



UNIVERSITY OF COLOMBO, SRI LANKA



UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING



DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)
Academic Year 2018 – 2nd Year Examination – Semester 3

IT3105: Object Oriented Analysis and Design

CASE STUDY

No. of Pages = 2

ABC Company is going to start an online store which sells Books and Blu-Ray Movies. They are planning to set up a computerized system as per simplified preliminary domain requirements summary given below.

Registration with the system

The customers if they wish can register with the system by creating a user account. Information required for registration is username, password, date of birth and a valid e-mail address together with their first name and last name. Optionally they can enter their billing address and shipping address while registering with the system even though it is possible to do so after registration as well. Upon successful registration a new user is created and the system should send an activation code to the e-mail address provided. User will have to enter this code at the first-time login to the system to activate their account.

The username and password has to be specified when logging into the system. The system should validate the login information provided and display appropriate error messages if any. If user fails to enter correct information within three attempts, the user needs to be locked for 10 minutes and informed via e-mail. After 10 minutes, the account should become active again.

A customer can request to close their user account if required. Administrators can close a user account for violation of system policies as well. Managing the user account should be possible enabling the user to change their password and address information.

It is possible for unregistered users to browse the system and view product details.

Administrative Users can only be created using a separate flow which is not visible to ordinary users. Administrative users can log on to the system to perform administration functions such as adding, modifying, removing products, setting product prices etc.

Browsing/Searching Products

Customers should be able to browse a list of products (i.e. Books and Blu ray). When a listed product is selected, details about the product need to be displayed. It should be possible to search for products using keywords such as title, author for books and Movie title for Blu-Ray discs. Advanced searching facility should be there for customers if required, where more searching attributes are available. When a customer clicks on a search result, details of the product need to be displayed.

Wish List

A wish list can only be created by registered customers and they should be logged on to the system to do so. While browsing/searching, customers should be able to add products they find interesting, to the wish list. The items added to the wish list need to be persistently stored so that the wish list is available on next log on. Managing the wish list is totally up to the customer and they should be able to add and remove products from it as they wish. When the user logs on to the system, they should be able to browse and view products previously added to the wish list.

Shopping cart

A logged on customer can add any number of products to a shopping cart while browsing or from the wish list. It should be possible to view the shopping cart and remove items from it at any time. Shopping cart information need not prevail after the closure of the browser window. When the user is ready, he/she can proceed to check out the shopping cart.

Checkout Shopping Cart

Customer needs to be logged in to the system to perform this action. When the checkout option is selected, products in the shopping cart need to be displayed to the customer where he/she can alter the default quantities (i.e. one) of each product if required. The total price for the products in the cart needs to be displayed as well.

Customers should be able remove items from the cart or go back and add more items. The total price should be updated with these alterations.

Placing Orders

Customer needs to be logged in to the system to perform this action. Customers can place orders based on the products in the shopping cart while in the checkout process. The shipping address should be displayed (if provided at registration) and if he/she wants to ship to a different address, then entering a different address should also be possible. Shipping charges for the order is also displayed and added to the total order amount. Shipping charges are obtained from a Courier Service system.

Payment for the order

Payments for orders can be done via credit card or using PayPal account. Payments are handled by a separate accounting module and need not be considered in this system. The payment information is transferred to the accounting module and information provided by accounting module can be received by the system.

Order Confirmation

Once the order is successfully placed, a confirmation e-mail and an invoice need to be sent to the user's e-mail address.

Delivery

Products ordered will be delivered to customers by an external courier service. The system will interact with the courier Service system to keep track of the delivery.

Order Status

Registered Customers can view their order status any time after placing the order by using the system. The order will be created as new and other connected systems will send information whenever something new happens to the order. The information such as whether the order is being processed, packed, dispatched, delivered, and closed are important for customers.
