I - Process Programming vs Modeling

⇒ Read the two ICSE9 papers first, then the two ICSE19 papers. The supplemental slides will provide background and examples.

⇒ Background

- What are the advantages of defined process technically? managerially?
- What are the 5 levels in CMM? What do they represent and what are their differences?
- What are fundamental differences between models and programs?
- \$\text{How do humans fit into these two paradigms?}
- ♦ What are programs good at? People?

II - Process Programming vs Modeling

⇒ Osterweil's process programming

- What are Osterweil's main complaints that lead him to process programming?
- What advantages do we derive from process programming?
- ♦What are the problems in considering process as software?
- Why does he thing process programs should be executable?

⇒ Lehman's Response

- \$\to How is Lehman's view different from Osterweil's?
- What are important aspects of models that make them more useful for processes?
- ⇒ Which side do you come down on? Why?
- ⇒ In the ICSE '99 papers, how are their views different form their '89 views?

III - A Broad View of Process Sytems

⇒ Process Capture

- What are three critical distinctions to be made about processes? Why are they important?
- Why are events a useful mechanism for process capture?
- What is the typical basis for best practices?

> Process Architecture and Design

- What aspects of product architecture and design are appropriate for processes?
- What are some of the recommended principles?

⇒ Construction

- What are the main differences between process programming and process modeling?
- Why a dynamic and not a static build process?
- ⇒ What were the lessons learned from the 5ESS process system studies?

IV - Programming and Modeling Examples

> How are the two approaches the same? Different?

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$General philosophy?
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Basic control structures?

\$Execution/enactment control?

\$Assumptions and results?

\$Exceptions?

\$Inter-process (activity, step, etc) communication?

- ⇒ How useful and intuitive do you find Little Jil's visual programming? I/I textual approach?
- ⇒ How would you program informal activities in Little Jil? I/I?

Process by Doonesbury









Process by Doonesbury







