Alex Sanders Software Engineering Vision Statement #1 9/1/11

1. What world problem are you concerned about?

The world has been using oil as a means for energy for more than a century. Yet, oil is a finite resource. Therefore, a mechanism must be put in place to limit the use of oil until a new, reliable, and efficient source of energy can replace it.

2. Why is this problem important?

Oil is used in a variety of ways, including as a lubricant, or even an ingredient in the fabrication of plastics, rubber tires, and even make-up. The finite nature of oil will require mankind to replace it as a source of energy, or else our technologically advanced world will come to a halt with no lights, no heating, no a/c, and transportation will be SEVERELY LIMITED.

3. What aspect of this problem seems particularly important to you?

I believe that the current use of energy use of the United States is not optimized. For example, lights are left on, contained environments are not sealed, like a refrigerator. A simple software system with sensors, or even hardwired programming can eliminate these losses with minimal power usage themselves.

4. How could a new software system help to solve this aspect of the problem?

I know some systems currently exist that TRY to maximize our energy A user-friendly-interface which is programmed and installed in the house/apartment that is tailored to its occupant would make a world or difference. Examples include the desired temperatures in individual rooms, dimming light in a room when there are no occupants, and removing power from items not being used.

5. Why do you think that this idea will make a big impact on the world?

The recycling requirements that were implemented after the 1973 OPEC incidents have essentially extended the use of oil and petroleum based economies. A similar product that is tailored for energy consumption in the home should have the same result as long as the application of the theory is sound. It is a homeowners answer to industrial recycling.

6. What sources did you use in writing this Vision Statement?

Oil Posts Biggest Gain as Traders Caught in End-Month Squeeze Bloomberg.com: September 23, 2008

Latin American Politics and Development : 2000;Harvey Klein, Howard J. Wiarda

Political-Military Relations and the Stability of Arab Regimes: 1999; Risa Brooks Other references to be added later.