

Lab 6.2

Introduce the semaphores on xv6 kernel.

Since the xv6 is a kernel without threads, see the file system and pipe implementation as source for developing your semaphores.

Add to the xv6 Makefile the main file `st.c`, which tests the semaphores system calls

Modify the files

Makefile

param.h

user.h

usys.S

syscall.h

syscall.c

file.c

sysfile.c

main.c

to add the system calls:

int sem_alloc()

void sem_init(int sem, int count)

void sem_destroy(int sem)

void sem_wait(int sem)

void sem_post(int sem)