



Introduction to Programming

Bertrand Meyer

Exercise Session 1

22 September 2009

Organizational

<http://se.ethz.ch/teaching/2009-H/eprog-0001/index.html>

- Final group lists will be published today
- If you **absolutely** want to switch to another exercise group because of language issues: send an email to nadia.polikarpova@inf.ethz.ch



About me





How about you?

Questions from me

- Which programming **languages** have you used?
- What kind of **projects** did you do?
- Who knows what **design by contract** is?
- What are your main **expectations** from this **course**?
- What are your main **expectations** from the **exercise sessions**?

Questions from you



- Installation: see assignment 1
- Demo
 - Compilation
 - Debugging
 - Code browsing



Workbench vs. Finalizing

Workbench mode

- Assertions (contracts)
- No optimizations
- Debugging possible

Slow / safe

Finalized mode

- No assertions
- Code optimizations
- No Debugging

Fast / unsafe



Compilation Stages I

- Degree 6: Examining System
- Degree 5: Parsing Classes
- Degree 4: Analyzing Inheritance
- Degree 3: Checking Types
- Degree 2: Generating Byte Code
- Degree 1: Generating Metadata



Compilation Stages II

Workbench mode

- Degree -1: Generating Code

Finalized mode

- Degree -2: Constructing Polymorphic Table
- Dead Code Removal
- Degree -3: Generating Optimized Code

Assignment 1

- 1 Welcome to ETH
- 2 EiffelStudio installation
- 3 Your first Traffic program

- If you have problems with assignment 1:
=> Switch to a group level A or B
or ask me...

Questions





See you next week!