

Requirements Analysis and Specification (COE691)

Lab 1

Due the week of Jan 29th, 2023 (In Your lab Session), Late submission will not be accepted

Objectives

- Review the UML use-case diagrams, and sequence diagrams.

Case Study: Buy&Sell Magazine Exchange ¹

This case study is a work of fiction. Names, characters, places, and other details either are products of the case author's imagination or are used fictitiously. Any resemblance to actual events or locales or persons, living or dead, is entirely coincidental.

Case Description: Buy&Sell Magazine Exchange is a e-business exchange that allows business fully on the Internet. The firm is considered as a clearinghouse for both buyers and sellers of used magazines. A registration with the company website is required for any individual to be offered a magazine for sale. The registered individual must provide a residential address, telephone number and e-mail address. The system then maintains an open account for this person. Access to the system as a seller is through a secure, authenticated portal.

A seller can list available magazines on the system through a special Internet form. The form asks for all the pertinent information about each magazine: its category, general condition, and the asking price. A seller may list as many magazines as desired. The system maintains an index of all magazines in the system so buyers can use the search engine to search for magazines. The search engine allows searches by title, publisher, category, and keyword. People who want to buy used magazines will visit to the site and search for the magazines they want. When they decide to buy, they must open an account with a credit card to pay for the magazines. The system maintains all this information on secure servers.

When a purchase is made, Buy&Sell sends an e-mail notice to the seller of the chosen magazine and payment information. It also marks the magazine as sold. The system maintains an open order until it receives notice that the magazine has been shipped. After the seller receives a notice that a listed magazine has been sold, the seller must notify the buyer via e-mail within 48 hours that the purchase is noted. Shipment of the order must be made within 24 hours after the seller sends the notification e-mail. The seller sends a notification to the buyer and Buy&Sell when the shipment is made. After receiving the notice of shipment, Buy&Sell maintains the order in a shipped status.

At the end of each month, a check is mailed to each seller for the magazine orders that have remained in a shipped status for 30 days. The 30-day waiting period exists to allow the buyer to notify Buy&Sell if the shipment does not arrive for some reason or if the magazine is not in the same condition as advertised. If they want, buyers can enter a service code for the seller. The service code is an indication of how well the seller is servicing magazine purchases. Some sellers are very active and use BotCom as a major outlet for selling magazines. Thus, a service code is an important indicator to potential buyers.

Questions

For the “Buy&Sell Magazine Exchange” case, develop the following:

1. A list of uses cases and a use case diagram.
2. A fully developed description for two use cases:
 - a. Add a seller and
 - b. Record a magazine order.
3. A System Sequence Diagram for each of the two use cases in question 2.

Submit your lab

On the D2L, Folder Assignments, Lab1, save your work as .pdf file and upload it by the due date. This is an individual work; no group work is allowed. A software for plagiarism check will be applied on each submitted work. **Please get yourself familiar with TMU's plagiarism policy**.