

UNDERSTAND AGILE START TO FINISH

* ONE DAY

* ONE TRACK



7:00 Registration

7:45 Initial Remarks Phil Japikse

8:00 Intro to Scrum Mark Windholtz

9:00 Engineering Practices Jim Weirich

Break

10:15 Five Things to do to be more Agile Brian Prince

11:15 Why Agile Fails Chris Nelson

Lunch and Panel Discussion

1:30 An Agile Success Story

2:30 Enterprise Agility

3:30 Retrospectives

4:30 Closing Remarks and Raffle

Sean Heuer

Phil Japikse

Joe Obrien

Microsoft[®]





























Enterprise Agility: Applying Agile in a Waterfall World

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Who am I?

- Principal Consultant, Pinnacle Solutions Group
- Microsoft MVP
- MCSD, MCDBA, CSM, CSP
- Member Telerik Community Speaker Bureau
- Enterprise Application Architect
- Trainer/Mentor/Speaker
- Lead Director, Cincinnati .NET User's Group
- Founder and President, Agile Conferences, Inc.
- Contributing Author
 - www.nplus1.org
 - "C# 2010 All In One" (Wiley)

Summary

- Scrum is about
 - Setting attainable goals
 - Preventing death marches through time boxing
 - Transparency
- Scrum is not about
 - Coding standards, development techniques or processes
- Scrum is a framework that promotes interaction, communication, and teamwork

Can't we all just get along?

- Teams don't work in isolation
- Teams must interact with many other groups in the enterprise that
 - Typically are not agile and/or
 - Have no desire/ability to become agile

Making Scrum work

- Courtesy and Respect
- Don't just assume they "don't get it"
- Be "Agile" in interactions
- Disclaimer: Some of the concepts in the following slides are not traditional Scrum

Inter-Team Communication

- Host meetings with representatives from all affected teams on a regular schedule
 - Development team reports:
 - High level progress status
 - Reaffirms architecture
 - Other teams report:
 - Status of infrastructure required for release
 - Any changes to external requirements
- Meet more often as release gets closer

Release Planning

- Enterprise projects
 - Usually consist of multiple sprints
 - Require a great deal of coordination between teams
- Product Backlog must be
 - Complete* (still subject to change)
 - Prioritized (all items, not just top n)
- Time-box the release
 - Priorities and scope will change
 - Estimates will be wrong
- Involves Product Owner, Architect(s), Security, Infrastructure, QA, Someone who knows MS Project, etc

Users

- Most users/customers don't understand software development
- Used to waiting months/years to see projects delivered
- Coaching is required
 - Product Owner is their single Point Of Contact
 - User Testing of Sprints is a new concept

User Testing

- User Testing is used to validate the state of the software after every sprint.
 - Key Users should be testing the codebase from the previous sprint
 - The Team (via the Product Owner) must fully disclose what they believe to be working and not working
- Users can enter *potential* defects into the tracking system

QA/Testers

- Best if QA is part of The Team
 - Corporate Silos can prevent this
- QA/Testers are used to the waterfall approach
 - Development creates something, throws it over the wall
 - QA tests it, throws it back
 - Ad infinitum
- Must adopt a different approach to testing

Sprint QA Testing

- As soon as the Sprint Backlog is determined:
 - Begin creating Test Plans for items in the sprint
 - Create/Update Integration Test Plans for current and previous Sprints
- When developers believe they are "Done"
 - QA Reviews Unit Tests
 - Validate that they are testing the requirements
- Bottom line, QA should be *Pro*active, and not *Re*active

Bug Triage

- Bug triage meetings happen immediately after the Daily Standup
- Triage Team
 - Lead QA, Architect/Dev Lead, Product Owner
- Bugs are marked for either:
 - Sprint Backlog
 - Product Backlog
 - Bug
 - Change Request

Swim Lanes

- Instead of Burn Down Charts
- "Stolen" from Kanban
- Tasks/Features move from
 - In Queue
 - In Process
 - Ready for QA
 - Ready for UAT
 - Ready for Release

Refining Requirements

- A good requirement is one that you can wrap a test around
- All Backlog items need to be defined well enough that a:
 - Developer can understand and code the intent
 - QA Resource/Tester can validate the code
- Incomplete items are removed

Wireframes

- Used to visually layout the User Interface
- All proposed screens
- Important to not look "finished"
- Tools:
 - www.mockupscreens.com
 - www.balsamiq.com



User Stories

- User Stories
 - As an [X] I Want [Y] So That [Z]¹
 - X is a role
 - Y is a feature
 - Z is the benefit

Ihttp://dannorth.net/introducing-bdd

- As an <u>Account Manager</u>, I want to be able to <u>Edit a Customer's Address</u> so that <u>we can</u> <u>Effectively Communicate with them</u>
- Includes success criteria

Success Criteria

- Must be testable
- Use Given/When/Then syntax
 - Given 2000 customers
 - When selecting one
 - Then the form should open in < 1 second

Context Specification¹

- When Editing a Customers Address
 - It Should Load in < 1 sec with 2000 customer records
 - It Should allow an Account Manager to edit the address

1 Behavior Driven Development (Code Magazine) - Scott Bellware

Defining "Done"

- All (Dev, Users, QA, etc) must agree on definition of Done
 - Developer
 - Unit Tests, Documentation, Code Reviews, etc.
 - QA
 - · Integration Testing, Black Box Testing, etc
 - Users
 - UAT
- Will be different based on the product
 - NASA vs XBOX

Test/Behavior Driven Development

- Development needs to be Test Driven
 - QA personnel need to understand what that means
- Successful T/BDD development teams build confidence in themselves and with others
 - QA shouldn't have to test that
 - Math.Add(2,3) returns 5
 - QA can focus on the bigger picture
 - Making sure the requirements are met
 - Integration Testing

Sprint 0

- Also referred to as the Foundational Sprint
- Occurs before full Team is formed
 - Product Owner, Application Architect
- Used for:
 - Configuration (e.g. Build Server, developer Virtuals)
 - Product Backlog creation
 - Acquiring Funding
 - Release/Hardware planning
 - Assembling the Development Team

Verification Sprint

- Occurs after code "chill"
- Used for:
 - Security audits
 - Performance/Load/UAT/Integration testing
 - Deployment documentation
- Team uses this time to work on:
 - Required documentation, improving Unit Tests, etc.
 - NOT refactoring application code

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