Overall Structure

This course is given by
- Michael Petter *(MP)*: petter@in.tum.de
- Axel Simon *(AS)*: Axel.Simon@in.tum.de
- there are 12 lectures
- there will be a written exam
- there is no repeat exam

We present selected topics that focus on current issues in the design or implementation of programming languages:
- concurrency *(AS)*
- object orientation *(MP)*
Outline (I)

1. **Concurrency (AS)**
   - Low-Level Concurrency, Memory Barriers
   - Wait-Free Algorithms
   - Locks and Monitors
   - Transactional Memory

2. **Object Orientation (MP)**
   - Method dispatching
   - Multiple Inheritance
   - Mixins and Traits
   - Prototype based Languages
   - Aspect Orientation
   - Generics and Templates

Administration

Lectures:
- every Wednesday at 14:15pm
- slides on http://www2.in.tum.de/hp/Main?nid=233
- lectures are recorded using the tele-teaching tool

Exercises:
- an exercise sheet is made available with every lecture
- exercises are voluntary but recommended

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Exercises:
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Tutorial sessions:
- every Friday at 10.00am in this room (H2), starting **Oct. 17**
- there are exercises to complete at home
- solutions to these exercises will be presented
- be there!
  - if you have questions of the general kind
  - if you have problems with the exercise sheet
Administration

Lectures:
- every Wednesday at 14:15pm
- no lectures on bank holidays: 10.11, 24.12, 31.12.
- slides at http://w2i2.ist.tue.mtkr.de/itg/lectures/2012
- lectures are recorded using the tle-teaching tool

Exercises:
- an exercise sheet is made available with every lecture
- exercises are voluntary but recommended

Tutorial sessions:
- every Friday at 10:00am in this room (HS), starting Oct. 19
- there are exercises to be completed at home
- solutions to these exercises will be presented
- be there!
- if you have questions or difficulties, please come to the tutorial session