CS510 Languages and Low Level Programming: Portfolio submission Topic 3

Due on April 29, 2016 at 11:59pm

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Topic
Explain how conventional operating system features (multiple address spaces, context switching, protection, etc.) motivate the desire for (and benefit from) hardware support.

The main benefit of implementing some of the OS features in hardware is performance. Specialized hardware will be in most of the cases many times faster than hardware, however implementing every single abstraction would make hardware OS dependent.
When feature is common enough or has been accepted as something vital it is almost always better to implement it the hardware.
Memory management unit in Pure software For ex
When feature becomes permanent, or in high demand, such as context switching