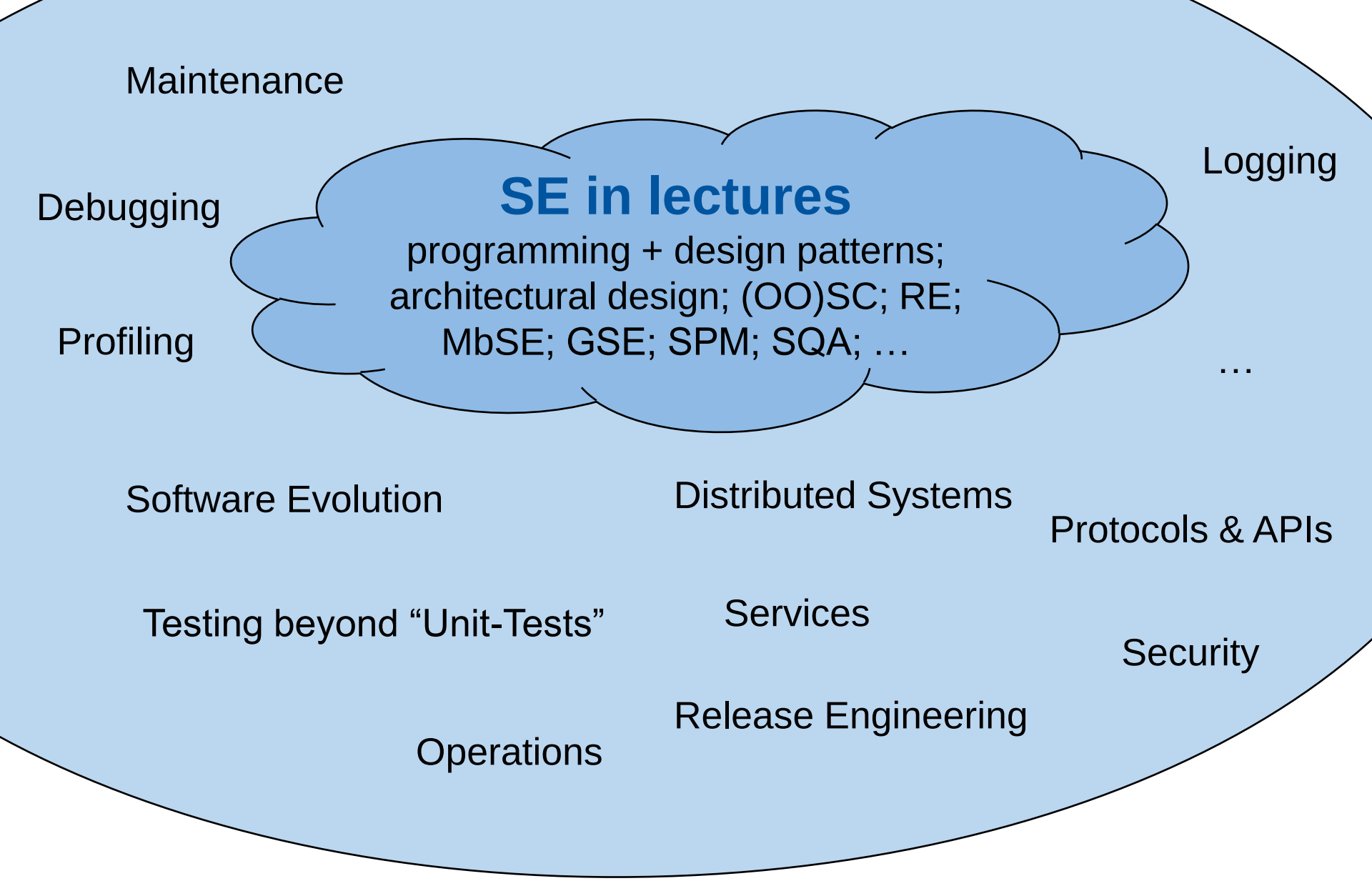
14.04.2021

seminar@swc.rwth-aachen.de

Full-scale Software Engineering & New Trends in Software Construction 2021

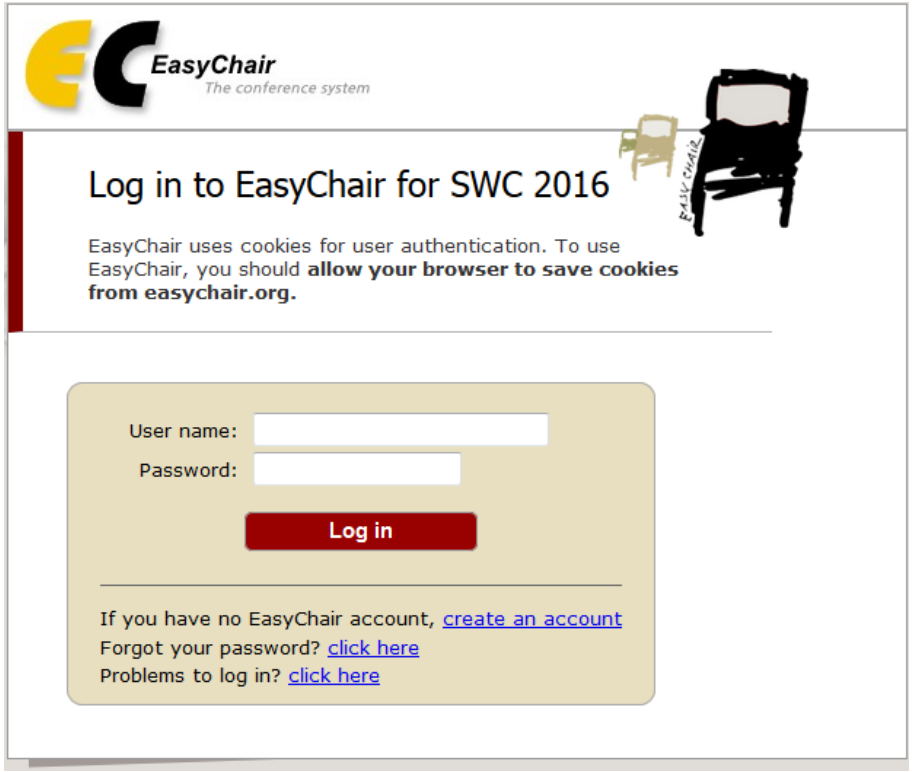
Kick-Off Meeting

Software Construction | RWTH AACHEN UNIVERSITY


Maintenance
Logging
Debugging
SE in lectures
programming + design patterns;
architectural design; (OO)SC; RE;
MbSE; GSE; SPM; SQA; …
Profiling
…
Software Evolution
Distributed Systems
Protocols & APIs
Testing beyond “Unit-Tests”
Services
Security
Release Engineering
Operations

“Conference-like Seminar”

- Choose a topic
- Propose a contribution (title and vision)
- Write a paper
- Review other papers
- Improve your paper
- Prepare a presentation
- Give a talk



Your Tasks and Schedule

- Get Moodle material and read the required reading
- Register at EasyChair
  - Note: This account you might use for real conferences
  - Thus: use your RWTH email
- Do research
- Meet with your supervisor regularly
- Choose a title
- Write an outline / vision
- Write a paper
- Write an abstract
- Write two reviews
- Prepare 1 question for each (reviewed paper) talk
- Make a presentation and present your work
- Attend Scientific Writing & Academic Presenting
- Attend all presentations of FsSE 2021

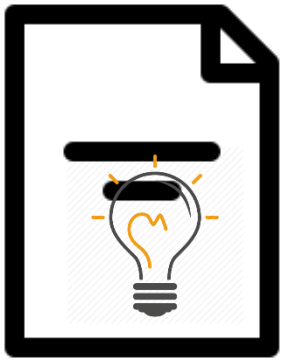
- **Apr. 14.** (16:00-16:45) Kick-off meeting
- **Apr. 15.-22.** Appointment: Discuss topic, literature, etc.
- **Apr. 27. (13:00-14:30)** Scientific Writing Workshop
- **Apr. 22.-29.** Appointment: Discuss outline, related work, and roadmap
- **Mai. 02.** Deadline: Email outline of paper
- **Mai. 30.** Deadline: Email draft version of paper
- **Mai. 31.- Jun. 04.** Appointment: Discuss the draft version
- **Jun. 02.** Deadline: Submit abstract
- **Jun. 06.** Deadline: Submit review preferences
- **Jun. 13.** Deadline: Submit first version of paper

- **Jun. 14.** Announcement: review assignment
- **Jun. 27.** Deadline: Submit reviews
- **Jun. 29.** (13:00-14:30) Academic Presenting
- **Jul. 5.-09.** Appointment: Discuss presentation
- **Jul. 11.** Deadline: Submit camera-ready version
- **Jul. 18.** Deadline: Submit final presentation
- **Jul. 21. & 22.** (13:00-16:30) Presentations

Requirements in Detail

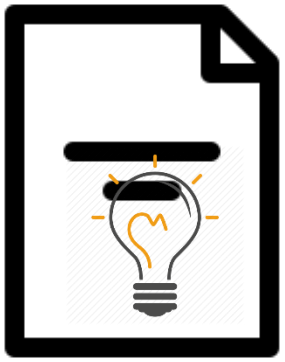
Outline

- Outline can – and will – change!
- Submit a new contribution
  - Invite your supervisor as co-author
- Think of the outline as a vision



Abstract & Title

- Abstract and title can – and will – change!
- Create the abstract when you have the results



Paper

- In English!
- Use our prepared ACM-style LaTeX template (see Moodle)
- Rename main .tex file: “2021_Author_WorkingTitle.tex”
- Follow formal requirements
  - references included
  - for 1st version: ± 1 page is “OK”
- Email draft version (.pdf only)
- Update contribution with 1st version
- Update contribution with 2nd (final) version

Reviews

- Bid on papers
- Review two papers of your fellow students
- A review comprises:
  - Short summary (“Contribution of the submission”)
  - Detailed comments (“Comments for the authors”), e.g., improvements in structure, presentation, and grammar
  - Evaluation of the contribution (accept / reject / etc.)
  - Internal comments (optional, are only visible to the chair)

Presentation

- 20 Minutes!
- Choose a (digital) presentation tool, e.g., PowerPoint, LaTeX, Prezi
  - Whatever presentation method fits your topic best
  - We provide a PowerPoint template (see Moodle)
  - Embed fonts
  - Attach a .pdf version
- Email draft version (.pdf only)
- Get feedback from supervisor (and fellow students?)
- Submit new “Presentation” contribution for final version
- Give your talk
- Prepare 1 question for each (reviewed paper) talk

How we grade

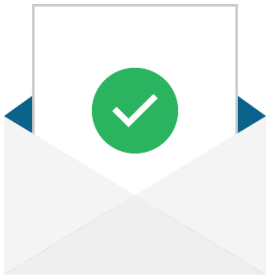
- Comply with our conventions ☺
  - Username, naming files, submissions, using templates, etc.
  - The more (stupid) work we have … ☹
- Stick to deadlines ☺
  - unless you have good reasons and communicate them upfront(!)
- Structure, content, language, and presentation of your paper ☺
  - E.g., diverge from page constraints … ☹
  - E.g., only one or two references … ☹
  - E.g., ignoring feedback … ☹
- Value of your reviews ☺
- Quality of your presentation and your talk ☺
- Show us effort ☺
  - Appointments, communication, team contribution, etc.

If your contribution is worth publishing,

we will help you write a **real paper**!*

* FsSE 2015: 4 papers submitted / 2 published

- Make use of links and materials on Moodle
  - E.g., how to write abstract, introduction, paragraphs, etc.
- Communicate
  - With us
  - With your fellow students
  - See “Guideline for Emails”
  - Send orga-questions to seminar@swc.rwth-aachen.de



- Email appointment requests
- Backup your work, e.g., GitLab, SVN, …

Topics and Assignments

Number	Supervisor	Topic	Student 1	Student 2
1	Peter Alexander	Exploring the quantification of EA debt	Md Al Mamun	Daniel Petri
2	Peter Alexander	Evaluating the applicability of Ms. Office applications for managing EA debt information	Patrick Piel	Jonas Füllmar
3	Christian Plewnia	(Quality of Service) Requirements of Workloads in Compute Clusters	Mahta Khoobi	Mudhammad Daniyal Danish
4	Christian Plewnia	Carbon Footprint Assessment of Compute Cluster Workloads	Philip Niederprüm	Yannick Kahlert
5	Selin Aydin	Towards a quality model for event driven architectures	Noyan Ahmed Siddiqui	Laurens Studtmann
6	Selin Aydin	Project management of big data projects - Challenges and Management Approaches	Nedelcho Dimov	Ivan Slavov
7	Nils Wild	Comparison of Software Quality Testing Strategies	Pascal Rene Sahner	Maria Kazantzi
8	Nils Wild	Bug Taxnonomies to drive Test Automation	Timo Rohrer	Md Tasin Siddiqi
9	Alex Sabau	Comparing design patterns defined by Microsoft Azure and Amazon AWS	Pavan Nadkarni	Sehrish Khan
10	Alex Sabau	Towards an aspect classification of cloud computing design patterns	Ricky Jonathan	Joana Schmidt
11	Horst Lichter	How to perform security testing	Erdzan Rastoder	Jakob Drees