

Project 1: Detailed use cases and design (Stage1).

Due date: September 18

In the first stage of the project we will incorporate the following features: *add client*, *add product* and *add product to client's wishlist*, **plus** any queries needed to verify (test) that these features have been implemented correctly.

Please submit all of this as a single word/pdf file.

Completing the analysis for Stage 1.

Detailed Use Cases Write detailed use cases for add client, add product, add product to client's wishlist, and for all the queries.

Design for Stage 1. Please complete each of the following:

- 1. Software classes.** Make a list of all the software classes that will be needed. To make this list, start with the conceptual class diagram for the warehouse project that was presented in the lecture. Using the discussion for the Library project in Chapter 5(D2L) as a template, plus other discussions in the lecture, explain why each of the software classes is needed; also explain if any of the conceptual classes are dropped. Create a software class diagram showing how these are related.
- 2. Design a solution for the features for Stage 1.** The features are: *add client*, *add products(multiple)*, *add products(plural) to a client wishlist (if the product specified already exists in the wishlist, change the wishlist quantity to the new quantity)*, **plus queries:** *display all clients with details, one per line; display all products with details one per line; given clientID display all products in wishlist with quantities*. For each feature, list the sequence of steps that will be performed within the system; for each step explain any design choices, and decide how the responsibility for completing the steps will be distributed amongst the software classes. See the discussion for the Library project in Chapter 5(D2L) and the related discussions in the lectures.
- 3. Creating Sequence Diagrams.** Construct sequence diagrams that reflect the solutions you have designed.