

Assignments in CSAFT

1 Overview

The assignments serve three purposes:

- to help us (and yourself) to ensure that you have a reasonable understanding of each topic.
- to help us understand which parts need to be explained better / differently.
- to give you a chance to identify the difficult parts, and ask questions. These will naturally arise when you read the chapters. You get bonus points for asking good questions.

Your submissions will constitute 25% of your grade. Your participation in the lecture / Q&A sessions will contribute another 25% of the points. There's going to be a final exam worth 50% of the points. In all of these categories there might be bonus points as well as extra hard questions, so don't focus on these numbers too much. The grading will be flexible and gauged by the overall performance of the class.

How a summary has to look like:

- One to two pages (or three if necessary).
- A PDF file. We don't care if it's $\text{T}_\text{E}_\text{X}$ or Word or Notepad or hand-written, just make sure we can easily read and annotate it. (If hand-written, please use dark ink, e.g. black.)
- Firstname, lastname, lecture title, and matriculation number.
- A single-paragraph overview of what this chapter is about in broad general terms. Describe the goal of the chapter, as well as how it fits into the context.
- After that, explain the main technical ideas (e.g. proof outlines) and how they relate to each other and the stated goals, in your own words. Stitch it together to form a coherent text.
- Some kind of conclusion, especially if there is any mismatch to your personal expectations or expectations you gathered from the stated chapter goals.
- Anything that you learned or took away from the chapter beyond what is already written down. A single sentence is sufficient.
- Bonus points if you can identify and summarize what you did not understand, and any specific questions. You can ask these during the discussions before the lecture, or on the mailing list, as you prefer.
- Send your submission as a PDF file via e-mail to Ben at <mailto:bwiederh@mpi-inf.mpg.de>. The deadline is three hours before the first session on that chapter starts.¹

¹Example: The chapter "Limits on Tolerance" will have three sessions, the first being on Wednesday, on 2021-04-21. Wednesday sessions start at 12 (noon, Berlin time), so please submit your summary by 9. For other chapters, the first session might fall on a Monday; those sessions start at 14, so please submit your summary by 11 in those cases.

2 Our Expectations – Some Details

These things keep the lecture running, the tutor happy, and the grades high:

- Imagine the reader of your submission is another student who hasn't read the chapter, and wants to get a reasonable grasp on what they missed.
- Ideally, present a narrative (how one concept leads to the next) that reflects your understanding. If this also reflects the sequence of concepts in the chapter, that's great. If you find a better sequence, even better.
- Please keep the page limit (two, maybe three pages) in mind. To paraphrase Einstein: "As short as possible, but not any shorter!"
- Simplifications are fine as long as they do not compromise correctness.
- Please keep those deadlines: we have to read your summaries, and possibly adjust the lecture slightly in response to your input, all in just three hours.
- `Summary_LoT_Lastname.pdf` is a good filename if your last name is Lastname, and this is the summary of the "Limits on Tolerance" chapter. In contrast, `file.pdf` is not good.
- Use your own words. Copy-pasting an entire paragraph or using technical terms just for the sake of it will not convince me that you actually understood what the chapter is about.
- If you discuss ideas and concepts with other students, please acknowledge this in a separate "acknowledgements" section at the end of the summary.² *This section does not count towards your page limit.* It suffices to simply name the people/websites/books/papers and a rough reason (e.g. "details for the XYZ algorithm").

3 Recommendations

These things are (hopefully) good advice, but by no means compulsory:

- You can, and in fact should, discuss the chapters with your classmates.
- One of the many ways to ensure that you use your own words is to let some time pass between reading the chapter and summarizing it. (Don't worry if you end up copying a sentence by accident.)
- Break down complex ideas into simple ones; this helps your own understanding *and* demonstrates that you understand the topic. Use technical terms wherever appropriate, and explain them either in-place or beforehand.
- After reading a chapter, you'll likely have some questions. Append them to the summary!
- You will need T_EX anyway for your Bachelor/Master thesis, so use this opportunity to get familiar with it and submit your summary in T_EX.

4 And finally ...

Our main communication channel will be our mailing list at: <https://lists.mpi-inf.mpg.de/listinfo/csaft-2021> . Please use it to ask questions, give feedback, and receive updates if something happens with the lecture schedule.

²Otherwise, this would get too close to plagiarism in our tastes.