CSE306
SOFTWARE QUALITY IN PRACTICE

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LEX 24

- SENS server went down between 4:00 and 6:00 (R2)
- See Piazza post - we'll give feedback on what you have
LPR

- Keep original schedule (T 05/03 and T 05/10)
- Gives us recovery options in case issues crop up
Development relies on many tools, including

- editor
- compiler
- debugger
- build system
- code repository
- unit testing framework
- etc
WHAT DOES AN IDE DO?

An IDE integrates

• editor

• compiler

• debugger

• build system

• code repository

• unit testing framework

• etc
TYPICAL EDITOR FEATURES

• Language-aware syntax highlighting
• Syntax formatter
• Code collapse/expand
• Code navigation (file to file)
• Code templates
• Code completion
• Code assist
REFACTORING SUPPORT

• rename: variable, function, class, etc.
• change function signature
• move up/down class hierarchy
• inline/extract function
• etc.
COMPILER INTEGRATION

• show errors in editor
• go directly to error
• continuous compilation
DEBUGGER INTEGRATION

• show breakpoints in editor

• highlight code execution in editor
BUILD TOOL INTEGRATION
• build project without leaving IDE

EXECUTION ENVIRONMENT EMULATION
• e.g. Android Studio, Xcode

CONSOLE / REPL / SHELL
• execute code from within IDE

WORK REMOTELY
• edit/compile/run code on remote system
VERSION CONTROL / REPO

• Interact with version control (add, merge, etc) from within IDE

• Track status of files in IDE

• Visualize branching structure, etc.