**Enova Shop Online Project**

Software Requirements Specification

Version <1.0>

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|  | **Introduction** | | |
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| **Project Code** | ESO | | |

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**Record of change**

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1. Introduction
   1. Purpose

This document goes through and define the general requirements for Online Bookstore System, given the brief mission statement. In this document, we will introduce functional and non-functional requirements for the system. The overall description describes the product and what assumptions and constraints were put into place. And last sections are introduced about entity relationship diagram.

* 1. Goals, Objectives and Scope

Online Bookstore System (ESO) will be a web-based software system to aid customers and owners to manage their books, purchases and sales. In addition, ESO will simplify and speed up the process of selection, ordering and purchasing books for customers as well as manage users and books store easily for owners. Graphical User Interface will be designed follow userfriendly intuitive design approach.

ESO will be a web-based shopping application designed in the form of an ecommerce web site.

The system will be designed to be used by book store customers with little or no experience in using computerized systems and by book store owners who will be trained to use ESO. To aid users, documentation will be provided a user manual which will contain a detailed description of all system functions.

* 1. Definitions, Acronyms, and Abbreviations

This document uses the following definitions, acronyms, and abbreviations:

|  |  |
| --- | --- |
| SRS | Software Requirement Specifications |
| ESO | Enova Shop Online |
| GUI | Graphic User Interface |
| ERD | Entity Relationship Diagram |
| IEEE | The Institute of Electrical and Electronics Engineers |
| BR | Business Rule |
| SC | Screen |
| UC | Use Case |

Table 1. Definitions, Acronyms and Abbreviations

* 1. References

The following material was used in creating this document:

 IEEE Standard 830-1998, IEEE Recommended Practice for Software Requirements Specifications

* 1. Overview

This document is organized as follows:

* + - * + Section 1: introduce about purpose, goals and objectives, scope, definitions and references of ESO.
        + Section 2: is overall description of ESO, include product functions, design and implementation constrains, assumptions and dependencies.
        + Section 3: specific requirements, this content includes external interface requirements, functional and non-functional requirements, design constrains, and entity relationship diagram.
        + Section 4: some helpful information if any (index, appendices, table of contents)

1. Overall Description
   1. Product Perspective

ESO will attempt to take the traditional attributes of a bookshop, that is the selling and purchasing books and place them in an online electronic environment. The system described in this document will be capable of selling books to customers in both electronic and traditional book format. While keeping a database of the customer’s purchases and account details. The product will also be required to deal with credit card companies and other financial institutions, these transactions will be processed in a safe and efficient manner.

* 1. Product Functions

The major features of the ESO is bellow functions:

* + 1. Registration

The registration function will allow users to create accounts. The account will track the user’s name, address, credit card information, username and password.

Purpose: this function provides security to the account member by setting up an account that is password protected.

* + 1. Login

This function allows members to enter their username and password. Once verified, users will be able to access account history, purchase books online, and update their account information.

Purpose: This provides a method which the user can access in restricted sites.

* + 1. Search

This function will offer users the ability to search for books by title, author, subject, course number, professor, or ISBN number.

Purpose: This offers a way to find a book if the user does not have complete information about it. It also provides price and availability information.

* + 1. Add to Shopping Cart

This function will allow users to temporarily save books in a list that are being considered for purchase.

Purpose: This offers convenience to the user by storing books online and allowing for purchasing.

* + 1. Delete from Shopping Cart

This function will remove any unwanted books from the cart.

Purpose: This allows users to change their orders easily and not be forced to purchase books that are no longer of interest.

* + 1. Reserve

This function will hold books for up to 7 days that will be purchased and picked up at the bookstore.

Purpose: This offers convenience to the user by allowing them to make sure a book will be in stock for immediate pickup. This also offers convenience for those who are unable or unwilling to give credit card information over the Internet.

* + 1. Checkout

This function will allow account members to purchase books online securely.

Purpose: This offers easy purchasing and added assurance with a confirmation number.

* + 1. Contact Us

This function will give users the store address, telephone number, email address, and its location on a map.

Purpose: This helps the user gain trust in the bookstore by showing how easy it is to have person-to-person contact with a BSU Bookstore employee.

* + 1. Update Account Information

This function will give account members access to edit their stored information.

Purpose: This offers convenience to the account members by allowing them to make changes to account information immediately.

* + 1. View Shipping Status

This function will allow account members to enter their confirmation number for a purchase and then view the status of shipment.

Purpose: This offers convenience to account members so they can find out when they should expect shipment.

* + 1. View Account Purchase History

This function will allow account members to see previous purchases.

Purpose: This offers convenience to account members by allowing them to easily view purchase history.

* + 1. Logout

This function will allow account members to exit their account for security purposes.

Purpose: This allows account members to exit their accounts, and prevent others from accessing it.

* + 1. Help

This function will give the user an overview of how to use the different functions listed above.

Purpose: This allows the user to get answers to immediate questions on using the website.

* + 1. Manage Customers

This function will allow administrator to manage customers who registered in system, he can view list of customers, add or delete customers and update customer information.

Purpose: This offers convenience to manage and control members in system easily.

* + 1. Manager Books

This function will allow administrator to manage books which book store had, he can view list of books, add or delete books and update book information.

Purpose: This offers convenience to manage and control books easily.

* 1. User Characteristics

Two types of user to use the system are: the customer and the administrator.

The customer will have the options to create an account and enter his details, including credit/payment details. He will also be able to purchase the books online.

The administrator will be able to check that the system is working correctly and restart/reset it if there are any problems. They will get notified of the systems wishes to remove unused customer accounts, remove accounts from the system, and also be notified of any malicious attacks that have occurred on the system.

* 1. General Constraints

As of revision 1.0 there are no constraints on the system.

* 1. Assumptions and Dependencies
     + - The system will have a connection to the Internet.
       - The operation of the online sales of books is dependent on the system actually being connected to the financial institutions in question.

* 1. User Documentation

This application will be delivered with this documentations:

* Online help: menu in the website that holds the application tells the customer how to use the software to get the maximum benefit from it.
* Report for the project manager and software customer explaining all the issues that concerned with this software.

1. Specific Requirements
   1. External Interface Requirements
      1. System Interfaces

* A credit card processing system: The system will access the credit card processing system via its web services API.
* ESO database: The system will interact with the inventory database via an ODBC connection.
  + 1. User Interfaces
       - The system shall provide a help link from each displayed HTML page to explain how to use that page.
       - The Web pages shall permit complete navigation and book selection only using the keyboard alone, in addition to using mouse and keyboard combinations.
    2. Communications Interfaces
       - ESO will send an e-mail message to the customer to confirm acceptance of an order, price, and delivery instructions.
       - ESO will send an e-mail message to the customer to report any problems with the book order or delivery after the order has been accepted.
  1. Functional Requirements
     1. Use Cases Diagram
     2. Actor Description

|  |  |  |
| --- | --- | --- |
| No | Actor Name | Definition & Interests |
| 1 | Customer |  |
| 2 | Administrator |  |

* + 1. Use Cases Description

|  |  |  |  |
| --- | --- | --- | --- |
| No Code Name Brief Description | | | |
| 1 | UC01 | Allow actor login to system |  |
| 2 | UC02 | Logout | Allow actor logout from system. |
| 3 | UC03 | Register | Allow actor to create accounts. |
| 4 | UC04 | Add to shopping cart | Allow actor to temporarily save books In list that are being considered for purchase. |
| 5 | UC05 | Delete from shopping cart | Allow actor to remove unwanted books from the cart. |
| 6 | UC06 | Reserve | Allow actor to hold books for up to 7 days that will be purchased and picked up at the bookstore. |
| 7 | UC07 | Checkout | Allow actor to purchase books online securely. |
| 8 | UC08 | Contact us | Allow actor to be gave the store address, telephone number, and store location on map. |
| 9 | UC09 | Update account information | Allow actor to edit his information |
| 10 | UC10 | View shipping status | Allow actor to view status of shipment. |
| 11 | UC11 | View account purchase history | Allow actor to view his previous purchases. |
| 12 | UC12 | Help | Allow actor to learn how to use the different function in the system. |
| 13 | UC13 | Search | Allow actor to search for books by title, author, subject, course number, professor, or ISBN number. |
| 14 | UC14 | View customer list | Allow actor to view list of customers in the system. |
| 15 | UC15 | Delete a customer | Allow actor to delete a customer in the system. |
| 16 | UC16 | Add a customer | Allow actor to add a customer in the system. |
| 17 | UC17 | Update customer information | Allow actor to update customer information. |
| 18 | UC18 | View book list | Allow actor to view list of books in the system. |
| 19 | UC19 | Delete a book | Allow actor to delete a book in the system. |
| 20 | UC20 | Add a book | Allow actor to add a book in the system. |
| 21 | UC21 | Update book information | Allow actor to update book information |

* + 1. Use Cases and Actors Mapping

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case Customer | | Administrator | Visitor |
| UC01: Add to shopping cart | **x** |  |  |
| UC02: Delete from shopping cart | **x** |  |  |
| UC03: Reserve | **x** |  |  |
| UC04: Checkout | **x** |  |  |
| UC05: Update account information | **x** | **x** |  |
| UC06: View account purchase history | **x** |  |  |
| UC07: Search | **X** | **x** |  |
| UC08: View customer list | **x** | **x** |  |
| UC09: Delete a customer |  | **x** |  |
| UC10: Add a customer |  | **x** |  |
| UC11: Update customer information |  | **x** |  |
| UC12: View book list | **x** | **x** |  |
| UC13: Delete a book |  | **x** |  |
| UC14: Add a book |  | **x** |  |
| UC15: Update book information |  | **x** |  |

* + 1. Use Case Specifications

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Specifications** | | | |
| **Use-case no** | UC01 | **Use-case version** | 1.0 |
| **Use-case name** | Add to shopping cart | | |
| **Author** |  | | |
| **Date** |  | **Priority** |  |
| **Actor:**   * Customer**.**   **Summary:**   * After login to home page, actor chooses a book and clicks on [Add to Cart] button to add a book into cart.   **Goal:**   * Actor adds books to cart successfully.   **Triggers:**   * Actor licks on [Add to cart] button   **Preconditions**   * Actor logged in to the system   **Post Conditions:**   * One successful message is displayed to notify that you have added successfully   **Main Success Scenario**   1. Actor logged in to the system 2. Actor chooses books then clicks on [Add to Cart] button   **Alternative Scenario:**   * None   **Exceptions:**   * Actor can’t login to the system   **Relationships:**   * This use case related to Customer uses case   **Business Rules:**   * Actor must login to the system first, the n choose products to add to cart | | | |

* 1. Non-functional Requirements
     1. Reliability
     2. Availability
     3. Security
     4. Maintainability
     5. Performance
     6. Usability
     7. Portability
  2. Design Constrains
  3. Legal, Copyright, and Other Notices
  4. Entity Relationship Diagram

1. Appendices