



Designing Interactive Systems I

L13: Final Exam Preparation and Final Presentation

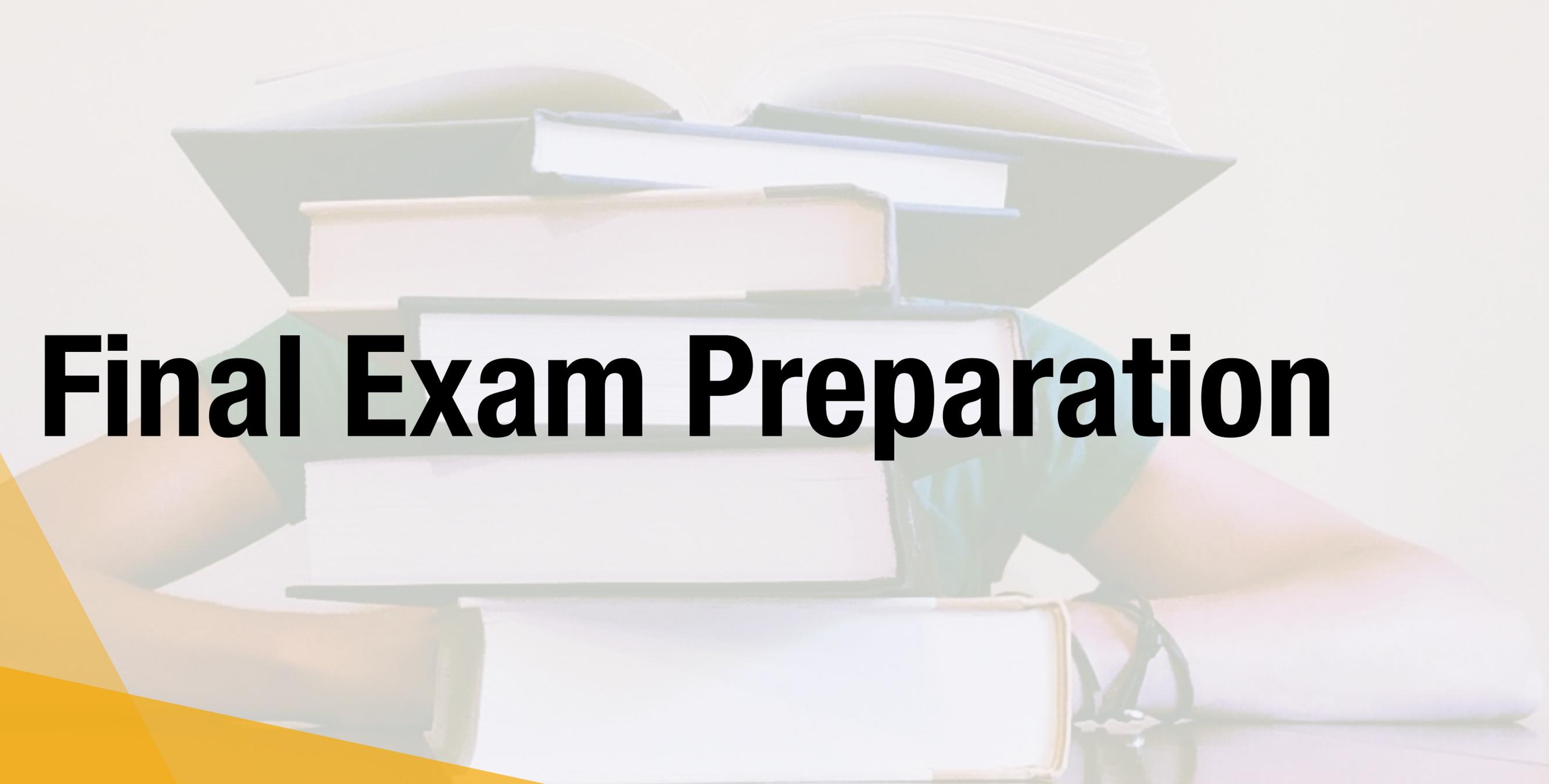
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Final Exam Preparation

Final Exam (1st Chance)

- **When?** Feb. 4 (next Tuesday), 14:30–16:00 (for 60 minutes)
- **Where?** 0.109
- **What to bring?** Like the midterm exam, please bring the following
 - A blue or a black pen
 - RWTH blue card or photo ID
 - Water bottle/snacks



Exam Regulations

- Mobile phone rings \Rightarrow fail the exam
- Cheating \Rightarrow fail the exam
- Please write the exam in **English!**



Points

- 60 minutes, 60 points
 - Points reflect difficulties of the question
 - Point distribution can be roughly estimated by the time we spent in the lecture for each topic



Grade Calculation

Midterm Exam **25 %**

Final Project **20 %**

Assignments **20 %**

Final Exam **35 %**



Relevant Topics

- All lectures and labs.
 - **Slides:** RWTHmoodle and course landing page
 - **Videos:** YouTube, course landing page, and RWTHmoodle



Sample Questions



Recall question #1: History

[3 points] **List** *four* phases of the technology lifecycle as proposed by David Liddle and Jan Borchers. **Indicate** where the “sweet spot” is and briefly **describe** why it happens.

- Enthusiast phase (hobby)
- Professional phase (work)
- Consumer phase (life)
 - Sweet spot
- Baroque phase (feature creep)
- Sweet spot: simplifies life; no feature creep (adequate functionalities)

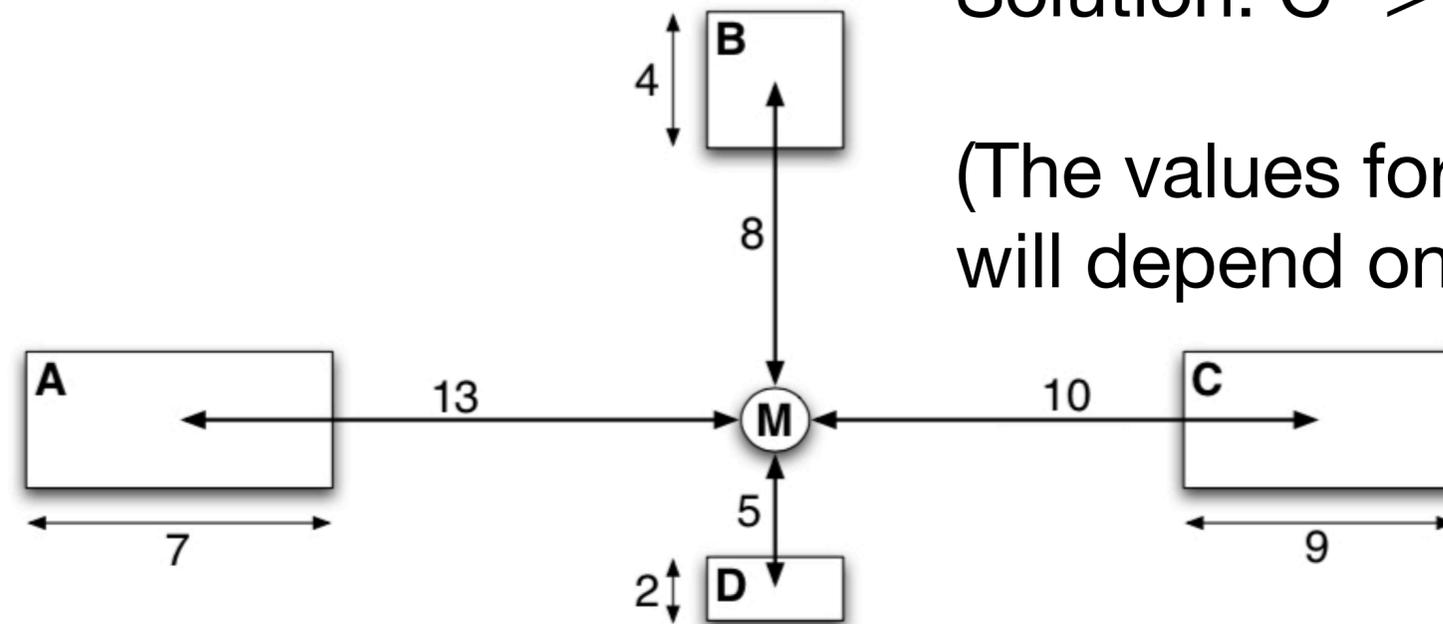
Application question #1: Fitts' law

[3 points] Christian wants to determine which button (A, B, C, D) is the fastest to reach on a touchscreen display. Assume that the user can move her hand, positioned at M, equally well in all directions and that none of the buttons (A, B, C, D) is near the screen edge. *Order* the targets that the user would **reach** from **fastest to slowest**, always starting at M. *Write* down the **formula** you used and the **intermediate steps** of the calculation. You can use **any** variant of the formula discussed in the lecture.

Hint: You don't need to apply logarithm to solve this question.

Solution: C -> A -> B -> D

(The values for intermediate steps will depend on the formula used.)



Application question #2: Design process

[3 points] Paulina wants to develop a travel planner app. One of the main tasks supported by this app is *looking up bus schedule between two locations*. Paulina wants to test if users are able to do this task using a *software prototype*. Suggest **one approach** she can follow to **limit** this software prototype and *justify* your answer.

[1 point] One approach to limit the software prototype:

E.g., vertical prototype

[2 points] Justification:

E.g., if Paulina just wants to test the interface and database for this feature, she can implement just that for any two locations and test it.

What sort of questions to expect?

- Expect plenty of application questions, where you will have to apply a concept you learnt in the video lectures.
- Please ensure you manage time better:
 - Do not write longer answers than required—the space given is usually adequate unless you have a really LARGE handwriting!
 - Do not get hung up on difficult questions that take up a lot of time—solve other questions and get back to the difficult ones towards the end.

