Monday April 19

Project #3 – Due Date = Monday May 3
Project is the implementation.

Term Project Due Date = Monday May 10 2010
Details of the Term Project haven't been announced yet.

Today we'll talk about Chapter 12: Evaluating Products, Processes, and Resources
See Pfleeger's slides

At the end of this lecture, we talk about The Future of Software (and Software Engineering)

Slide (12.27) – Boehm's Quality Model (1978)
Reflects an understanding of quality where the software
- does what the user wants it to
- uses computer resources correctly and efficiently
- is easy for the user to learn and use
- is well-designed, well-coded, and easily tested and maintained

ISO 9126 - http://iso.org
(see slides 12.29 for more details)
Functionality
Reliability
Usability
Efficiency
Maintainability
Portability

Software quality Models
Boehm
ISO 9126
Dromey

Software reuse
(Slide 12.53 for reuse lessons)

CMM – Capability Maturity Model
5 Levels- Initializing, Repeatable, Defined, Managed, Optimizing

Capability Maturity Model Integration - http://www.sei.cmu.edu/cmmi
Required Questions for Level 1 of The Process Maturity Model
What are they asking about on this slide?
THE PROCESS!

CMM Maturity Levels

CMM Key Practices

6 levels of capability

Where do we go from here with software? The future?

Google: **The future of software**

**Attributes that come to mind:**

1. Mobile computing (on the move)

2. Ubiquitous computing (everywhere) – Technology recedes into the background of our lives, seamlessly around us.
   - Invisible computing
   - Personal & Ubiquitous Computing – Wearable computers. What would you use this technology for. Fiber-optics in your clothing - [http://www.youtube.com/watch?v=YrtANPtnhyg](http://www.youtube.com/watch?v=YrtANPtnhyg)

3. Knowledge Based Software Systems (KBSS)
   - Computational Intelligence

4. Cloud computing
   - How?
   - Issues: Privacy & Security

   - Autonomous – The software runs itself. No help from users.

**New Computing Paradigms / Technologies**

6. Quantum Computing


8. Bio-computing – How can we get our DNA & RNA to do the computing for us?

***NEXT LECTURE – CLOUD COMPUTING.***