SWINBURNE UNIVERSITY OF TECHNOLOGY

SWE20001
Managing Software Projects

Lecture 1d

Writing Product Backlog

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Scope [Working definitions]

- Things to do in the project
- Identify the boundary of the project
- Within the boundary – Within the scope – need to do it
- Outside the boundary – Out of scope – refuse to do it
- On the boundary (?) – grey area – need negotiations

Q: What if the client is desperate to have something from outside the boundary?

Product Backlog – What is it?

- A list of items that are required to be done for the project
- Written by the Product Owner (e.g. customer rep.)
- Have some indication about the (relative) importance of the items
- Team members (i.e. developers) select the items in the Product Backlog to be developed during Sprint Planning Meeting
- Items need to be specific enough for development

Product Owner – What to write?

Q: WHERE TO START?

- Within Scope – break it down to smaller things
- Based on usage scenario
- Based on user stories
- Based on software features
- Based on functional requirements
- Based on non-functional requirements
- Based on “things” needed to be done in the project
- Based on …

Example – Paint your Bedroom

Assume that you want to paint your Bedroom

- How much time you need to finish this item?
- Make a guess first, then move on

Paint Your Bedroom – Define Scope

Things to be considered

Scope

- An empty room / room with furniture (?)
- Any holes to patch (?)
- 4 Walls (?) – same colour / different colours (?)
- Door (?) – same colour / different colours (?)
- Trims (?) – same colour / different colours (?)
- Ceiling (?) – same colour as walls' / different (?)
- How many coats of paint you need?

Example: Paint Your Bedroom

- Scope
  - ☐ An empty room
  - ☐ No holes to patch
  - ☐ 4 Walls – same colour [what colour?]
  - ☐ No doors
  - ☐ No trims
  - ☐ Ceiling – different colour from walls [what colour?]
  - ☐ Primer (Undercoat) + 3 coats of paint

Example: Paint Your Bedroom (cont'd)

- Product Backlog 1
  - ☐ Get Tools
  - ☐ Determine the colour of Walls and Ceiling
  - ☐ Get Paint
  - ☐ Paint the Walls
  - ☐ Paint the Ceiling
- Product Backlog 2
  - ☐ Get Tools
  - ☐ Get Undercoat for Walls
  - ☐ Get Undercoat for Ceiling
  - ☐ Get Paint for Walls
  - ☐ Get Paint for Ceiling
  - ☐ Get Masking Tapes
  - ☐ Paint Undercoat
  - ☐ Paint First Coat
  - ☐ Paint Second Coat
  - ☐ Paint Third Coat

Example: Peer Review System – Context

You are given the task to develop an electronic system to facilitate the submission and subsequent analysis of peer-reviews for a project-based university unit with multiple teams.

The system must enforce
authentication of all users,
validate all peer review submissions
based on predefined validation rules,
and allow for a semi-automatic analysis of all peer reviews.

Each student has to submit an evaluation of every member in his/her team (including self). A rating from 1 to 5 is required on several aspects of teamwork, together with a paragraph of text that gives a holistic description of the individual's contribution.

Example: Peer Review System – Present Situation

- Students to fill out the peer review forms and submit it via email
- Convenor to collect and analyze the review
  - ☐ Manual process
  - ☐ Time consuming
  - ☐ Error prone
- Electronic submission and analysis can help convenor to solve these issues
- An example of Peer Review Form

Example: Peer Review System – Product Backlog

OK Examples

- Allow a student to submit the peer review assessment of **one of** their team members
- Allow a student to resubmit their assessment of a particular team member and override the previous submission
- Allow a student to modify their previous submission of a particular team member

Bad Examples

- Allow a student to submit a peer review assessment of their team members
- Build the menu of the peer review system
- Build the UI for the peer review system
- Build the database for the peer review system

Example: Peer Review System – Product Backlog (cont'd)

- Allow a convenor to generate the performance report of a student based on the peer review assessments
- Allow a convenor to configure the peer review form used in their units
- …

Product Backlog – Reflection

- How to write product backlog?
- Any criteria?
- What are the “Dos”?
- What are the “Don’ts”?