ESOF 422 Homework 3

Instructions:

Work with your partner on this homework.
Your homework is worth 40 points.

Due: 2/20 (Thursday) by 5pm. –No exceptions so plan accordingly.

Question 1 (20 pts)

Finish the design studio problem we began in class.

Extend the CoffeeDispenser to use a State Pattern to keep track of its states.

Email me:

1. a copy of your .use file so that I can run it. Please name your file as follows:
   <last name 1>_<last name 2>_q1.use
2. A README_q1 file with instructions that allow me to create an instance of your CoffeeDispenser along with any other commands I need (i.e. creation of other objects, associations, etc.)
3. I will test your design by opening the PSM of your design, then running various accept, brew, and reset commands that clearly show transitions between states.

Question 2 (20 pts)

In this exercise you will design a First Person Shooter (FPS) game. Your class diagram should contain classes for the FPS and its associations to the rest of the game environment (i.e. weapons cache, levels, etc. use your imagination). An FPS can be in any one of the following states: Neutral, Attack, Panic, or Die.

Think about the messages (i.e. operations) that can be sent to the FPS and how the FPS will react to the messages depending on its state. Use a State Pattern to keep track of the state of the FPS.

Email me:

1. a copy of your .use file so that I can run it. Please name your file as follows:
   <last name 1>_<last name 2>_q2.use
2. A README_q2 file with instructions that allow me to create an instance of your FPS along with any other commands I need (i.e. creation of other objects, associations, etc.)
3. I will test your design by opening the PSM of your design, then running various commands that clearly show transitions between ALL states.