

SWE20001

Managing Software Projects

Lecture 8b

Estimating by Comparison



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Estimating by Size Comparison



- Among the many items to be estimated, choose one* to perform the estimation
 - Item A, Item B, **Item C**, Item D, Item E, Item F
- Estimate the effort for this particular item
 - Item C = 15 hours
- Compare the size of other items with this chosen item
 - $A \rightarrow C$ [double the effort]; $B \rightarrow C$ [half the effort]; ...
- Calculate the efforts of other items
 - $A = 30$ hours, $B = 7.5$ hours, **$C = 15$ hours**, ...

Note: Items A, B, C, D, E, and F do not need to be similar

First Item? What to choose?



- Choose anyone [probably a bad choice]
- Choose one that you feel **comfortable** to perform the estimate
- Choose one that you know best
 - ☐ You know “exactly” what to do and how long does it take to do it
- Choose one that you are most familiar with
- Choose one that you have done in previous sprint
 - ☐ You have an accurate/actual effort
- Choose one that you have done in previous projects
- ...

Example – Paint Your Bedroom – Sizing

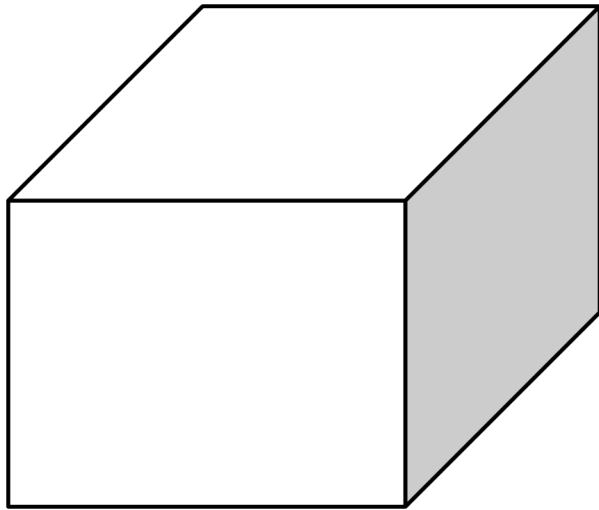


Wall

- 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
- Ceiling – approx. 1.3 hours per coat

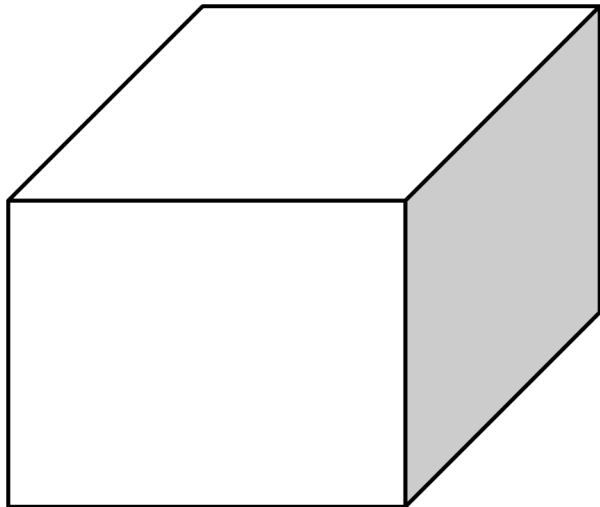


Example – Paint Your Bedroom – Sizing



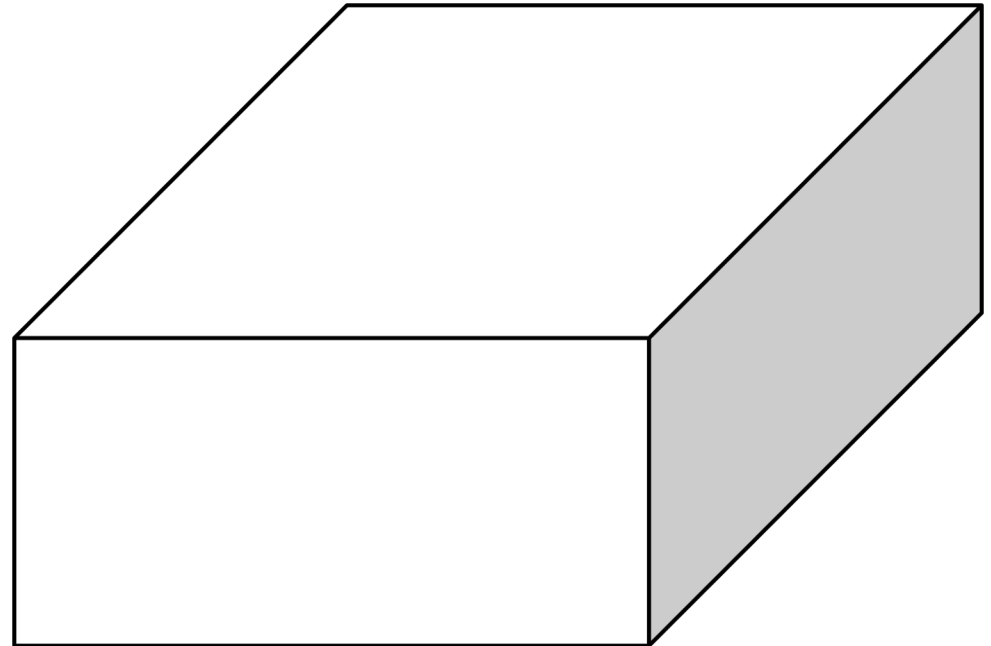
Previous Bedroom

- 3m (l) x 3m (w) x 2.3m (h)
- Wall – 1 hour per coat
- Ceiling – 1.5 hours per coat



Current “Bedroom”

- 6 m (l) x 6 m (w) x 2.3 (h)
- Walls – double the effort
- Ceiling – quadruple the effort



Example: Peer Review System – Sizing



- **The chosen one:** Allow a student to submit a peer review assessment about one team member – **20** hours
- Allow a convenor to generate the performance report of a student based on the peer review assessments – [double the effort]
 - 40 hours
- Allow a convenor to configure the peer review form used in their units [1.5 the effort]
 - 30 hours
- ...

Size Comparison – Issue



- Difficult to compare unrelated / different items