Software Lab 2023

Chair of Computational Modeling and Simulation
Objectives

• Design and implementation of engineering software
• Team responsibility
• Solution for a research and/or industry relevant problem

Benefit

• Scientific skills: Software Engineering, Clean Code documentation, Scientific writing.
• Soft skills: Teamwork, Presentation, Communication
• 6 ECTS: 2 hours per week x 2 semester

Organisation/Contact

• Miguel A. Vega Torres M.Sc. (miguel.vega@tum.de)
Dates

- Feb 1st: presentation of project topics
- Feb 12th: application deadline for the topics
- March ~1st: announcement of Software Lab 2023 project teams

Key points

- duration: SS 23 & WS 23/24
- group size: 3 (4) students (usually 3)
- time effort: 2 hours / week
- 3 Presentations: exact dates will be announced one month in advanced
- deliveries: documented code, scientific report and a poster
All information:

https://www.cee.ed.tum.de/cms/teaching/master/softwarelab/
CHOOSING YOUR TOPIC
How to Register

1. Read the guidelines -> Decide if you want to commit to the project.

2. Choose your six most favorite topics and two no-go topics:
   - 🏆 2 Gold topics
   - 🏆 2 Silver topics
   - 🏆 2 Bronze topics
   - ✗ 2 No-go topics (No student will be matched to one of his No-go topics!)

3. Registration: insert your selection in the online form on the website (same QR code as before).
   - ⚠️ Use your TUM email address for it.
   - 📅 Do it before Feb 12th.
Q&A
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1. Which **programming skills** are needed?
   - The content of the CiE 1 course or equivalent.

2. **How difficult is software lab?**
   - It is a very difficult project!
   - ⚠ *if you are not sure you will commit to working on the project for at least 2 h per week, please do not send an application with your selection on the website.*

3. **What if I already sent once my selection but I now changed my mind?**
   - If you change your mind, only the last application (with the **TUM Email**) before the deadline will be considered for the topic assignment.
Q&A

4. Can the Software lab project be used as a base for a **master’s thesis**?
   - Yes, however, a master thesis must stand on its own, i.e., it is not the exact same topic as software lab.
   - If the results of your software lab project are good enough, your supervisor may advise you to write a paper out of it.

5. **How is the distribution done?**
   - There is an algorithm that does the distribution automatically, it tires to maximize the number of students that obtain a goal topic. It is not first-come-first-serve.
PRESENTATION OF TOPICS