

Praktische Softwaretechnologie

Károly Bósa
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Research Institute for Symbolic Computation
(RISC)

Goals of this Course

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PRACTICAL Software technology:

- General purpose is to give an overview on software development from practical point of view.
- During this semester we will touch several topics.

The idea is to give such a course for students whose profession is not computer science such that

- if in the future you will need to use computer for programming purposes this lecture can provide a basis for this.
- if in the future you will meet some (basic) problems or challenges related to software development, then this course MAY HELP you to solve them (such that you can recall the lecture notes or the example programs we discuss here).

Content of the Course

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- Object Oriented (OO) Programming
- A modern OO Language: **Java**
- Implementation of some **algorithms in Java**
- The Modeling Language **UML**
- A Software Development Environment : **Eclipse**
- A version managing backup system: **Subversion**
- Design Patterns
- The Java Test Framework **JUnit**
- Introduction into **the Client-Server Solutions and Web Services**

Organization/Requirements

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- **Lectures (english!!!)**
- **Practical Programming Exercises/Homeworks**
- **Each student MUST give a presentation about a chosen topic (at least 40 minutes, in English, with slides)**

Slides, exercises and other information are/(will be) available at:

<http://moodle.risc.jku.at/course/view.php?id=107>

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- Lectures (english!!!)
- Practical Programming Exercises/Homeworks
- Each student **MUST** give a presentation about a chosen topic (at least 40 minutes, in English, with slides)
- **No exam!!!**

Slides, exercises and other information are/(will be) available at:

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Presentations

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- **The presentation topics will be available on the course web page**

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- **The presentation topics will be available on the course web page**
- **Everybody must choose a topic : First come , first served!!!**
- **If you will not be able to attend the class when your presentation is scheduled, (attempt to) notify me one week in advance, please!!!**
- **You should show me the draft of your presentation one week before (or at least you should be able to tell me some sentences about its structure and notify me if you have problem).**

Still some words about the presentations

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- **It is not acceptable if you read your presentation:**
 - **Of course, you can check your notes during your presentation.**
 - **You can read some terms/sentences on your slides (but do not write your slides fully with sentences).**
- **Please upload your slides to the course webpage in pdf format after your presentation.**

Course Web Page

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To take part in the course, you have to enroll in the [KUSSS system](#). Since the exercises will be submitted via Moodle, you also have to [login in Moodle](#) (<http://moodle.risc.uni-linz.ac.at>) and register as a course participant. You will then also receive per email all messages posted in the News forum.

The screenshot displays the Moodle interface for the Research Institute for Symbolic Computation (RISC). At the top right, it indicates the user is not logged in and provides a language dropdown set to English (en). The main content area is titled 'Course categories' and lists several options: 'SS 2014 (5)', 'WS 2013/14 (5)', 'Previous Years', and 'Miscellaneous (4)'. The 'SS 2014' category is highlighted with a red circle. To the left, there is a 'Navigation' menu with 'Home' and 'Courses' links, and a 'Login' form with fields for 'Username' and 'Password', a 'Remember username' checkbox, and a 'Log in' button. Below the login form are links for 'Create new account' and 'Lost password?'. A search bar for courses is located at the bottom of the course categories section. On the right side, there is a text box providing information about the Moodle installation and a link to 'Documentation'. The Moodle logo is visible at the bottom center of the page.

Course Web Page

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moodle.risc.jku.at/course/view.php?id=107

Most Visited Getting Started Latest Headlines Google Calendar

You are currently using guest access ([Log in](#))
English (en)

Praktische Softwaretechnologie (SS2014)

Home > Courses > SS 2014 > PractSoftTech14

Navigation

- Home
 - Site pages
- Current course
 - PractSoftTech14**
 - Participants
 - General
- Courses

Lecturer: [Karoly Bosa](#)

Language of the Course: English

Times and Places: Wednesday 10:15 - 11:45 KG 519
Thursday 14:30 - 16:00 KG 519

Start Date: 12.03.2014


Topic of the Course:


- Object Oriented (OO) Programming
- A Modern OO Language: Java
- Implementation of some algorithms in Java e.g.:
 - Searching and sorting algorithms
 - Stacks and queues
 - Recursion
 - Backtracking (Eight queens problem)
 - Approaching definite integral of a given functions
 - Java Applets, Basic Graphics Tools and Event Handling
 - Bitmap Rotation in 3D
 - Lagrange Interpolation
 - etc.
- A Software Development Environment : Eclipse
- A Version Control System: Subversion
- The Modeling Language UML
- Design Patterns
- The Java Test Framework JUnit
- Introduction into Client-Server Architectures and Web Services

Requirements:

- Each programming exercise/homework will be evaluated.
- Each student **MUST** give a presentation about a chosen topic (approx. 45 minutes, in English, with slides). The possible topics will be announced soon.

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 [News forum](#)

 [!!! Here you can find the topics of the student presentations \(updated on 11.03.2014\) !!!](#)

Search forums

[Advanced search ?](#)

Upcoming events

There are no upcoming events

[Go to calendar...](#)

Recent activity

Activity since Sunday, 9 March 2014, 3:11 PM

[Full report of recent activity..](#)

Course updates:

Added File
!!! Here you can find the topics of the student presentations (updated on 11.03.2014) !!!

Exercises

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- During the this semester you have to solve and submit 11-12 practical programming exercises.
- You can submit each exercise only before its deadline.
- You can upload your solutions on the corresponding section of the course web page or you can print them out and give them to me personally before the class.
- No submission via e-mail