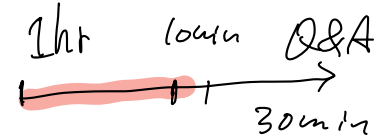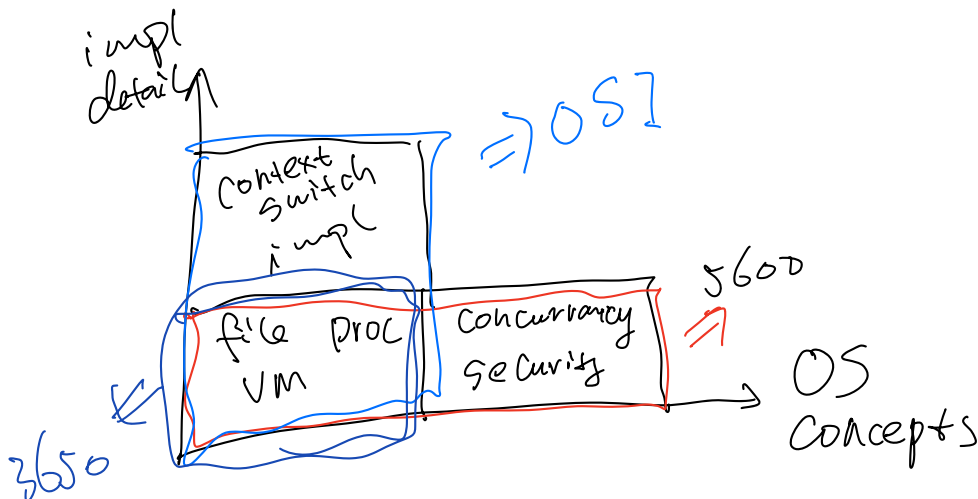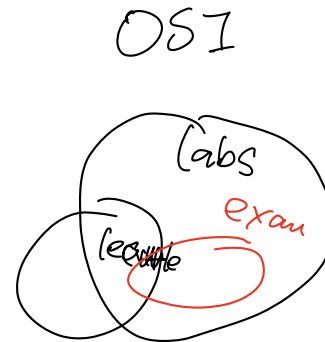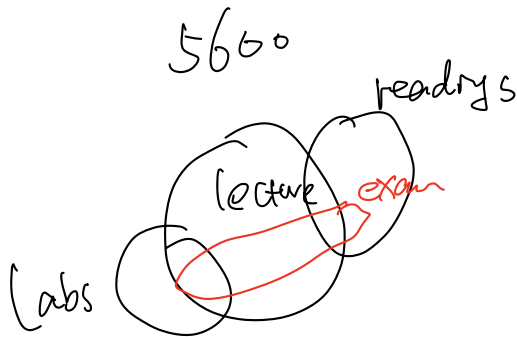```
Week 1.a
CS6640
09/07 2023
https://naizhengtan.github.io/23fall/

0. in-class policies
1. Intro to OSI
2. What is an operating system?
3. Why study OS implementations?
4. How will we study operating systems?
5. Mechanics and admin

```

0. policies

1hr   10min  Q&A
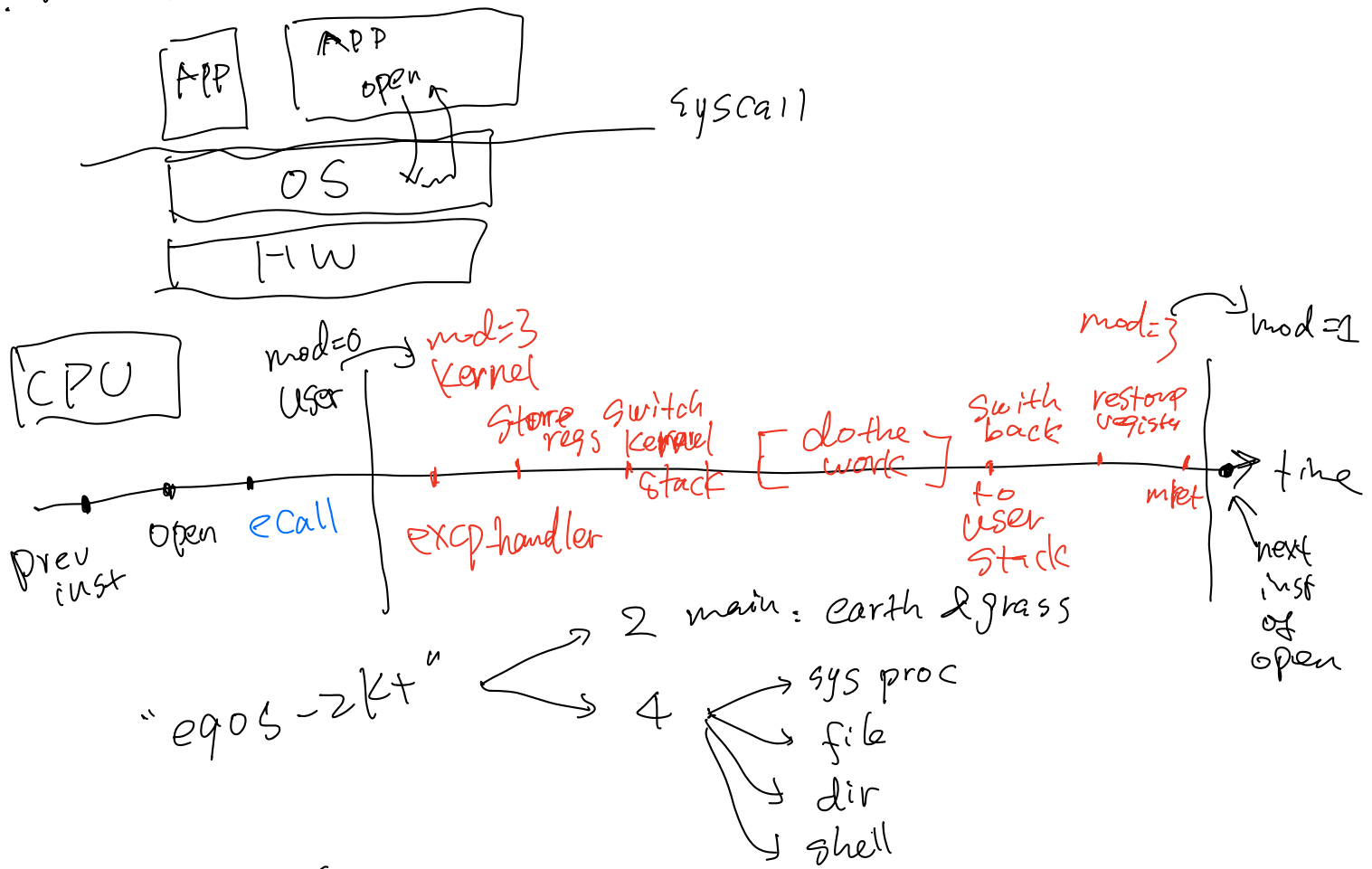       30min

① no laptop in the first hr

② chocolate

③ lottery

1. OSI

5600



readings
lecture   exam
labs

OSI

labs
lecture   exam

impl
details

=)OSI

context
switch
impl

file proc
vm

concurrency
security

5600

=>

3650

OS
concepts

# 2. What is an OS?

APP | APP open

Syscall

OS

HW

CPU

mod=0 User → mod=3 Kernel

mod=3 → mod=1

Store regs | Switch kernel stack | [ do the work ] | Switch back to user stack | restore registers

ex-cp handler

prev inst | open | eCall

mret

time

next inst of open

"egos-2kt" → 2 main: earth & grass

4 →
- sys proc
- file
- dir
- shell

assumptions:

1. C

2. basic concepts of OS

3. read __manual & spec__  RISC-V
   SiFive CPU

What is the purpose of OS?

a) managing resources

b) abstracting HW

3. WHY? 
→ understand actual happening
→ like infras
→ care about perf

4. How do we learn OS] ?

5. Mechanics & Admin
   - Communication
     - Piazza
     - Staff mailing list ←
     - office hours
   - lectures
     - |—1hr—| Q&A |—30min—|
     - −1%
   - labs
     - 70%
     - integrity
   - exams          (week8)
     - midterm.    20%
     - final oval , 90%
                 [week14, 15)