## **Domain Model Diagram**

The purpose of this assignment is to introduce an object-oriented <u>analysis</u> tool called the domain model. The domain model is a visual representation of the objects in the real-world problem that you are trying to solve. These objects are called *conceptual classes*, not software classes, because they represent objects in the problem space, not the solution. In this assignment you will sketch a domain model, illustrating the real-world objects for one of your project use cases. Your supervisor will review the domain model and offer comments to help you to refine your understanding of the use case.

#### What I want You To Learn

- How to sketch a domain model for the problem space, using simplified UML class diagram notation
- The elements of a domain model such as classes, associations, and attributes

## Deliverable

*Ch.* 10 of our book -- Point of Sales example

Please read chapter 9 from our textbook – especially read sections 9 (start) - 9.6, 9.15 and 9.17. Examine the domain model for the Monopoly Game in section 9.17.

For this assignment, sketch a domain model (like the Monopoly model in 9.17) for one of the use cases in your project. Bring your sketch to class for credit. (Do not turn it in to my.csi.) Please use the UML class diagram notation as shown in section 9.17. Include class names, associations, and attributes. DO NOT include methods, because a domain model is not a model of the software!

Note: Since we don't have an existing system (like Monopoly) to model, please imagine how one of your features will work and model it.

# Criteria for assignment

- 1. State the name of the use case (or feature), and identify a set of conceptual classes that model it
- 2. Show associations between the classes. Name the associations and include multiplicity where possible
- 3. Show possible attributes for some of the classes (do not include methods)
- 4. Use the UML class diagram notation as shown in the examples (see section 9.17)

### **Grading Rubric**

Criteria	Done Well	Need Improvement
Identify a set of conceptual classes	A set of conceptual classes is	Conceptual classes are not
that model your use case; state	identified that is reasonable	identified or do not seem
the name of the use case	for the use case	reasonable for the use case
Show associations between the	Associations are shown that	Associations are missing, or do
classes	seem reasonable for the use	not seem to be reasonable, or
	case; associations are named;	are not named or are missing
	multiplicity is shown	multiplicity
Show possible attributes for some	Reasonable attributes are	Some additional attributes could
of the classes (do not include	shown (and methods are not	have been identified for the
methods)	show) for classes	classes
Use the UML class diagram	The diagram follows	The diagram does not follow the
notation as shown in the examples	conventional UML class	conventional class diagram
	diagram notation	notation