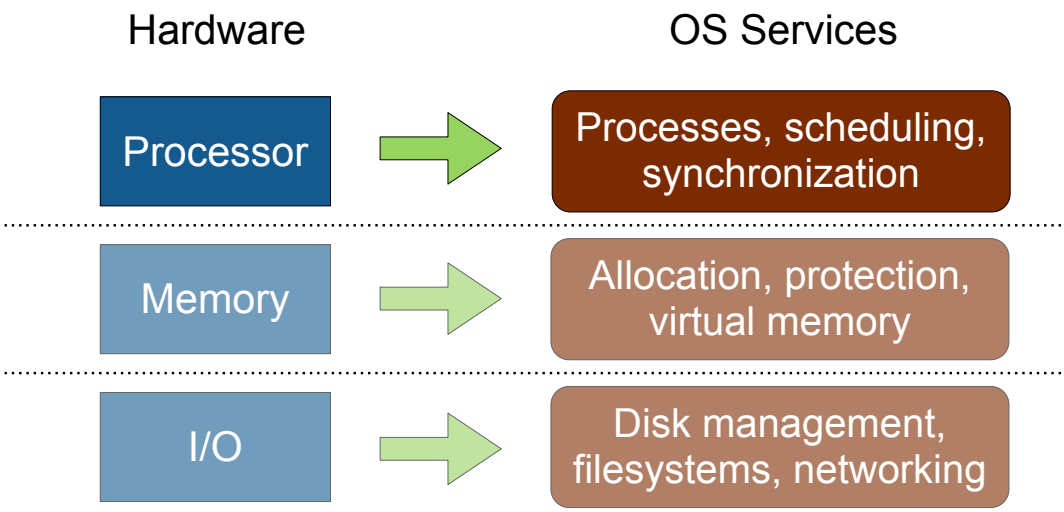
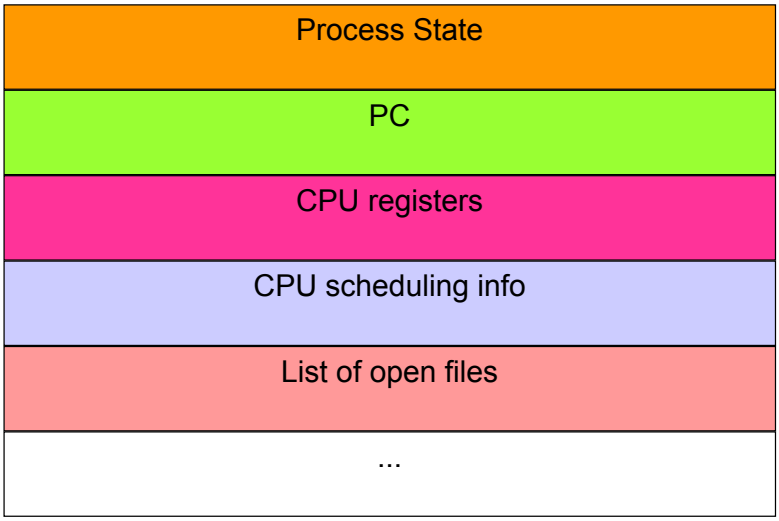
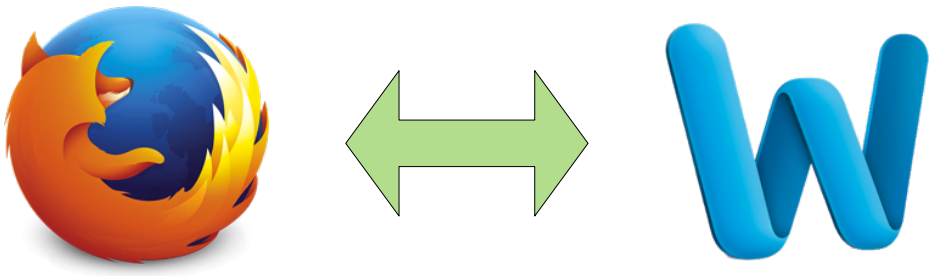
Processes



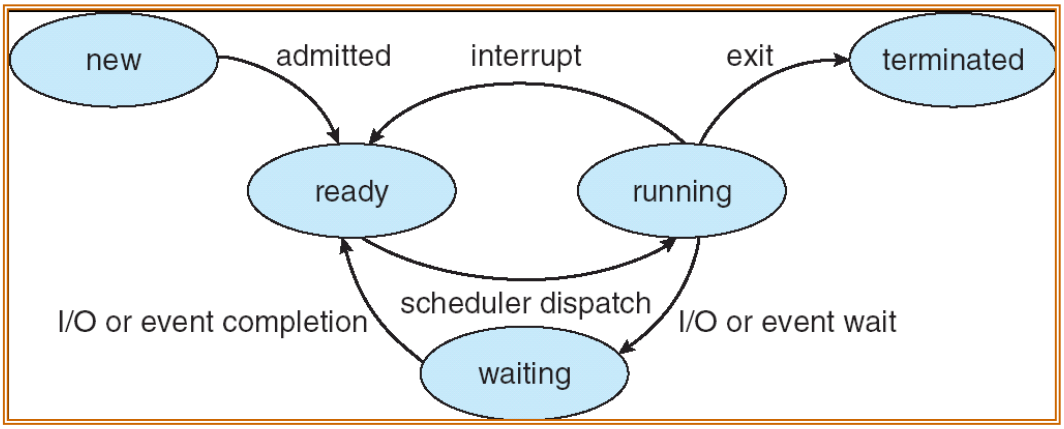
Process Control Block (PCB)



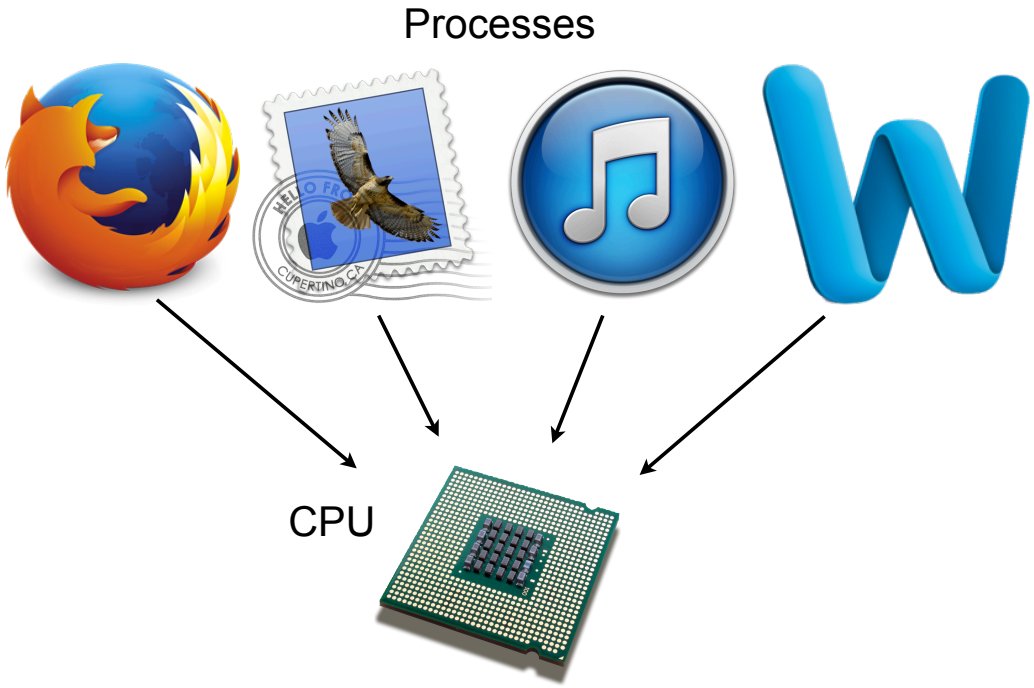
Context Switching



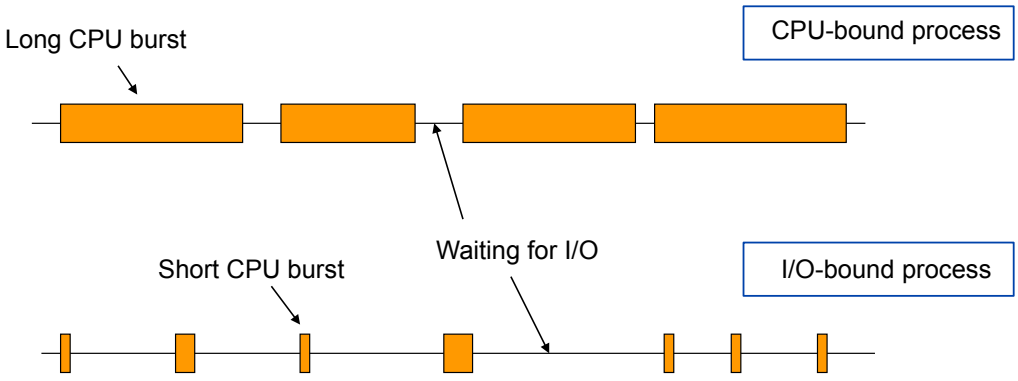
Process Execution States



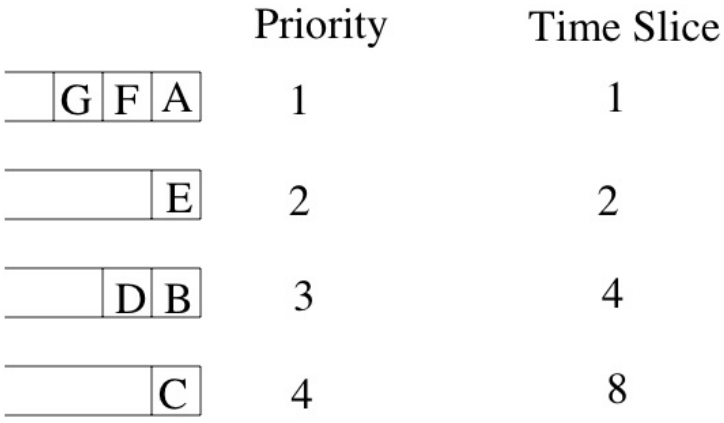
CPU Scheduling



CPU and I/O Bursts



Multilevel Feedback Queues



CPU Scheduling Summary

First Come First Serve (FCFS)

Shortest Job First (SJF)

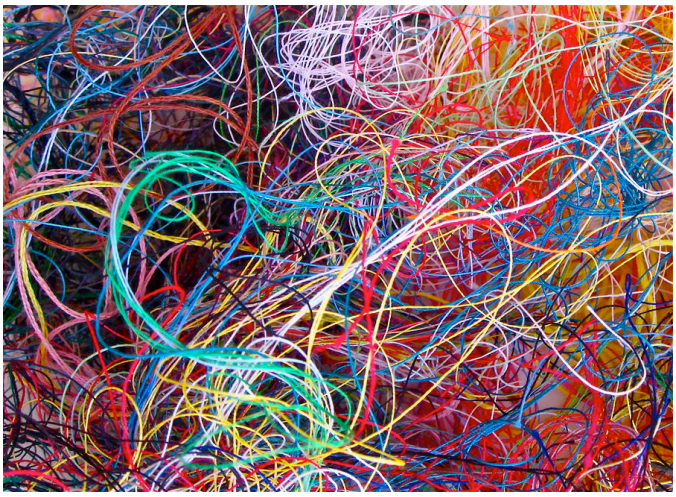
Shortest Remaining Time First (SRTF)

Round-Robin (RR)

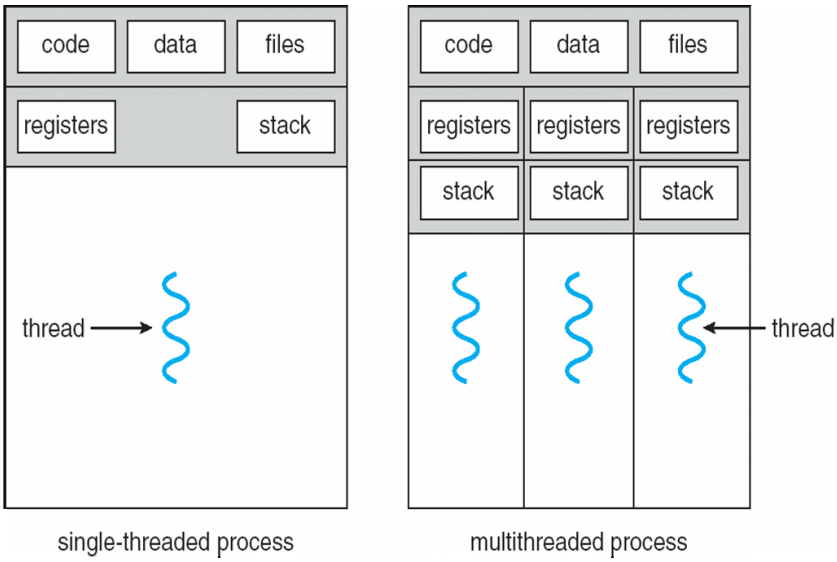
Multilevel Feedback Queues (MLFQ)

... more advanced schedulers ...

Threads



Multithreaded Processes



Thread APIs

POSIX Threads (pthreads):

```
pthread_create(&tid, NULL, my_fun, &param); // thread runs my_fun
```

Windows Threads:

```
ThreadHandle = CreateThread(NULL, 0, MyFun, &Param, 0, &ThreadID);
```

Java Threads:

```
Thread t = new Thread(new MyRunnable(param));
t.start();  // start the thread running MyRunnable.run()
```


User-Level Threads