

# Project 3 Roadmap

Multilevel Feedback Scheduling  
Semaphores

# Multilevel Feedback Scheduling

- `struct Kernel_Thread` in `kthread.h`
  - current queue: `int currentReadyQueue`
  - blocked state: `bool blocked`
- there are 4 run queues now:
  - `s_runqueue[MAX_QUEUE_LEVEL]` in `kthread.c`
- a thread is initially in `s_runqueue[0]`
  - except IDLE thread that enters at 3 when switching to MLF mode
- check the scenarios
  - `Find_Best()` automatically pick the highest priority thread in a queue
  - `Get_Next_Runnable()` will call `Find_Best()` for each queue until it finds a ready process

# Multilevel Feedback Scheduling

- end of quantum ?
  - if blocked promote
  - if has just run demote (check TODO in `Timer_Interrupt_Handler()` defined in `timer.c`)
- make sure your `sys_setSchedulingPolicy()` works before stuff gets complicated
- A thread becomes blocked in `wait()`.