CSSE 374: Lab 4-1 (Design Studio)

Download the **Lab4-1.zip** file from Moodle and import it as a Java project in your Eclipse IDE. Here are a couple of things you must be aware of throughout this exercise:

[Note 1] For some of the questions, you have to make assumptions about method names, signatures, and type of variables. It is alright to make those assumptions but make sure you document those assumptions both in your code snippets (using inline comments) and your design diagrams.

[Note 2] You **must not** have any syntax errors in your code snippets even though your code may not be functional.

Questions on Interaction Diagram (Reference Document)

1. Draw a UML class diagram based on the sequence diagram in the slide and append it to **docs/Answers.pdf**. [**5 points**]

2. Go to the **questions2** package and create code snippets that best reflect the SD in the slide incorporating your class diagram of Q1. [**5 points**]

3. Go to the **question3** package in your Eclipse project and create necessary code snippets that best reflect the SD in the slide. [**5 points**]

4. Go to the **question4** package in your Eclipse project and create necessary code snippets that best reflect the SD in the slide. [**5 points**]

5. Draw a UML class diagram based on the sequence diagram in the slide. Append it to **docs/Answers.pdf**. [**5 points**]

6. Go to the **question6** package in your Eclipse project and create necessary code snippets that best reflect the SD in the slide incorporating your class diagram of Q5. [**5 points**]

7. Go to the **question7** package in your Eclipse project and create necessary code snippets that best reflect the SD in the slide. [**5 points**]

8. What is the key limitation of Communication Diagram? How do we overcome this limitation? Append it to **docs/Answers.pdf**. **[5 points]**

Design Exercises

9. Consider the following Asteroid arcade game: http://www.learn4good.com/games/action/asteroids_online.htm. Using a communication diagram, illustrate how a space ship, an asteroid, and a bullet (or missile) would interact with each other. Append the diagram to **docs/Answers.pdf**. [**10 points**]

Deliverables

Bundle your project in the **zip** format and upload it to Moodle.