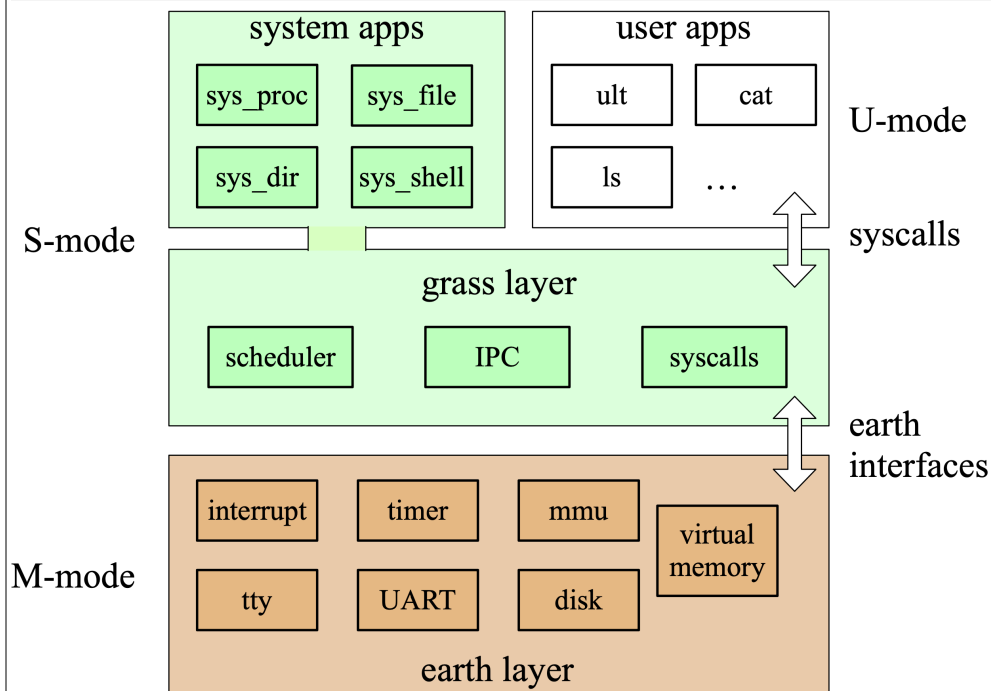


CS6640, Week 5b

1. egos architecture



2. egos-2k+ booting process

```

1 ----- Simulate on QEMU-RISCV -----
2 cp build/release/earth.elf tools/qemu/qemu.elf
3 riscv64-unknown-elf-objcopy --update-section .image=tools/disk.img
4   tools/qemu/qemu.elf qemu-system-riscv32 -bios none -readconfig
5   tools/qemu/sifive-e31.cfg -kernel tools/qemu/qemu.elf -nographic
6 [CRITICAL] ----- Booting -----
7 [SUCCESS] Finished initializing the tty device
8 [INFO] Use direct mode and put the address of trap_entry() to mtvec
9 [SUCCESS] Finished initializing the CPU interrupts
10 [SUCCESS] Finished initializing the timer function
11 [SUCCESS] Finished initializing the disk device
12 [SUCCESS] Finished initializing the CPU memory management unit
13 [INFO] Grass kernel file size: 0x00002700 bytes
14 [INFO] Grass kernel memory size: 0x00002c88 bytes
15 [CRITICAL] Enter the grass layer
16 [INFO] Load kernel process #1: sys_proc
17 [INFO] App file size: 0x00001330 bytes
18 [INFO] App memory size: 0x00001740 bytes
19 [SUCCESS] Enter kernel process GPID_PROCESS
20 [INFO] Load kernel process #2: sys_file
21 [INFO] App file size: 0x000027c0 bytes
22 [INFO] App memory size: 0x00002814 bytes
23 [SUCCESS] Enter kernel process GPID_FILE
24 [INFO] sys_proc receives: Finish GPID_FILE initialization
25 [INFO] Load kernel process #3: sys_dir
26 [INFO] App file size: 0x00000fb4 bytes
27 [INFO] App memory size: 0x000013bc bytes
28 [SUCCESS] Enter kernel process GPID_DIR
29 [INFO] sys_proc receives: Finish GPID_DIR initialization
30 [INFO] Load kernel process #4: sys_shell
31 [INFO] App file size: 0x000006e0 bytes
32 [INFO] App memory size: 0x000006e0 bytes
33 [CRITICAL] Welcome to the egos-2k+ shell!
34 [INFO] proc 5 died after 0 yields, turnaround time: 0.00,
    response time: 0.00, cputime: 0.00
35 → /home/cs6640

```

