

CS 3204 Operating Systems

Lecture 7
Godmar Back

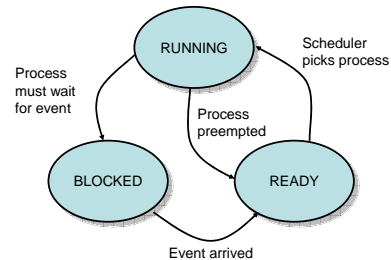
Announcements

- Project 0 is **due tonight, 11:59pm**
- Curator instructions have been posted on website
 - You should have received a password to submit – if not, contact vijayms@vt.edu right away!
- Please submit a correct tarball, following instructions
 - Avoids karma point deductions.

Overview for today

- Finish
 - Process States
- Process/Thread API Examples
- Fork/join model
- Time Slices

Process States



- Only 1 process (per CPU) can be in RUNNING state

Reasons for Preemption

- Generally two: quantum expired or change in priorities
- Reason #1:
 - A process of higher importance than the one that's currently running has just become ready
- Reason #2:
 - Time Slice (or Quantum) expired
 - Default time slice in Linux is 100ms
- Question: what's good about long vs. short time slices?

I/O Bound vs CPU Bound Procs

- Processes that usually exhaust their quanta are said to be CPU bound
- Processes that frequently block for I/O are said to be I/O bound
- Q.: what are examples of each?

- What policy should a scheduler use to juggle the needs of both?

