

SWEN 223: Software Engineering Analysis

Assignment 3

Submit by 05/05/2017

1 Conceptual Model

In the first assignment you created a use case diagram for a cash register system for the “BUNDLE’nBANK” supermarket.

1.1 Create a Domain Model

Create a conceptual model of the “cash register” domain involving all concepts required to address the use cases you have come up with. You may use the CRC card technique to ascertain which concepts are needed and what their responsibilities and collaborators are. Note that you do not need to submit the result of this preparatory step.

1.2 Cover Advanced Functionality

Make sure you are not only addressing the most basic functionality of a cash register. Extend the functionality of the cash register, if you have not done this already, to include further functionality as outlined in section 1.1.1 of the first assignment.

1.3 Create a Class Diagram

Draw a class diagram representing your conceptual model. The concepts (classes) should contain operations and functions (methods), defining the responsibilities of the concepts. Attributes may be included, but are not mandatory, if the existing methods make their presence redundant / implicit.

Pay attention to accurate labeling of concepts (classes), their operations (methods), and relationships (associations) with appropriate multiplicities. For full marks, incorporate several of the advanced class diagram notation element types presented in lectures.

1.4 Submission

Submit your class diagram via the electronic submission system. You may accompany it with extra documentation (in a .txt file or as part of the diagram) elaborating on assumptions made, explanations as to how the tool you have used may have been limiting you, etc.

Note: Allowed submission formats are PDF documents (.pdf) or image files (.gif, .png, .jpg). Other formats cannot be considered and will unfortunately have to be counted as non-submissions.
