Kickoff meeting

Helping Donald Knuth
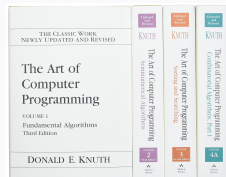
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Introduction

- Helping Donald Knuth in proof-checking some of his exercises in *The Art of Computer Programming*
- Check / correct proof
- Present and defend your results
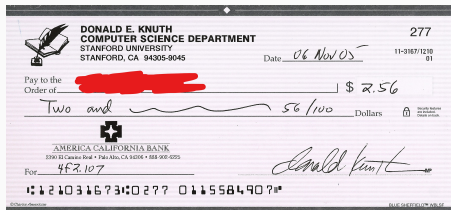- Goal: Send letter to Donald Knuth with the polished proof

Outline

- **Kickoff / Questions** (today)
- **Select Topic**
  - Reserve the topic until 26.10.
  - *Proposal* until 26.11.
- **Biweekly Meetings**
  - Quick status report
- **Hold Presentation / Discussion** (Feb 2022)
  - 30 minutes / talk
  - Discussion with audience + clarification from you!
- **Send result to Donald Knuth** (Mar 2022)
  - Letter + Essay
  - Include comments from audience

Your Task

- Diligently do the calculations
- Maybe start thinking about the exercise without looking at the solution at first
- Proof read references and language mistakes
- Sometimes it is neccessary to write a program to verify the solution etc.
- If you find any mistake, you get the famous *Knuth reward check*!

Exercise Selection and Proposal

- Reserve an exercise until 26.10. via mail to
  `tcs-teaching@cs.rwth-aachen.de`
- Check availability on website
- Give Proposal: Short description of the question +
  background + solution approach (until 26.11., written
  and in presentation)

- Talk about your progress, problems etc. with us and your peers

Presentation

- Block seminar in February
- 30 minute talk where you present the task and solution
- Audience asks for clarification
- Vote whether to accept the proposed solution or not

Essay and Letter to Donald Knuth

- Write your findings to Don: "Dear Don, I have read exercise N and its answer very carefully, and I believe that it is 100% correct,..."
- List all mistakes you found and suggestions (if any)
- Incorporate feedback from your presentation
- Write your detailed solution
- Deadline: March 2022

Sources

- Mathematical Writing by Knuth (link)

Ressources on presentation

- Many available, e.g.,
  http://ianparberry.com/pubs/speaker.pdf
- Learning by doing... and from the mistakes made by others!
- Practise, practise, practise!

Discussion Group?

Telegram, WhatsApp, . . .

Decision on a Date for a Regular Meeting

biweekly