Automation Element

When I asked Dr. Podorozhny what he was expecting from our References document, he suggested we cite Finite State Machines and suggested simple examples such as: if an emergency alarm sounds, then the system locks the door. I thought this was significant because it points to the necessity of including some automation in the project.

In light of this, his criticism of other group projects makes sense. He said that he did not want our project to be just a "glorified database" and asked the group implementing a Wheel of Fortune game to propose a completely different project. This shows that our system should log the activities of our system; this is important for security and usability, but it should do more.

The automation involved in the Wheel of Fortune game is primarily the random selection of dollar values when the player spins the wheel. In contrast, FSMs define specific state changes that result from certain user input. Our remote home management project could include any number of basic automatic activation of doors, lights, and thermostats, triggered by motion detectors, time of day, and temperature, etc.

I included the references for Mealy State Machines (MSMs) because they are an extension of FSMs that have obvious applications in our project. I could see storing user preferences, or our system activity logs in MSM memory to intelligently customize individual installations.