Report on the Bob exercise

The “Bob exercise” was designed to integrate all of the different items that we have covered during the semester. In class we will examine some of the issues presented in the exercise. Note that there are many options. The options allow you to display what you have found important and what you have the most confidence in.

Consider for example the idea of troop movement. This addresses a variety of issues related to motion. It also addresses group boid-like behaviors. However the troops still need to move from point A to point B. This means that something like path planning and path following would be involved. Also note that the troops would assemble and disassemble. This might suggest that when disassembled the troops would have some FSM like set of behaviors.

Or again consider the decision to be made about building a city. Now it was not explicit in the exercise but might be fairly assume that there is a choice between building a new troop collection and building a city. That decision might involve utility considerations. A lot to think about there.

Or again one might consider that Bob has several possibilities open at any given time and Bob might be more defensive or may aggressive. This suggests that there might be some role for probability distributions.

In essence the Bob exercise not only addresses all of the components examined this semester but also provides you a framework for addressing the issues that interest you most.

With this in mind, you will need to construct a design for the AI components that could be used in working toward an overall design for a Bob game. You will need to report on three things

Your general overall design for the game

A component related to motion

A component related to decision making

In each case you should make reference to the course materials as well as the materials in the texts.

Be creative but make sure there are clear responses to the three items above and that there is explicit use of the available materials. The report will be due by the evening (11:29) of April 22, 2016. With careful use of the references to the texts, four to five pages will be sufficient.