RECITATION 13

INFO

- Jon Rutkauskas
- Recitation: Tue 12-12:50
- Office Hours: Tue 11-11:50
  Thur 11-12:50
  SENSQ 5806
  (additional hours by appointment if needed)
- On discord: @jrutkauskas
- By email: jsr68@pitt.edu
- Website:
  https://github.com/jrutkauskas/spring2019-449-rec
- Ask me any questions you have!!!

WARMUP POLLS

“STICK” AROUND…

- Still have stickers!
- Also, an extra surprise to everyone who came to this final recitation

HOW DOES A MUTEX KEEP SHARED MEMORY FROM BEING MESSED UP BY A NONCOOPERATING THREAD?

If they try to access the shared state, they get blocked

It doesn't.

If the shared state is changed, the mutex reverts it to the last safe state

The mutex restricts access on the level of the MMU (Memory Management Unit)

I really don't know... please explain the answer to me.

HOW DOES A MUTEX KEEP SHARED MEMORY FROM BEING MESSED UP BY A NONCOOPERATING THREAD?

- Threads only get blocked when they try to *lock the mutex* when it's already locked.
- Mutexes don't actually change the way we access the actual shared state, we just agree to lock and unlock the mutex around the access
- There's no transaction history with mutexes; if you want something like that, have a look at DBMSs
- The MMU has no concept of mutexes and is not affected by them

- Remember – Mutexes are just an additional tool to ensure we don't access shared state out of our turn, but they only work if we use them; they don't actually change the memory access

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OMETS!

- Please do them. You'll get cookies (and subsequently, I might get cookies as well) These cookies are worth it
- Also, there may or may not be a TA evaluation sent to you. I do appreciate feedback.

FINAL EXAM

- That thing's coming up
- Look over class slides, example code, etc.
- You already have a bunch of practice questions you can go through
  - https://github.com/jrutkauskas/spring2019-449-rec
- Also the recitation slides
- Also, I'm here to help:

FINALS WEEK OH

- Available on Discord anytime!

During finals week in regular 5806 SENSQ (may get better room if full):

- Tuesday from 12:00pm – 1:00pm
- Wednesday from 10am – 12pm
- Friday from 1pm – 3pm

- Come to review, look over code, ask about any concept, go over slides, or even just to study.

FOR THE REMAINDER OF THIS CLASS

- Finals questions. I'll have an anonymous poll
- Lab 9 (AKA Project 5) – Making a device / driver
  - https://jarrettbillingsley.github.io/teaching/classes/cs0449/labs/lab9.html
  - Setup VM – harder on macs
  - Make a demo driver (code given)
  - Make a basic driver – pretty fun!

THANKS FOR A GREAT SEMESTER!