

## Assignment 1

1. Review the three projects from Informatics 221 posted on the 123 website, and choose one to be the basis for your work in this class. Note that the three projects involve different programming languages.
  - a. AsteroidMelee: written in JavaScript using Websockets. ArchStudio 5.
  - b. AsteroidMiner: written in Python. ArchStudio 4
  - c. 2DLander: written in Java. ArchStudio 4
2. Install either ArchStudio 4 or ArchStudio 5, depending on the project you choose to work from.
3. Load the xADL models from your project into ArchStudio, and get to the point where you can make changes to the model.
4. Design a change or enhancement to the game. The change(s) is(are) up to you, but it must be significant enough to require adding a component or two. It certainly may involve changes to several components. The change should improve the game, or make it into a different, but at-least-as-interesting game. Consider both:
  - a. Functional improvements (e.g. more types of interaction between the players, better management of time, new features, high score keeping)
  - b. Non-functional improvements (e.g. easier startup, more robust, more scalable)
5. Develop specifications for your design changes. Change the xADL model as appropriate. If the UML models better capture the changes, then develop revised UML models also.
6. Create a document that documents and discusses your revised design. Use the document structure that you see in the source project as an example. That is, your document should describe the changes made and include screenshots/images from ArchStudio and (as needed) revised UML diagrams.
7. In that same document, include some reflection on the activity. What did you learn? How confident are you in your new design, having based it entirely on the document and models you received, and not on the source code?
8. Turn in this SINGLE document as a PDF. Turn-in mechanism to be announced.

## NOTES:

1. You may work individually or in a team of two...not more.