Why Study Tools?

• Tools shape the way we think
  – If all you have is a hammer, the whole world looks like a nail

• Tools shape the way we work
Categories of Tools

• Communication
  – IM
  – IRC
  – Email
  – Mailing lists

• Documentation
  – Word
  – Wiki’s
  – JavaDocs & their ilk

• Planning
  – MS Project
  – Excel

• Source control
  – SVN
  – GIT

• Automated build systems

• IDE’s

• Testing
  – Model checkers
  – Unit testing tools

• Bug tracking
  – Bugzilla
  – Jira

• Design
  – UML
  – Visio
  – UI builders

What are we missing?
General Software Engineering Process

- Requirements definition
- System design
- Sub-system development
- System integration
- System installation
- System evolution
- System decommissioning

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- Design
  - UML
  - Visio
  - UI builders
- Documenting requirements
- Tying requirements to code
- Tracking progress/productivity
Integrated Environments

• Sourceforge
• Launchpad
• CodePlex

Tool Assignment

• Pick a category of tools (claim on mailing list, at most 2 people per category)

• Survey some common tools in that category (at least 2), write a comparative assessment
  – Key features
  – What do they have in common
  – What differentiates them

• Plan on spending a few hours using each
• Writeup should be ~2 pages.