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CS333 – Fall 2014
Proj 5 – Kernel.h

```
##############################################################################

header Kernel

  uses System, List, BitMap

  const

    SYSTEM_STACK_SIZE = 1000       -- in words
    STACK_SENTINEL = 0x24242424    -- in ASCII, this is "$$$$"

    -- The kernel code will load into the first megabyte of physical memory.  This
    -- should be more than enough.  We will use the second megabyte for page frames.
    -- Thus, the frame region is 128 page frames of 8K each.

    PAGE_SIZE = 8192                                  -- in hex: 0x0000 2000
    PHYSICAL_ADDRESS_OF_FIRST_PAGE_FRAME = 1048576    -- in hex: 0x0010 0000
    --NUMBER_OF_PHYSICAL_PAGE_FRAMES = 512              -- in hex: 0x0000 0200
    -- ############   NEW code   ############
    NUMBER_OF_PHYSICAL_PAGE_FRAMES = 100               -- for testing only
    -- ############   NEW code   ############  endClass


    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX   SKIPPED CODE    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

  var
    readyList: List [Thread]
    currentThread: ptr to Thread
    mainThread: Thread
    idleThread: Thread
    threadsToBeDestroyed:  List [Thread]
    currentInterruptStatus: int
    processManager: ProcessManager
    threadManager: ThreadManager
    frameManager: FrameManager
        -- ############   NEW code   ############
    diskDriver: DiskDriver
    --serialDriver: SerialDriver
    fileManager: FileManager
        -- ############   NEW code   ############

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    InitializeScheduler ()
    Run (nextThread: ptr to Thread)
    PrintReadyList ()
    ThreadStartMain ()
    ThreadFinish ()
    FatalError_ThreadVersion (errorMessage: ptr to array of char)
    SetInterruptsTo (newStatus: int) returns int
    ProcessFinish (exitStatus: int)
    -- ############   NEW code   ############
    InitFirstProcess ()
    -- ############   NEW code   ############

    -- Routines from Switch.s:
    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX   SKIPPED CODE    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

endHeader
```