## Scheduling

- Scheduler uses scheduling algorithm to choose a process from the ready queue
- Scheduling doesn't matter much on simple PCs, because
  - 1. Most of the time there is only one active process
  - 2. The CPU is too fast to be a scarce resource any more
- Scheduler has to make efficient use of the CPU because process switching is expensive
  - 1. User mode → kernel mode
  - 2. Save process state, registers, memory map...
  - 3. Selecting a new process to run by running the scheduling algorithm
  - 4. Load the memory map of the new process
  - 5. The process switch usually invalidates the entire memory cache