Domain Model Diagram

The purpose of this assignment is to introduce an object-oriented analysis 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.csl.) 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

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