Agile software development with Scrum

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### What is Scrum?

<table>
<thead>
<tr>
<th>NOT CHECKED OUT</th>
<th>CHECKED OUT</th>
<th>DONE! :D</th>
<th>SPRINT GOAL: BETA-READY RELEASE!</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIGRATION TOOL</td>
<td></td>
<td></td>
<td>SPRINT GOAL: BETA-READY RELEASE!</td>
</tr>
<tr>
<td>BACKOFFICE</td>
<td></td>
<td></td>
<td>SPRINT GOAL: BETA-READY RELEASE!</td>
</tr>
<tr>
<td>USER ADMIN</td>
<td></td>
<td></td>
<td>SPRINT GOAL: BETA-READY RELEASE!</td>
</tr>
<tr>
<td>TEST</td>
<td></td>
<td></td>
<td>SPRINT GOAL: BETA-READY RELEASE!</td>
</tr>
<tr>
<td>DEPOSIT</td>
<td></td>
<td></td>
<td>SPRINT GOAL: BETA-READY RELEASE!</td>
</tr>
<tr>
<td>WAITING</td>
<td></td>
<td></td>
<td>SPRINT GOAL: BETA-READY RELEASE!</td>
</tr>
</tbody>
</table>

**Burndown**

**Unplanned Items**

**Next**

<table>
<thead>
<tr>
<th>UNPLANNED ITEMS</th>
<th>NEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRITE SHIPPER</td>
<td>5d</td>
</tr>
<tr>
<td>WRITE TESPER</td>
<td>5d</td>
</tr>
<tr>
<td>ISSUE SUGGESTS</td>
<td>5d</td>
</tr>
<tr>
<td>TEST CASES</td>
<td>5d</td>
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</tbody>
</table>

**Withdraw**
What is Scrum?

- Scrum and XP from Trenches
- Scrum Primer
- Scrum on Wikipedia
- Scrum and XP in Atlassian
- Agile RSS and Scrum Alliance RSS
Scrum roles

- **Product Owner**
  - Proxy between customer and the team
  - PO can be customer or Marketing rep

- **Development Team**

- **Scrum Master**
Scrum Team

- Self-managing and self-organizing
- Up to 10 people
- Cross functional (db admin, web designer, tester, etc.)
- Bigger project = more Scrum teams
- Collocated team (couple of teams can work in different locations)
Scrum guidelines

- Estimation
- Planning
- Backlogs
- Iteration (sprint) from 2 to 4 weeks
  - Daily Scrum (standup meeting)
- Demo
- Iteration review
Scrum guidelines

• Self-management
  - There is no imposed leader
  - Everybody is responsible for the success of the project

• On-site client – proxy is possible
  - Deliver early and often
  - Demo at the end of each iteration
Scrum guidelines
Iteration / Sprint

- Estimating and Planning (4h + 4h)
  - Define goal of the iteration

- Daily Scrums
  - What have you done on this project since the last Daily Scrum meeting?
  - What do you plan on doing between now and the next DS meeting?
  - What impediments stand in the way of you meeting your commitments to this Sprint and the whole project?

- Demo (4h)

- Retrospection - post-mortem (4h)
Estimation
Estimation

• User stories
  - “As a user I want to … in order to …”
  - Acceptance criteria / how to demo it?

• Story points
  - Abstract size (not time required to complete the tasks)
  - 0, 1, 2, 5, 8, 13, 21, 100
  - “5” is twice as complex as “2”
Planning

- Planning poker
- Release planning (user stories level)
- Iteration planning (task level)
  - Time/effort estimation in days
  - Minimum unit is 0.5 day
  - Maximum unit is 2 - 3 days
Backlogs

- **Product backlog**
  - User stories
  - Epics

- **Iteration backlog**
  - User stories
  - Tasks
  - Bugs
Iteration Burndown

OUCH! Need to remove some backlog items from the sprint.

Need to add some backlog items to the sprint.
Team Velocity

- How to measure?
- Can we include stories 90% done?
- Can we increase it?
- Can we work overtime?
- What velocity will we have in the next iteration?
Team Responsibility

- “We are all in this together”
- Avoid “hit-by-the-truck” factor
- Avoid “it’s his/her fault” situation
- Confront problems and “smelly” decisions - foster constructive conflict
- Support other team members
Scrum vs. Waterfall

• Iterative and incremental process
• Can stop at any time if there is a problem
• Documentation? - definition of “done”
• Better prepared for changes
• Better react on changes
Scrum and XP

- Overlapping concepts
- Work good together
- Communication, Simplicity, Feedback, Courage, Respect vs. Scrum
Manager vs. Scrum Master

- Manager drives the team
- Leader serves the team
- Scrum Master can be developer at the same time
- Scrum Master is the Leader
Leadership

- Manager has to become leader
- Leader serves team members
- Leader has to cover up the team
- Leader is a role model
Introducing Scrum (pros)

- Better communication
- Faster development
- Better team relations
- Better productivity
Introducing Scrum (cons)

- Not everybody likes that way of working
- Managers sometimes don’t like the change
- Not every manager is a Leader - servant mode
- Hard to convince that the change will pay off
Scrum is about...

- ... accepting uncertainty
- ... working as a team
- ... delivering early and often
- ... constant estimating and planning
- ... keeping sustainable work pace
- ... self managing work environment
- ... having fun working 😊
Scrum is about...
Contact me

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