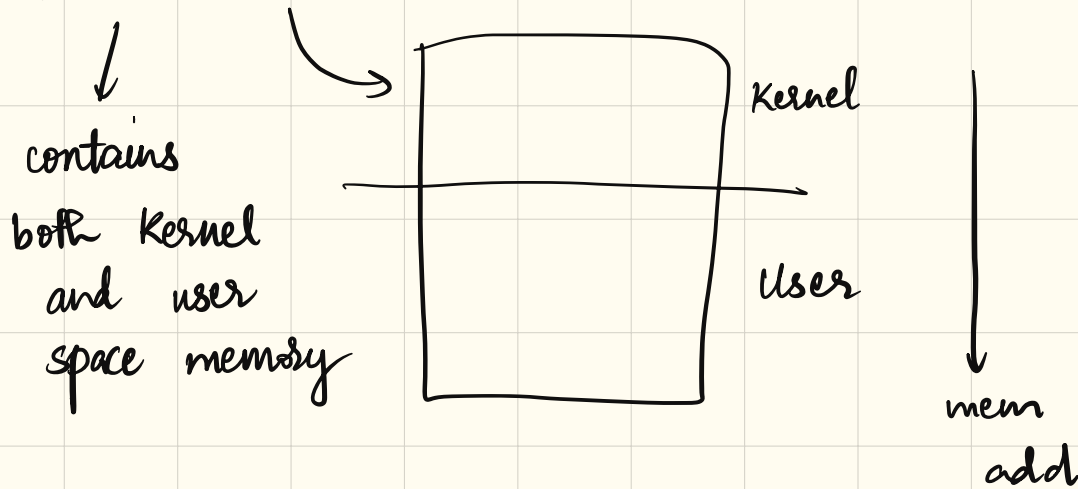


GemOS . Kernel



context.h

every process is a stack

execution context → exec-context struct

struct user_regs

struct vm_area

lib.h → library functions for kernel functions

printk (...)

printf will not work

you can implement more func.

apic.h → timer interrupt

memory.h → APIs to allocate memory

serial.h → serial communication

lib.c
library
fn

→ add new code file to Makefile

page - c
entry - c

init → calls exec_init

User space code → in user/

contains init.c

→ try printf

→ User space library

#define bad?

syscall numbers defined
in entry.h

How much time
did it take to
write the kernel
code?
GUI?

Debadatta Mishra → GemOS paper

Kindle — Arun KP (instructor)

↳ extended gemOS to have
NVM.

gem5 supported NVM