ESD.34 System Architecture

Opportunity Set #1 - Definitions

Deliverables due: January 11th, during class.

Learning Objectives:
• Develop reference definitions in your context
• Articulate the meaning of "Principle"
• Practice the "ID, create, search, synthesize" critical thinking process

1. Answer the following questions:

For each definition you must
• Make up your own definition first
• Find several other definitions and cite the sources
• Compare and critically analyze all the definitions
• Synthesize your final definition
For each definition, write an illustrative example of something that fits the definition (e.g. is a system).

1.a. What is a System?

1.b. What does it mean to be Complex (in the sense of a technical system)?

1.c. What is Value?

1.d. What is a Product?

2. Principles, Methods and Tools

Fill in the matrix with one example of related principles/methods/tools for each of the architecture of products, product development process and product organizations. For example, a principle for a product architecture might be: “Each product exists as part of a larger system when delivering value.” (Don’t use this one)

Deliverables:
For each question, prepare a single powerpoint chart. Bring it to class, and I will ask you to read out your input. Also submit by class an electronic PowerPoint version to the class server as OS1IAP2007_groupN. Include the list of group members on the first page of the submission.