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6.004 Computation Structures
Spring 2009

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Lab #8 Checkoff

| <i>Name</i> | <i>Meeting date & initials</i> | <i>Score</i> |
|------------------------|------------------------------------|--------------|
| <i>Athena username</i> | | |

If you work at home, please remember to upload your design files to Athena before coming to the lab for your meeting so you'll be able to demonstrate your design in the lab.

Step 1: Add mouse interrupt handler (3 points)

Testing procedure: insert a “.breakpoint” before the JMP(XP) at the end of your interrupt handler, run the program and click the mouse over the console pane. If things are working correctly the simulation should stop at the breakpoint and you can examine the kernel memory location where the mouse info was stored to verify that it's correct. Continuing execution (click the “Run” button in the toolbar at the top of the window) should return to the interrupted program. When you're done remember to remove the breakpoint.

Step 2: Add Mouse() supervisor call (3 points)

Testing procedure: Once your Mouse() implementation is complete, add a Mouse() instruction just after P2Start. If things are working correctly, this user-mode process should now hang and Count3 should not be incremented even if you type in several sentences (i.e., the prompt should always be “00000000>”). Now click the mouse once over the console pane and then type more sentences. The prompt should read “00000001>”. When you're done, remember to remove the Mouse() instruction you added.

Step 3: Add fourth user-mode process that reports mouse clicks (6 points)

Testing procedure: If all three parts are working correctly, the appropriate message should be printed out whenever you click the mouse over the console pane. You may find it necessary to use “.breakpoint” commands to debug your user-mode code.

Step 4: Synchronize mouse reporting with other I/O (3 points)

Testing procedure: Start typing in a sentence then click the mouse. The click message should be printed *after* the translation and the following prompt have been printed.