CSC 360 Lecture 3

## System calls

* Applications run in user mode.
* OS/kernel runs in kernel mode
* An application that makes a system call must enter a “trap” in order to have the OS make the system call in “Privileged mode” by switching the “mode/status bit”.
* Switching from User to Kernel mode is called a “context switch”.

## Cost of a context switch

* Save/restore registers.
* Load the Program counter with handler trap.
* May need to flush the caches.
* Note: May have to make a scheduling decision.

## System call (again)

* Save the program counter.
* Set the mode bit.
* Set the program counter to the address of the system call vector.
* Verify all arguments.