LAB 2

Spring 2011, BESE 15

Use Case Diagrams

Objective

The aim of this lab is to introduce students to the concept of UML use case diagrams. They will first be familiarized with the notations and concepts associated with these and will then be given a practice scenario for which they have to create use case diagrams.

Submission Requirements

You are expected to complete the assigned tasks within the lab session and show them to the lab engineer/instructor. You need to submit the report even if you have demonstrated the exercises to the lab engineer/instructor or shown them the lab report during the lab session.

Tasks for Today

Use Case Diagram:

A use case is a set of scenarios that describe an interaction between a user and a system. Use case model is a representation of sequence of transactions initiated by the user (actor) from outside the system. In the process, the transaction uses internal objects to take the transaction to completion.

TASK 1:

Create a set of use cases for the given scenario:

Hurry's require a new point of sale and stock control system for their many stores throughout the UK to replace their ageing mini based systems.

A sales assistant will be able to process an order by entering product numbers and required quantities into the system. The system will display a description, price and available stock. In-stock products will normally be collected immediately by the customer from the store but may be selected for delivery to the customer's home address for which there will be a charge. If stock is not available the sales assistant will be able to create a backorder for the product from a regional warehouse. The products will then either be delivered direct from the regional warehouse to the customer's home address, or to the store for collection by the customer. The system will allow products to be paid for by cash or credit card. Credit card transactions will be validated via an online card transaction system. The system will produce a receipt. Order details for in-stock products will be printed in the warehouse including the bin reference, quantity, product number

and description. These will be collected by the sales assistant and given to the customer. The sales assistant will be able to make refunds, provided a valid receipt is produced. The sales assistant will also be able to check stock and pricing without creating an order and progress orders that have been created for delivery.

The store manager will be able at any time to print a summary report of sales in the store for a given period, including assignment of sales to sales assistants in order to calculate weekly sales bonuses.

The stock manager will be able to monitor stock levels and weekly run-rates in order to set minimum stock levels and requisition products which fall below the minimum stock levels or for which demand is anticipated. When the stock arrives it will be booked in by the warehouse person. Stock that has been backordered for collection from the store is held in a separate area and the store manager advised of its arrival.

The catalogue of available products will be maintained remotely by marketing from head office. Marketing will also be able to access sales information from each store system.

ASSIGNMENT:

Make a set of use cases for the database project that you completed in the previous semester.