Geometric Modeling
Summer Semester 2010

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Introduction
Today...

Topics:

- Formalities & Organization
- Introduction: Geometric Modeling
- Mathematical Tools (1)
Today...

Topics:

• **Formalities & Organization**
  - Registration
  - Exercises & Exams
  - Time & Location
  - Feedback

• Introduction: Geometric Modeling

• Mathematical Tools (1)
Registration
Registration: Lecture

Important: You have to register for the lecture

• If you don’t register, you cannot do the exercises and cannot take exams
  (you are welcome to come in and listen, but this won’t get you any credits for your studies)

• You must register within the first two weeks of the lecture
  ▪ Email Jens Kerber: kerber@mpi-inf.mpg.de
  ▪ Include: Name, student number, your email, “Studienordnung”
  ▪ If you are registered, just have to do exercises and pass the exam, otherwise you will fail the lecture.
  ▪ Register before April 29th, 2010. This is also the last day to unregister again (kerber@mpi-inf.mpg.de)
Registration: Lecture

Summary:

If you want to take the exam & the exercises
⇒ Sign up on or before April 29th, 2010.

In case you change your mind
⇒ Unregister on or before April 29th, 2010.

How to register / unregister?

- Email to Jens Kerber: kerber@mpi-inf.mpg.de
- Include name, student number, “Studienordnung”, email
Written Exam
You also have to *signup for taking the exam*. 

- Due to university requirements, you have to sign up for the exam *separately*.
- If you sign up for the lecture, you must sign up for the exam.
- If you forget to sign up for the exam, but signed up for the lecture you will fail automatically.
- You will be notified about the signup deadline by the university.
- Sorry for the red tape...
Summary:

If you have signed up for the lecture

⇒ Sign up for the exam as well.

(Please pay attention to the university deadline!)
Exercises & Exam

To pass the lecture, you need to...

- Participate in *all exercises*
- Obtain at least *50%* of the *exercise score*
- *Pass* the final *written exam* or *the re-exam*
  - Two tries, but no pass if you fail both exams
- A score of more than 50% in the exercises gives you a *bonus score* for the written exam.

**Date for the written exam:**

- Last week of the course (details later) - *discussion?*
- Re-exam at the beginning of wintersemester 2010/2011
Exercises
Exercises

How do the exercises work?

• Goal: theory & practice
• Theory & practice: Alternating each other week
• Exercises will be posted online on Tuesdays

Theoretical Exercises

• Each student has to prepare a write-up
• Hand-in solutions at the *Tuesday lecture* (before the lecture)
• Will be graded and returned in the exercise courses (one week later)
• Solutions will be discussed in the exercise courses
Practical Exercises

• Programming assignments
• Every other week, instead of theory
• Group work: groups of three students
• A C++/QT framework will be provided (Linux/Windows)
• Other languages can be used (but no support), please talk to us about the details in case you want to use your own environment
Practical Exercises (II)

Practical Exercises: Grading

• Grading will be done in personal interviews
• Please sign up for an interview slot (list will still be available at Room 208 after the lecture)
• The group of three must show up entirely.
• Everybody is graded individually, based on the group’s implementation and the personal knowledge about the implementation, i.e. everybody must be able to explain all of the code to the tutor.
Practical Exercises: Grading

- **Time:** Slots will be during exercise course times
  **Place:** same room as exercise course
- Each group is assigned a 20 minutes slot. It is sufficient to show up for this slot only (not for the whole 90 minutes)
- To avoid delays, please be punctual
Practical Exercises (IV)

Hardware / Software:

- You must *demonstrate* your implementation in the exercise room.
- Bring your own laptop. *(Discussion)*
- Windows users:
  - Visual Studio Express is available for free download
- Linux users:
  - GCC/QT 4.3 and K-Develop are part of any major Linux distribution
- If necessary, you can use your CS login for the CIP machines (our framework has been tested there), but you need a laptop for the presentation
Practical Exercises (V)

First Exercise Meeting:

• The first meeting for the exercises will be next week
• Unlike the other practical grading meetings, we will meet for 90 minutes in the exercise room (E1 4 / R023)
• Topics:
  ▪ Using the programming environment (personal advice)
  ▪ Introduction to the provided C++ framework
• *Unlike* the grading interviews, participation in next week’s meeting is voluntarily.
• It is just meant to help students with little programming experience.
Time & Location
Time & Location

Lecture:

- **Tuesday 14-16h (c.t.)**
  
- **Thursday 14-16h (c.t.)**

- **Room 021, MPI Building (Campus E1 4)**
Exercise Courses:

- **Time:**
  - Friday 10-12h
  - Friday 12-14h
  
  *(discussion)*

- **Location**
  - Theory: E1 4 – R023
  - Practice: E1 4 – R023
  - Exception: July, 2nd (alternative will be announced)
# Schedule (tentative)

<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture Tuesday, hand in Assignments</th>
<th>Assignments out on Tuesday</th>
<th>Lecture Thursday</th>
<th>Exercises Courses (Friday)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr. 20. / 22.</td>
<td>Lecture #1</td>
<td>Ass. #0: Practice</td>
<td>Lecture #2</td>
<td></td>
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<td></td>
<td>(programming tutorial)</td>
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<tr>
<td>Apr. 27. / 29.</td>
<td>Lecture #3</td>
<td>Ass. #1: Theory</td>
<td>Lecture #4</td>
<td>Progr. tutorial #0</td>
</tr>
<tr>
<td>May 04. / 06.</td>
<td>Guest lecture #5</td>
<td>hand in: Theory #1</td>
<td>Guest lecture #6</td>
<td>Solutions #1</td>
</tr>
<tr>
<td>May 11. / 13.</td>
<td>Lecture #7</td>
<td>Ass. #2 Practice</td>
<td></td>
<td>Interviews #2</td>
</tr>
<tr>
<td>May 18. / 20.</td>
<td>Lecture #8</td>
<td>Ass. #3 Theory</td>
<td></td>
<td>Solutions #3</td>
</tr>
<tr>
<td>May 25. / 27.</td>
<td>Lecture #10</td>
<td>hand in: Theory #3</td>
<td></td>
<td>- no course -</td>
</tr>
<tr>
<td>June 01. / 03.</td>
<td>Lecture #12</td>
<td>Ass. #5 Theory</td>
<td>Holiday</td>
<td>Interviews #4</td>
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<tr>
<td>June 08. / 10.</td>
<td>Lecture #13</td>
<td>hand in: Theory #5</td>
<td></td>
<td>Solutions #5</td>
</tr>
<tr>
<td>June 15. / 17.</td>
<td>Lecture #15</td>
<td>Ass. #6 Practice</td>
<td>Lecture #14</td>
<td>Interviews #6</td>
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<tr>
<td>June 22. / 24.</td>
<td>Lecture #17</td>
<td>Ass. #7: Theory</td>
<td>Lecture #16</td>
<td>Solutions #7</td>
</tr>
<tr>
<td>June 29./July 01.</td>
<td>Lecture #19</td>
<td>Ass. #8: Practice</td>
<td>Lecture #18</td>
<td>Interviews #8</td>
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<tr>
<td>July 06. / 08.</td>
<td>Lecture #21</td>
<td>Ass. #9: Theory</td>
<td>Lecture #20</td>
<td></td>
</tr>
<tr>
<td>July 13. / 15.</td>
<td>Lecture #23</td>
<td>hand in: Theory #9</td>
<td>Lecture #22</td>
<td>Solutions #9</td>
</tr>
<tr>
<td>July 20. / 22.</td>
<td>Lecture #25</td>
<td>Ass. #10: Practice</td>
<td>Lecture #24</td>
<td>Interviews #10</td>
</tr>
</tbody>
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Evaluation

Questions & Suggestions

• Please let us know if there are any issues *anytime*

• *We appreciate your feedback!* Please let us know:
  • ...if you find a certain part of the lecture hard to understand or not well explained.
  • ...any suggestions how to improve the lecture or the exercises.
  • ...any other questions, suggestions or concerns.

• Easiest: Come to my office
  • Office hours: just drop by, or mail to be sure I am around.

• Mail me, or speak to / mail the teaching assistants
Questions?