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

- “Documenting your software test project,” Karen N. Johnson and Michael D. Kelly [http://searchsoftwarequality.techtarget.com/guide/allInOne/category/0,296296,sid92_tax308063,00.html](http://searchsoftwarequality.techtarget.com/guide/allInOne/category/0,296296,sid92_tax308063,00.html)
- Blog post, James Bach, see: [http://www.satisfice.com/blog/archives/63](http://www.satisfice.com/blog/archives/63)
- Webcast: “Making Sense of Software Tests,” Hosted by Tech Target. Presenter: Karen N. Johnson [http://searchsoftwarequality.techtarget.com/guide/allInOne/category/0,296296,sid92_tax308063,00.html](http://searchsoftwarequality.techtarget.com/guide/allInOne/category/0,296296,sid92_tax308063,00.html)
- The Seven Basic Principles of the Context-Driven School see: [http://www.context-driven-testing.com/](http://www.context-driven-testing.com/)
Thank you!

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