Homework #2: CSE503, Spring 2006

Due at 10:30 AM, Thursday, April 13, 2006

1. Jon Jacky has some short Z examples (and portions of a larger spec) at:
http://staff.washington.edu/jon/z/z-examples.html
For any of the three examples:
>   a. (15 points) Write a page of evaluation about specifying the system using
>   Z. In particular, consider scaling (for example, a much larger finite state
>   machine than in the first example) and ease of extending the specification
>   (for example, defining a new operation for the text processing example).
>   b. (10 points) Write a simple extension of your choice of any of the three
>   specifications.

 2.   I promised to discuss the example of confusing situation created by the pair of
signs at the bottom of an escalator: "Shoes must be worn" and "Dogs must be
carried." Instead, you will :-).
>   a. (15 points) Write a page that discusses the dimensions of confusion in
>   these signs.
>   b. (10 points) Write a precise (it needn't be formal, in the mathematical
>   sense, but it can be) specification of what was intended by the creator of the
>   signs.

3. (25 points) Write a statechart-style specification for some device you can find on
campus. Choices include: the operator console in one of the EE1 classrooms, a
microwave oven in the Allen Center, etc. Use an appropriate level of abstraction
(as opposed to modeling the device in complete detail).