Software Lab 2024

Chair of Computational Modeling and Simulation
Objectives

- Design and implementation of engineering software
- Teamwork – team responsibility
- Solutions for research and/or industry relevant problems

Benefit

- Scientific skills: Software Engineering, Simulation Background
- Soft skills: Teamwork, Presentation, Communication
- 6 ECTS: 2 hours per week * 2 semester

Organisation/Contact

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

- Jan 31\textsuperscript{st} presentation of project topics
- Feb 14\textsuperscript{th} application deadline for the topics
- March ~1\textsuperscript{st} announcement of Software Lab 2024 project teams

Key points

- Duration SS 24 & WS 24/25
- Time effort \textbf{2 hours/week}
- Group size 3 - 4 students (usually 3)
- 3 Reviews exact dates will be announced one month in advance
- Deliveries documented code, scientific report and a poster

Groups (3 - 4)

2 Semesters (2 h/week)

3 Presentations

Deliverables: Code, data, report
All information:

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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 14th EOD.
Q&A

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 cannot guarantee a commitment of at least 2 hours per week to work on the project, please do not send an application with your selection on the website.

3. What if I sent a selection once but now changed my 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's thesis should be an independent work, distinct from the specific focus of the software lab.
   • If the results of your software lab project are good enough, your supervisor may recommend that you extend them and write a paper out of it.

5. How is the distribution done?
   • An algorithm automates the distribution process by aiming to maximize the number of students receiving a gold topic.
   • It is not first-come-first-serve.
PRESENTATION OF TOPICS