EECS 678 – Operating Systems – Spring 2020
Quiz – 1

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1. **True or False (1 point):** After startup, the operating system will not do *anything* unless there is an interrupt.

2. **Circle all that apply (1 point):** The OS uses the *address space* protection mechanism to:
   (a) ensure applications do not crash into each other
   (b) ensure applications do not crash into the OS

3. **Fill in the blanks (1 points):** The API provided by the OS is called the system call interface

4. **True or False (1 point):** Passing function arguments in registers is faster than passing arguments on the stack.

5. **True or False (1 point):** The Linux OS uses a hybrid design that combines aspects of the *microkernel* and *modular* approaches.

6. **Fill in the blanks (1 points):** The assembler is a system program that takes an assembly code file as input and outputs object code.

7. **Select the correct answer (1 point):** The broad goal(s) of OS services designed to support the *user's view* of the operating system is:
   (a) enable efficient use of hardware resources
   (b) enable fair use of the hardware resources
   (c) make it easier to use or interact with the computer hardware

8. **Circle all that apply (2 points):** A *Batch* OS:
   (a) keeps multiple jobs in memory simultaneously
   (b) allows I/O and CPU computation to overlap
   (c) frequently switches jobs to fairly allocate CPU time to each user job
   (d) maximizes efficient use of hardware resources.

9. **Circle all that apply (2 points):** A *modular* OS design has the following properties:
   (a) moves much of the functionality from kernel space to user space
   (b) requires modules to communicate by passing messages across the OS interface
   (c) allows users to add or remove kernel services dynamically
   (d) is not as small as a microkernel OS design