Software Engineering Design & Construction

Dr. Michael Eichberg
Fachgebiet Softwaretechnik
Technische Universität Darmstadt

Main Topics

- Understanding Software Design and Development

- Software Design Principles

- Software Design Patterns

- Advanced Programming Language Features

Goals of the Lecture

- To be able to produce "good" designs; i.e. to produce code that is – among others – reusable, maintainable, comprehensible.

- To learn to judge the design of existing pieces of software.

- To get familiar with advanced programming language features and to learn when to apply them.

- To get a deeper and thorough understanding of design patterns.

- To understand the relation between software design and programming languages/
  To understand why improvements of programming languages are important/
  To understand programming language concepts w.r.t. supporting high-level design.

Organization

Final Exam

- We will have a written exam at the end of July, 2015.
  (The date shown in TuCan may change due to the overwhelming interest in this lecture!)

- The exam will take 90 minutes.

- It will be an open-book exam.

Organization

Exercises

- We will have approx. 10 exercises

- The exercises are not graded!

- We will discuss the solution to each exercise one or two weeks after presenting it.

- You are allowed to submit one exercise to get it corrected by a tutor. The tutors will have two office hours each to help you with the exercises.

Organization

Mid-term Exam

- The mid-term exam is optional.

- By passing the mid-term exam you will get a bonus for the final exam.

- The bonus cannot be used to pass the final exam.

Points in the
Mid-term Exam   Bonus

100% — — — — — — — — 100%

50%

0%   0%