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?
♀ 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 view of software processes does his example suggest?
  - What advantages do we derive from process programming?
  - What are the problems in considering process as software?
  - Why does he think process programs should be executable?

- **Lehman’s Response**
  - 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 from their ’89 views?
III - A Broad View of Process Systems

**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?
  - General philosophy?
  - 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?
SO WHAT’VE YOU BEEN UP TO, BERN?

OH, YOU KNOW—WORKING ON THE NEXT PARADIGM—THE USUAL.

DO YOU KNOW THAT ALEX, WHO’S ALL OF 16, IS ALREADY WORRYING ABOUT OUTSOURCING?

WELL, SHE NEEDN’T BE...

SHE’S JUST GOT TO LEARN HOW TO MAKE IT WORK FOR HER.

FOR INSTANCE, MY NEPHEW ZIG, WHO’S A SYSTEMS ANALYST, RECENTLY OUTSOURCED HIS OWN JOB!
Process by Doonesbury

Every night he e-mails a day of work to this wicked smart engineer in Bombay. The next morning, the completed work is sitting in his mailbox.

Zig pays the engineer a third of his salary, and is now looking for a second job!

Wow... That's impressive...

And his boss hasn't caught on?

No, every few weeks Zig has the engineer screw up.