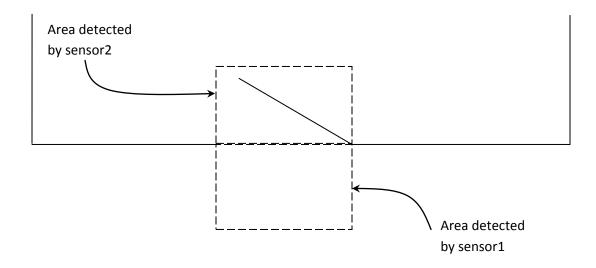
In-class assignment CS2984 March 22-23, 2011

Use the Snoopy tool to produce a Petri net solution to the entry door described below. We will look at solutions from different class members during class on Thursday, March 24.

Entry Door Problem

The entrance door to a building automatically opens to allow people to enter the building and closes when no one wishes to enter and it is safe to do so. Sensors detect the presence of people near the entry door as shown in the following figure. People walk near the door, wait for the door to open, and proceed through the door, cross the area immediately inside the building, and move away from the door.



The door operates according to the following rules:

- 1. the door opens if it is closed and a person is detected by sensor1 and no person is detected by sensor2
- 2. the door remains open as long as there is a person detected by sensor1 (note, multiple people may be in the area observed by sensor1)
- 3. when the door is open it does not close if there is a person detected by sensor2 (note, multiple people may be in the area observed by sensor2)
- 4. when the door is open it may close when no person is detected by either sensor1 or sensor2