



Week 3 Announcement

Posted Jan 19, 2025 11:00 PM

Hello Students:

Project One, which has 2 parts, is due in this module. In part I, you will create a software design document. In part II, you will complete a Java application, the game application. You will use Eclipse IDE to work on the game application. There will also be several reading assignments in this module to explore Operating System Process and Threading resources, which will help you learn how to identify techniques for utilizing processing and memory management in software applications related to various operating platforms.

Software design templates are used extensively in the real world software development projects. In some companies, they may be called User Requirement Specifications (URS), Functional Specifications Design Specifications (FSDS), etc. In many of the major projects that I was involved in throughout my more than 20 years software development career, I had to develop many of these design templates. They are also a very good tool to help dispute resolution if there ever arises a conflict with your client in terms of the exact scope of the work.

Project One

Game, Team, and Player will all have a name and an identifier. This presents a good case to create a base entity class which will have name and ID fields that will be inherited by the Game, Team, and Player classes. The idea is that common attributes (fields/properties) and behaviors (functions/methods) should be in the base (parent/super) class that will be inherited by the derived (child/sub) classes.

Be sure to implement the following:

- Creating the base Entity class as shown in the UML class diagram provided.
- Modifying the Game class to derive from Entity and removing the local class variables and getters/setters.
- Creating the Team and Player classes, derived from Entity.
- Utilizing the iterator pattern to search the appropriate Lists to find an existing instance with a matching name and, if found, not creating another instance but returning the existing one instead.

I would encourage you to do some research on the concept of refactoring existing code to improve the readability and maintainability. I would also encourage you to incorporate industry standard best practices, including in-line comments and appropriate naming conventions to enhance readability of your code.

Please feel free to reach out (s.sarkar1@snhu.edu) if you have any questions. I am always here to help as much as I can.

Thanks,

Suhash