Term Project: Iteration 1 – Class Diagram

(Fall 2023)

Project Description:

In this iteration, we will focus on creating a class diagram for the project. This class diagram will contain an outline of the classes that may be contained within the project, along with some of the attributes and methods associated with those classes. The contents of this class diagram will be derived from your understanding of the project, the use cases that the project must address (as per Iteration 0), and your knowledge of object-oriented programming generally.

Instructions:

Create a UML Class Diagram using GenMyModel. Your diagram should contain **at least four classes**, with appropriate relationships, multiplicities, and attributes depicted. When creating your diagram, keep the following in mind:

- The purpose of a UML Class Diagram is to act as a language-agnostic blueprint for the classes in a program. By creating your class diagram, you are **not** locking yourself into any specific implementation of the project, nor will you be graded against any implementation that already exists. Focus on the concepts, not the code.

- Remember to depict some relationship between each of the classes in your diagram; none of the classes should be isolated from one another. Additionally, **remember to depict the correct multiplicities** for these relationships

- When depicting the multiplicities, remember that the numbers represent how many objects are associated with each other *per relationship*, not how many objects exist in the program as a whole. For example, a car dealership may contain hundreds of vehicles and thousands of wheels, but the multiplicity between car and wheel would still be 1 to 4.

- If your class diagram depicts any containment relationships, remember to consider whether that relationship is *composition* or *aggregation*, and to use the correct notation.

- If your class diagram depicts any inheritance relationships, remember that the arrow points *from* the child class *to* the parent class, not the reverse.

- Your class diagram need not contain 100% of the attributes and methods present in the actual implementation. In fact, since we do not yet know the actual implementation, it would be very difficult to depict this. Focus on the attributes and methods that you know (or have good reason to believe) the classes would contain.

Deliverables:

Once you have completed your class diagram, export the diagram as a .jpg file named with the name “userid_iteration_1.jpg” where “userid” is your Tech username. For example, “jstrickler_iteration_1.jpg.” Submit the .jpg file to the Iteration 1 dropbox in iLearn.