SWINBURNE UNIVERSITY OF TECHNOLOGY

# SWE20001
# Managing Software Projects

Lecture 5a

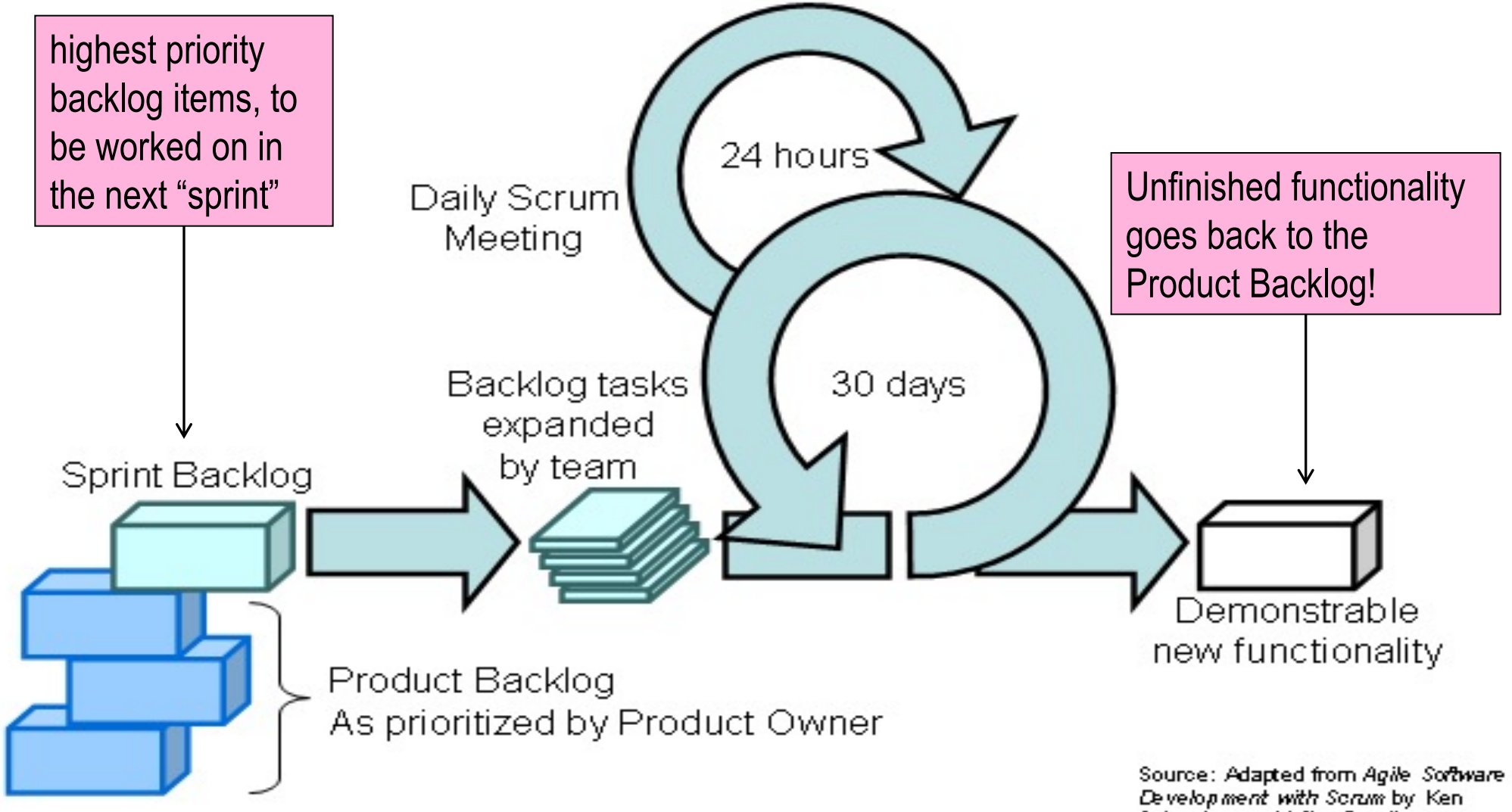
Getting Sprint Backlog Item

- WBS (Estimating)

# Sprint Backlog – What is it?

- A list of **items*** that are required to be done during the sprint
- **Item** = Item + its tasks (breakdown tasks) + estimated time for each task
- Determined by the Scrum team during the Sprint Planning Meeting

# Scrum – The Process (Recap)




Source: Adapted from *Agile Software Development with Scrum* by Ken Schwaber and Mike Beedle.

# Items in Sprint Backlog – Where from?

- From those items in the Product Backlog
- Developers to “discuss” with Product Owner to decide whether a particular product backlog is good for the “next” sprint

# Items in Sprint Backlog – How to?

- Team members (Developers and Product Owner) to
  - Think about what to do with the item
  - Ask questions about the item so as to collect enough information to develop the item
  - Determine whether the item can be completed in the "*next*" sprint
  - Break down the item into smaller tasks
  - (for each task) Estimate the time required (efforts) to complete the task
  - If "total efforts required > a sprint", break the item down to smaller pieces so that it can be completed in one sprint
  - If "total efforts required < a sprint", fit "several items" into one sprint

# Paint Your Bedroom Example (Recap – Lec1)

- 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

# Paint Your Bedroom Ex. (Recap – Lec1 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 – Sprint Backlog

- Item 1: Allow a student to submit their peer review assessments about their team members
  - ☐ Peer Review Form (?)
  - ☐ Online submission (via Web site?) / Submission via mobile apps (?)
  - ☐ One member per submission (?)
  - ☐ All team members in one submission (?)
  - ☐ Any other questions (?)

# Example: Peer Review System – Sprint Backlog

- Item 1: Allow a student to submit their peer review assessments about their team members [Task breakdown via WBS]
  - ☐ T1: Design the form
  - ☐ T2: Program the form (Web ? / GUI ?)
  - ☐ T3: Design database table / schema for the peer review submission
  - ☐ T4: Program the module for submission (extract info and save to database)
  - ☐ T5: Design test cases for submission
  - ☐ T6: Test the correctness of the submission module
  - ☐ Any other tasks (?)
  - ☐ Any dependencies (?)

# Example: Peer Review System – Sprint Backlog Item 1 + Tasks

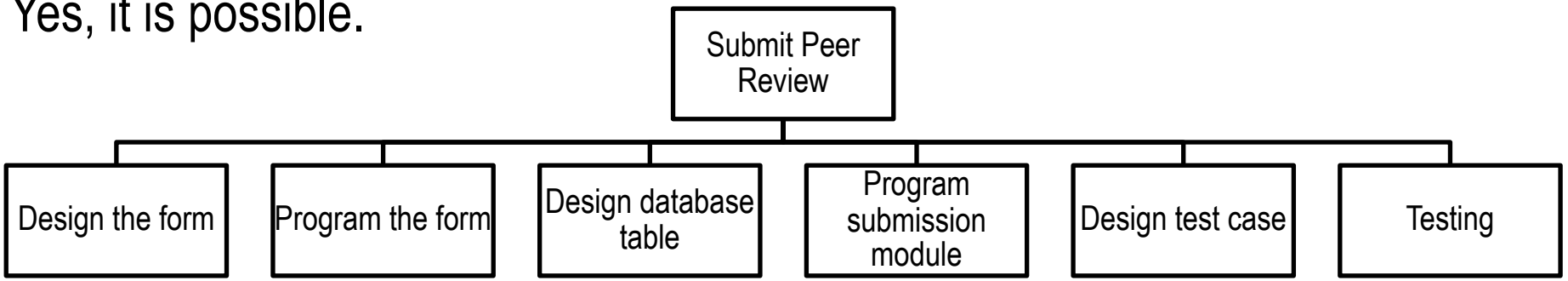
| Task Id | Desc | Depends on | Duration (hrs) |
|---|---|---|---|
| T1 | Design the form | | 1 |
| T2 | Program the form | T1 | 1 |
| T3 | Design database table / schema for the peer review submission | T1 | 1 |
| T4 | Program the module for submission (extract info and save to database) | T2, T3 | 3 |
| T5 | Design test case for submission | | 1 |
| T6 | Test the correctness of the submission module | T4, T5 | 1 |

# Ex.: Peer Review System – Sprint Backlog Item 1 – WBS

Qn 1: Is this good enough?
Ans: Depends.

Qn 2: Can it be broken down further to even smaller tasks?
Ans: Yes, it is possible.

Qn 3: But how?
Ans: Let's do this in Lecture. The result may be different from the previous version.

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