As discussed on Blackboard, your group project is to design a simple 2D grid-based game using the Java programming language and JavaFX. Although the assignment is vague, I will require the following from all of you in order for your group to receive top credit:

1. At least ***one*** abstract class and ***one*** interface: It is not enough that your game “works” – you must show that you understand the tenets of object-oriented design! The size of these items is not important; it is the design that is of utmost importance, because you also must demonstrate…
2. Polymorphism: Have your code be as flexible as possible. For example, can your game easily incorporate a smarter computer player without having to rewrite large blocks of code?
3. Work Log: This is 40% of the group project, and each grade is on an individual basis. How much work did each person give to the project each day? It should be a ***daily*** representation of everyone’s work. Normally, this would be printed out and bound as professionally as possible, but we don’t have that luxury this semester. I will just need this all submitted to me as one large Microsoft Word file. I really need to know what each member is doing daily, since there will not be labs for the last few weeks of class.
4. Design Approach Explanation: This should be a 2-3 page document explaining your design process. Which process did your group choose (waterfall model, iterative model, V-shaped, etc.) and how did it evolve as your project formed?
5. UML Diagram: All of your classes, as well as their relationships, need to be shown in a UML diagram.
6. Java Docs: I need a Java Doc for each of your classes! Make sure you have followed Java Doc commenting conventions!
7. Code: I will need all of your source code, as well as an executable jar file that can be run on any computer. I will show you how to create the jar file as we draw nearer to presentation day.

The breakdown for the group project grade is the following:

Work Log: 40%

Development Approach: 10%

UML Diagram: 20%

Java Docs: 10%

Code: 20%

Presentations will take place (tentatively) on Thursday, December 8. Everyone should be prepared to present for a minimum of eight minutes and a maximum of fifteen minutes.