INCOSE Healthcare Working Group
4th Annual Systems Engineering in Healthcare Conference

Development Difference –
Essential Insight for Understanding and Mastering Developmental Project Quality

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Agenda

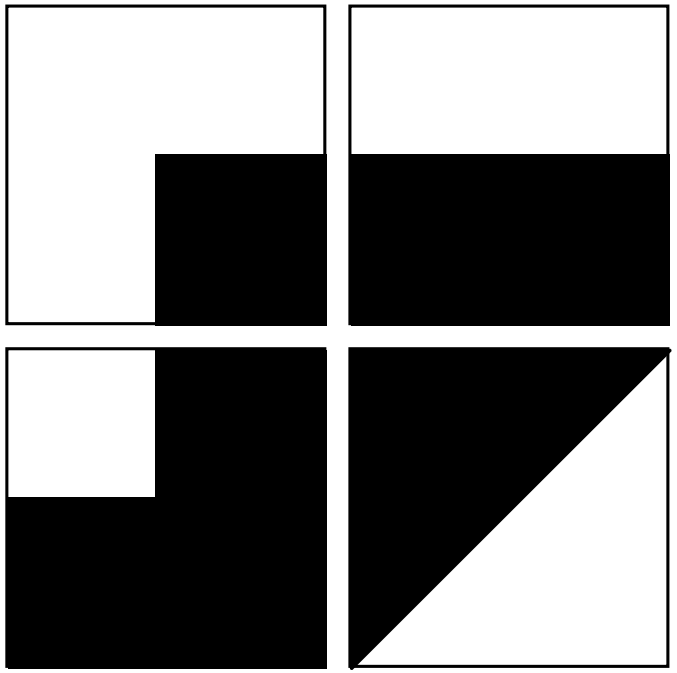
- Introduce Activity
- Have Fun
- Discuss Observations
- Discuss Implications
- Questions

Activity

- Complete a mini-project in 30 minutes
- The project is to solve a puzzle
  - There are thousands of possible solutions
  - You only need to find one
- There's no trick involved, just work…
  - Report progress at 15 and 30 minute points
  - Watch for things that feel like real projects

Requirements

- Use all 64 pieces
- Create an 8x8 piece square
- Place pieces “face-side” up
- Match black and white interior edges
- Don’t modify or trade pieces
- Report completion time when you finish
- Report progress % at 15 minute point
- Report progress % if not done at 30 minutes



Observations

- What reminded you of real projects?
- Was your progress report “accurate”?
  - How did you arrive at % complete?
  - Why did that work / not work out well?
- Why is this activity so different than putting a jig-saw puzzle together?
  - Was “invisible effort” required?
  - Was significant rework required?
- What damage does the “wrong” approach cause?

Implications

- Pure constants and variables are rare in practice
- It is very common to find a single method applied to a mix of task types
  - What happens when “jig-saw” manufacturing measures are applied to creative tasks?
  - What happens when creative methods are applied to purely manufacturing tasks?
  - When a mix is present, what happens to the tasks that align with imposed method?
  - What happens to the “minority” subset within that mix?
- When in doubt about task nature, what is the only safe choice?

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Thank you for attending!

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