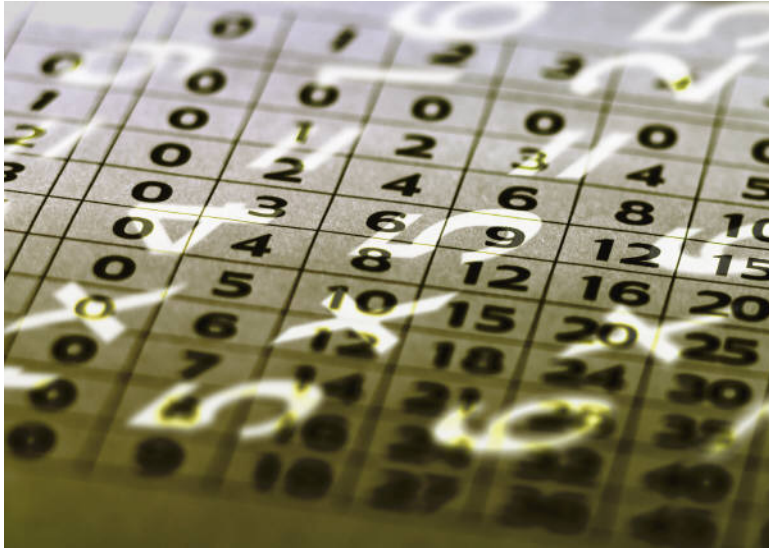
1. Black box
2. White box
3. Gray box
4. Functional
5. Automated
6. Regression
7. Security
8. Data
9. Exploratory
10. Performance
11. Stress
12. Multi-user
13. Cookies
14. Compatibility
15. Interfaces
16. Developer
17. Unit
18. Integration
19. System
20. User Acceptance
21. Installation

# Test Environment



- For some projects, getting an environment is easy.
- And for some projects, getting an environment established can be one of the most challenging aspects of the project.
- Maintaining the environment: the software release and the data.

# Test Data



- Depending on the product, test data can be an essential factor.
- In other cases, getting a copy of production data might be restricted.
- If test automation is a type of testing, building test data might be needed.

# Resources



- Existing staff
- Contract staff
- Tools
- Utilities

# Estimates



- Methods of building estimates.
  - Top down
  - Bottom up
  - WBS
- Include other people in estimating.
- Look at a calendar to plan out of office time.

# Project Plans & Milestones

- Project Dates
- Development milestones
- Testing milestones
- Milestones for elements of the plan, such as hiring staff, acquiring an environment, purchasing test tools

# Keeping the Strategy Alive



- Review the plan throughout the release.
- Status updates keep stakeholders informed.
- Update and distribute the plan at key intervals.
- Communicate change.

# Are we done yet?

- Release criteria
- Go, no-go release meetings
- Post-release monitoring
- Learning from the project

# references

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# Thank you!

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