

7.2 Scheduling metrics

turnaround time = end time - arrival time

FIFO scheduling

Example 7.1

compute average turnaround time per process

Jobs arrive in ready queue in order - A, B, C

Each runs for 10 units of time

Suppose each process has a different run time.

Brainstorm to think of run times for processes

A, B, C that would yield a best case average

turnaround? worst case?

The worst-case for FIFO leads us to think of another scheduling algorithm that will do better with average turnaround

Shortest Job First (SJF)

Re-work your worst-case example for FIFO using SJF.

Find the average turnaround time.

Figure 7.4

Suppose processes can arrive later.

How can this mess up SJF?

7.5 Shortest Time to Completion or Preemptive SJF

7.6 Response Time Metric

Time when first run - arrival time

7.7 Round Robin

aims to do well with response time

Run each process for at most N units of time.

This duration of time is called a time slice or scheduling quantum.