Attendance via Zoom



- Let's try to make this a great experience for all of us:
- Please check your setup before the meeting. We start all calls 10 minutes early, where you can do so.
- Please connect before the meeting starts.
- Please join using your full name. If you use a nickname or pseudonym, tell the advisors (needed for grading).
- - Please join with a **microphone** and a **camera**: It improves the overall experience in interactive parts.

Please mute your microphone when not speaking.

Software Engineering for Artificial Intelligence

Basics and Challenges (Example Meeting) Organizational slides



05.05.2020 | FB20 | Reactive Programming & Software Technology | 2



TECHNISCHE UNIVERSITÄT DARMSTADT

Agenda

- Relevant Format Changes
- Example presentation:

"Basics and Challenges"

Open Organizational Questions





Relevant Format Changes



- You work in teams of 2 persons on a topic
 - You do the reading material list, presentation, discussion together
 - Make sure to distribute work equally and to have each a ~ 50 % share of talk time in presentation and discussion
- We split the class into two batches for all future meetings
 - You only attend the meetings of your batch
 - Tuesday-batch: Tuesdays at 17:00
 - Thursday-batch: Thursdays at 17:00
 - In both batches we cover the same topics
- Everything else remains unchanged





This is an interactive format: everyone becomes the expert in one topic, teaches it to all others, and we discuss it together

- Each meeting covers 2 topics
 - Being presented first
 - Then followed by Q&A and a discussion
- 1 week before each meeting we publish a introductory reading material list (webpage)
 - Please read it for preparation

Typical Meeting





This is an interactive format: everyone becomes the expert in one topic, teaches it to all others, and we discuss it together

- We provide a list of materials for the start
- You extend this list with suitable resources
- You prepare a 25-30 mins presentation
- You prepare for a 15-20 mins discussion on the topic
- For your class mates, you prepare a short list of introductory reading material (~1 h reading time ~= 10 pages)

By May 5th

Presented the assigned meeting slot

Due 7 days before your presentation slot; mail it to: sokolowski@cs.tudarmstadt.de







- Introductory reading material list (20 %)
 - Did it prepare well for your presentation and the discussion?
 - Did it take roughly 1 hour to read all suggested resources?
- Presentation (60 %)
 - Used resources, presented slides and the talk: Was the topic well introduced, explained, and did you provide interesting insights?
- **Discussion guidance** (10 %)
 - Apart from Q&A, could you offer questions leading to discussions?
 - Did it have clear directions and involve the class mates?
- General discussion participation (10 %)
 - Did you regularly ask questions or add to the discussion?

Example Presentation: Basics and Challenges



• See separate slides



Example Presentation: Critique



Some things you can do much better:

- You have a more specific topic: be less general and provide more clear and cool insights
- Literature: The presentation used only parts of two books and two papers: expand your research further
- Introductory reading material
 - The reading material can be composed of multiple references and can also use only smaller parts of them, e.g.:
 - Section 1 + 2 of Someone, Another. A paper titel. [...]
 - Section 3 of Anyone et al. Another paper. [...]
 - Up to "The bloody details" of Author. A blog title. [...]
 - Should be closer to 60 minutes reading time (today it was ~90 minutes)

Tentative Schedule



• In the next three weeks no meetings: time for your topic preparation

Topics	Tuesday-batch	Thursday-batch
Choosing AI Techniques		
Software Architecture of Al-enabled	02.06.2020	04.06.2020
Systems		(Public holiday on 11.06
Requirements and Risks	09.06.2020	18.06.2020
Model Quality & Metamorphic Testing	00.00.2020	10.00.2020
Data Quality Assurance	16.06.2020	25.06.2020
A/B Testing	16.06.2020	-
Debugging	23.06.2020	25.06.2020
Data Provenance & Reproducibility	23.06.2020	02.07.2020
Computational Notebooks	30.06.2020	02.07.2020

Recommendation



"Software Engineering for ML-Enabled Systems" by Christian Kästner

(Prof at CMU) at the Code & Supply meetup in Pittsburgh

- 45 minutes talk giving you a nice and more detailed overview
- <u>https://youtu.be/9_xeTHaTcCQ</u>

Question & Answers





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