Operating Systems About

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https://teaching.dahahm.de

October 18, 2022

Agenda

About me and this lecture

Organizational

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Interaction in this Lecture

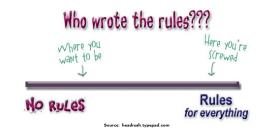
- Participate lively
- Ask questions!
- A key attribute for science is scepticism



"Education is a dialogue not a one way monologue" 1

¹JNICSR Times, http://jnicsrtimes.com/?p=1476

Some Rules



Rules for this Course

- Be respectful
- There are no stupid questions or comments
- You can interrupt me at any point
- The lecture starts on time (soft real-time)

About me



- Study of Computer Science at Freie Universität Berlin
- Software Developer for ScatterWeb and Zühlke Engineering
- Research on IoT and Operating Systems

Contact

E-mail: oliver.hahm@fb2.fra-uas.de

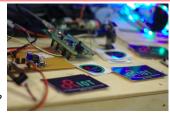
Office hours: Fridays 10:00 – 11:00, room 1-212

Join the RIOT!

RIOT is the friendly operating system for the IoT!

You're interested in . . .

- ... programming the IoT?
- ...collaborate with hundreds of people from all over the world?
- ... contribute to a big FLOSS project?





Get in touch

Get in touch and do some hacking at the $All\ RIOT$ event at the university!

Every two or three weeks 4pm in room 1-237.

Or look at https://riot-os.org/community.html



What about you?

Please go to the survey at https://pingo.coactum.de/977183



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Which part of your studies do you find most interesting?

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- Which part of your studies do you find most interesting? What is your preferred programming language?

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About me and this lecture

Organizational



Organizational

- Lecture:
 - Tuesday 10:00 11:30, room BCN-421
- Exercise:
 - Tuesday 11:45 13:15, room BCN-421
- Written exam

campUAS

Enrolment Key: HahmOpSys



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Please note!

■ This course is for students of Computer Science — Mobile Applications, B. Sc.

Further Information

Course page

All material regarding this course can be found at https://teaching.dahahm.de.

This includes

- Announcements
- Slides
- Exercises

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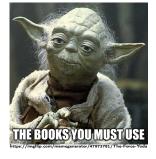
Do not ask!

Everything is relevant for the exam.

Slides

- The creation of the slide sets is work in progress
- They cover all topics of the lecture
- BUT they are no book and, hence, do not comprise
 - all details
 - all derivations
 - all thoughts and discussions which are part of the lecture and exercises

- ⇒ participate
- ⇒ ask questions
- ⇒ take notes
- ⇒ do your own research (e.g., use the books)



Exercises

The exercises are no legal precondition for participating in the exam, <u>BUT</u> they...

- ...are very important to recap the content.
- ...are a good opportunity to check your understanding.
- ... provide the chance to ask me all your questions.



Exam

What is necessary to pass the exam?

You should be able to . . .

- explain main concepts and ideas with your own words,
- select a suitable solution for a given problem,
- analyze a given solution and detect (potential) problems, and
- explain your answers.

Literature

Andrew S. Tanenbaum. Herbert Bos: "Modern Operating Systems", 4th Ed., Pearson, 2014.

https://elibrary.pearson.de/book/99.150005/9781292061955

■ William stallings: "Operating Systems – Internals and Design Principles", 9th Ed., Pearson, 2018.

https://elibrary.pearson.de/book/99.150005/9781292214306



Systems



You can borrow both of these books from the library or access them online for free (see links above).

More Literature





https://link.springer.com/book/

10.1007/978-3-658-29785-5

- Parts of the slide sets are closely related to the books.
- The two-column layout (English/German) of the bilingual book is quite useful for this course

https://link.springer.com/book/10.

1007/978-3-662-53143-3

Summary

- At the end of each chapter the last slide summarizes the most important take-away messages
- Now is a good moment to recapitulate whether there are any open questions
- When preparing for the exam these summaries can help you