



SCRUMBUTT TEST

aka the Nokia Test

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Avoiding ScrumButt

Nokia Test Origins

- **In 2005, Bas Vodde started training and coaching teams at Nokia Networks in Finland. The first Nokia test focused on Agile practices**
 - jeffsutherland.com/basvodde2006_nokia_agile.pdf
- **By 2007, Siemens joined Nokia Networks to form Nokia Siemens Networks with over 60,000 employees and 15 billion Euro in revenue. Bas Vodde moved to China to train Nokia Siemens Networks staff on Scrum and updated the Nokia Test to include Scrum practices.**
- **In 2007, Jeff Sutherland tuned the Nokia Test for Scrum Certification and in 2008 developed a scoring system**
 - agileconsortium.blogspot.com/2007/12/nokia-test.html
 - jeffsutherland.com/Agile2008MoneyforNothing.pdf

Nokia Test Questions

- **Iterations**
- **Testing**
- **Enabling Specifications**
- **Product Owner**
- **Product Backlog**
- **Estimates**
- **Burndown**
- **Disruption**
- **Team**

Question 1 - Iterations

- **No iterations - 0**
- **Iterations $>$ 6 weeks - 1**
- **Variable length $<$ 6 weeks - 2**
- **Fixed iteration length 6 weeks - 3**
- **Fixed iteration length 5 weeks - 4**
- **Fixed iteration 4 weeks or less - 10**

Question 2 - Testing

- **No dedicated testers on team - 0**
- **Unit tested - 1**
- **Features tested - 5**
- **Features tested as soon as completed - 7**
- **Software passes acceptance testing - 8**
- **Software is deployed - 10**

Question 3 - Enabling Specifications

- **No requirements - 0**
- **Big requirements documents - 1**
- **Poor user stories - 4**
- **Good requirements - 5**
- **Good user stories - 7**
- **Just enough, just in time specifications - 8**
- **Good user stories tied to specifications as needed - 10**

Question 4 - Product Owner

- **No Product Owner - 0**
- **Product Owner who doesn't understand Scrum - 1**
- **Product Owner who disrupts team - 2**
- **Product Owner not involved with team - 2**
- **Product Owner has a clear product backlog estimated by team before Sprint Planning meeting (READY) - 5**
- **Product owner with release roadmap with dates based on team velocity - 8**
- **Product owner who motivates team - 10**

Question 5 - Product Backlog

- **No Product Backlog - 0**
- **Multiple Product Backlogs - 1**
- **Single Product Backlog - 3**
- **Product Backlog has good user stories that satisfy the INVEST criteria - 5**
- **Two sprints of Product Backlog are in a READY state - 7**
- **Product Roadmap is available and updated regularly based on team estimates of Product Backlog - 10**

Question 6 - Estimates

- **Product Backlog not estimated - 0**
- **Estimates not produced by team - 1**
- **Estimates not produced by planning poker - 5**
- **Estimates produced by planning poker by team - 8**
- **Estimate error < 10% - 10**

Question 7 - Sprint Burndown Chart

- **No burndown chart - 0**
- **Burndown chart not updated by team - 1**
- **Burndown chart in hours/days not accounting for work in progress (partial tasks burn down) - 2**
- **Burndown chart only burns down when task is done (TrackDone pattern) - 4**
- **Burndown only burns down when story is done - 5**
- **Add 3 points if team knows velocity**
- **Add two point if Product Owner release plan**

Track Done - Scrum pattern by Jim Coplien

It is easy to interpret the burn-down chart as a good portrayal of estimated remaining time, and to use that portrayal to develop confidence in meeting the Sprint's actual business goals of done functionality.

Usually, team members update the burn-down chart daily to reflect adjustments to the amount of remaining work. Such updates reflect a desire to have as good knowledge as is possible about the effort remaining. These estimates are made in mid-stream and reflect increases that arise from emergent requirements. However, given that one emergent requirement has been discovered in a task doesn't imply that no others remain. While the confidence in an estimate usually improves with each revision and with continued work on the task, unusually wicked problems seem never to converge.

On the other hand the Product Owner is not centrally interested in partially completed work, only in items that are done and potentially shippable. Since the goal of Scrum is to achieve the Sprint target agreed with the Product Owner, and to reduce risk, the focus should be on done. Emergent requirements increase risk, and the Product Owner is certainly interested if estimates expand. Because there may always be emergent requirements, any estimate of remaining time based on work mid-stream in a task has a higher degree of uncertainty than the relatively risk-free estimate of zero remaining time for done items.

In theory, it is possible for the remaining time on a burn-down chart to be quite near zero, yet to have few (or perhaps zero!) tasks in the done state.

Therefore:

Update the Product Backlog in only two cases: reducing the amount of remaining known work if the task is done; and increasing the amount of known work if the task grows in size due to emergent requirements or other insights gained during the Sprint. Do not reduce the amount of remaining work that arises from progress on partially completed tasks.

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The team and Product Owner have a better picture of the state of the Sprint with respect to the Sprint's business goals of delivering done functionality. The team can revise estimations in the middle of a Sprint with more confidence because they are not dependent on the unknown remaining time for partially completed tasks. Yet, the risks incurred by the "surprises" of emergent requirements are embraced and made visible.

It is impossible, using this approach, to come near the end of a Sprint with a burn-down chart that projects success even if the Sprint only ends with 90% of the tasks 90% done.

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There is a chance that a completed task can become "un-completed" by emerging requirements in some other task during the sprint. For such cases, see the pattern Domino Effect.

This pattern was suggested by Jeff Sutherland, co-founder of Scrum, and he reports that it is widely used by his clients.

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Question 8 - Team Disruption

- **Manager or Project Leader disrupts team - 0**
- **Product Owner disrupts team - 1**
- **Managers, Project Leaders or Team leaders telling people what to do - 3**
- **Have Project Leader and Scrum roles - 5**
- **No one disrupting team, only Scrum roles - 10**

Question 9 - Team

- 🌐 **Tasks assigned to individuals during Sprint Planning – 0**
- 🌐 **Team members do not have any overlap in their area of expertise – 0**
- 🌐 **No emergent leadership - one or more team members designated as a directive authority -1**
- 🌐 **Team does not have the necessary competency - 2**
- 🌐 **Team commits collectively to Sprint goal and backlog - 7**
- 🌐 **Team members collectively fight impediments during the sprint - 9**
- 🌐 **Team is in hyperproductive state - 10**

Return on Investment of CSM Course

- **Typical Scrum Certification course average on ScrumButt test is 4 out of 10.**
- **At end of course, on average, participants think they can get their teams to score 6 out of 10.**
- **They estimate that velocity will increase 20-50% with this higher score.**
- **If the average team costs 100K Euro a month, then a 20% higher velocity will save about 20K Euro/month on development.**
- **20K/1500 cost of course = 1333% ROI the first month (and it keeps on paying back every month)**

Questions?



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