

SWE20001

Managing Software Projects

Lecture 8a

Estimating by Analogy



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Estimating by Analogy

Goal: To estimate the effort of an item

- Find something* similar to the current item
- Try to analyse the similarity [and differences] between these two items (current vs similar)
- Estimate the effort required for the “similar” parts based on the similar item
- [Estimate the effort for the “differences”]
- Calculate the total effort required

Similar Item – Where do I start?



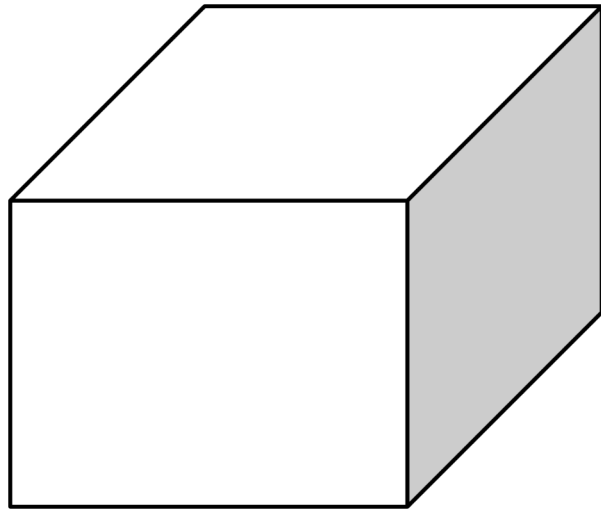
- Based on the functionality / feature of the current item
 - Based on the characteristics of the current item
 - Based on the tasks required to complete the current item
-
- For more accurate estimation, usually choose an item that you did in the past

Example – Paint Your Bedroom – Analogy



Wall

- 3m (l) x 3m (w) x 2.3m (h)
- Each Wall = 6.9 sq. m.
- Each Wall – 1 hour per coat



Ceiling

- Same room
- Ceiling = 9 sq. m
- Similarity – covering the area
 - 1.3 hours per coat [adjusted]
- Differences – hold the roller up high longer
 - Need 0.2 hours per coat
- Total: 1.5 hours per coat

Example: Peer Review System – Analogy



- Want to estimate: Allow a student to modify his/her peer review assessment about a particular team member

[Assuming need to pull previous data from database → modify → submit]

Similar items may be:

- A student to submit his / her review report of a particular team member
 - Similarity: the review form will be the same; same submission process
- A person to modify his / her review report of using a particular product
 - Similarity: pull the previous data from database → modify → submit it

Analogy – Issue



- Difficult to get similar items unless you have done a lot in this industry