Introduction to Software Engineering
(2+1 SWS)
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Computer Aided Software Engineering
CASE tools can lead to significant improvements in software quality and productivity.

• CASE Tools support process activities such as requirements engineering, design, program development and testing.

• CASE tools include:
  • compilers, debuggers, build tools,
  • integrated development environments
  • design editors
  • data dictionaries
  • tools that support the visualization / comprehension of existing code
  • ...

A Classification of CASE tools

- **Tools** support individual process tasks (e.g. compiling a program)
- **Workbenches** support process phases (e.g. requirements specification or design)
- **Environments** support a substantial part of the software process.
Doors is an example of a requirements management tool for systems and IT applications. www.volere.co.uk/tools.htm has a broad overview of requirements management tools.
A subversion Client
A File Comparison and Merge Tool
The Eclipse IDE
The XCode IDE
The Reengineering Tool CodeCrawler
The possibilities for improvements of the software process by CASE tools are limited.

Limiting factors:

1. Software engineering is a design activity based on creative thought.

2. Software engineering is a team activity and quite a lot of time is spent on interacting with other team members, which is (still) not well-supported by current CASE tools.

(However, recent tools and plug-ins start to offer corresponding support.)