

-Software Requirements Specifications

Online book shop

A Web Application Design Project

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1. Introduction

1.1 Purpose

The purpose of this document is to present a detailed description of the Online Book Shop that is going to be implemented. It will explain the purpose and features of the system, the interfaces of the system, the functional and nonfunctional requirements and what the system will do.

1.2 Product Scope

The software system will represent an online shop made exclusive for selling books. This system will be designed to be very user-friendly, with easy to use interfaces and very effective in finding the desired book through different filters for every user.

More specifically, the system is designed to allow his users (the buyers) to easy find the product that they need with buttons that will act like filters for authors, publisher or most recent books added.

After finding what he needs, the customer can put the items in the inventory and check out.

1.3 Definitions, Acronyms, and Abbreviations

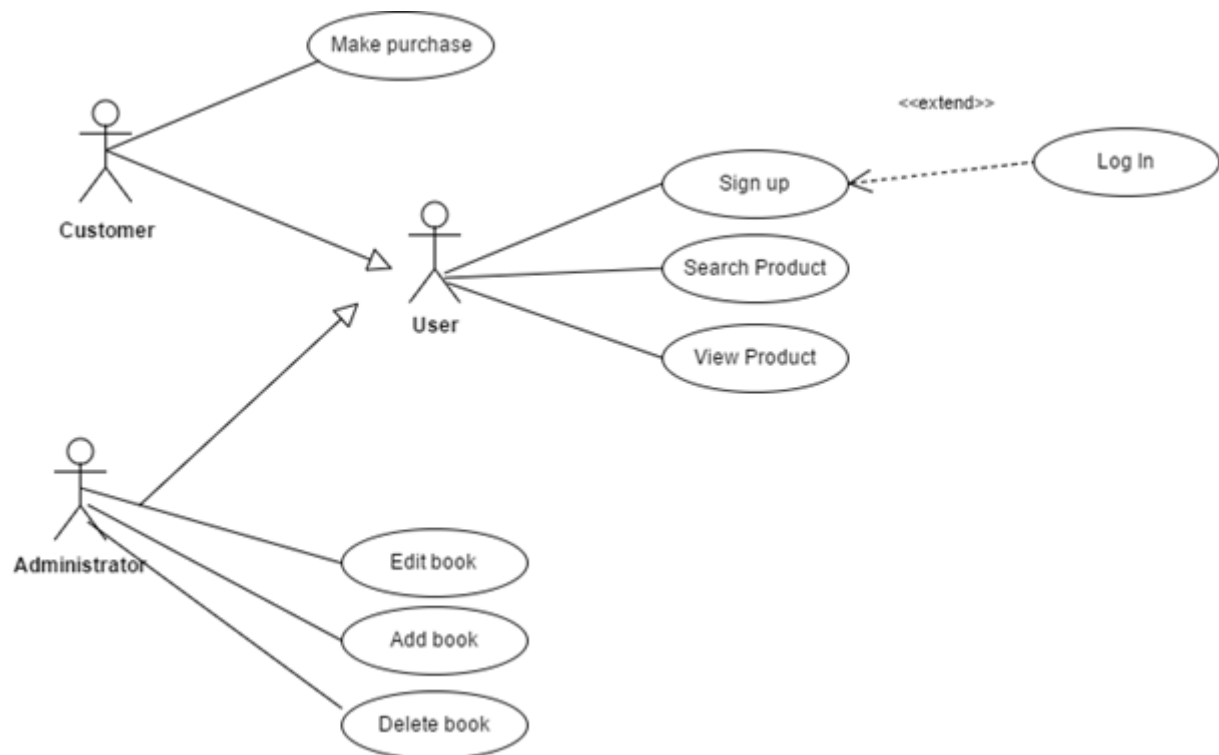
Term	Definition
Book	An individual entity that has these additional attributes: Title, Author, Price
Checkout	The process a Customer goes through to purchase an Item
Customer	A person that is a user of the system but has created an account
Inventory	An object that holds items available for purchase by the Customer
User-Friendly	Very easy and self-explanatory entity for the User
Software Requirements Specification	A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.
User	The person who operate the software product.

2. Overall Description

2.1 Product Perspective

The product is a self-contained system that must be available to anyone who is interested in using it and has internet connection and must work correctly in at least Google Chrome. The product is intended for online book shopping.

Use Case Diagram

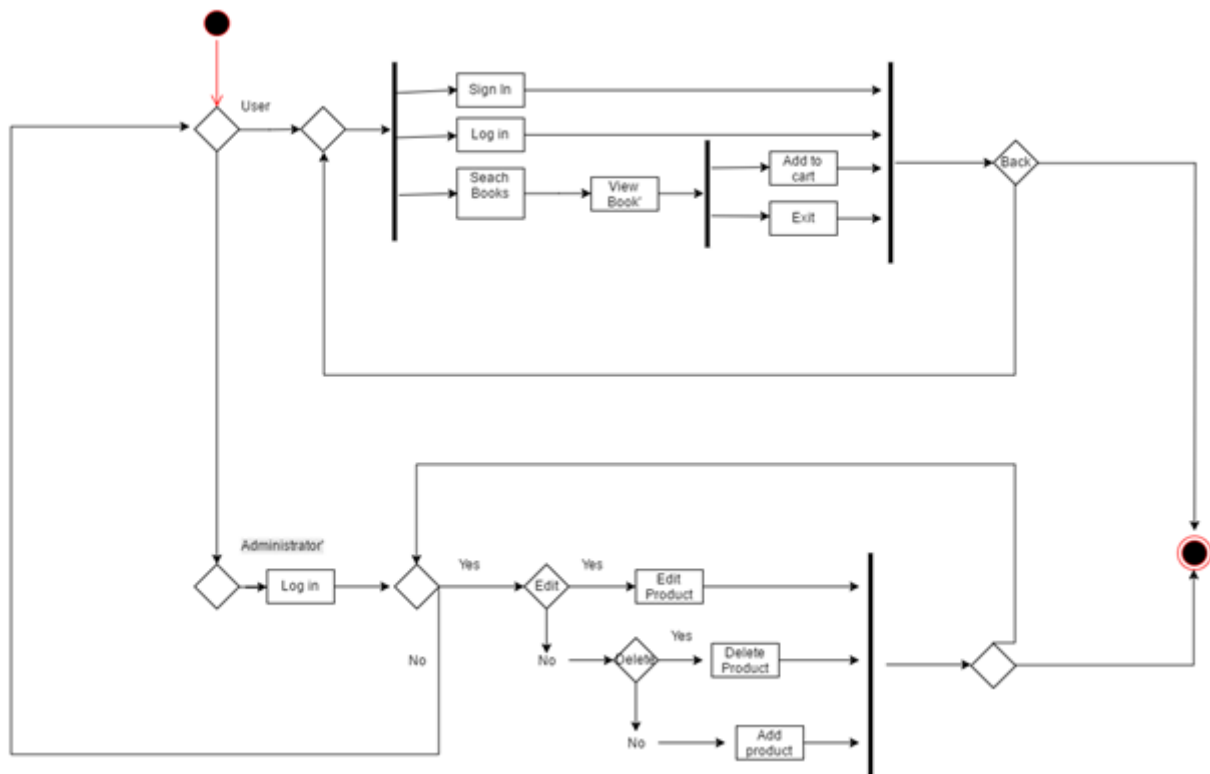


2.2 Product Functions

The online shop will provide a number of functions, each listed below.

- Maintain data associated with the inventory: a book has a title, author and a price
- User identification : the user can create an account and thus become a customer
- Customer log in : a customer has a username and a password to log in in his account
- Administrator log in : an administrator has a username and a password to log in in his account
- Search for existing books in different ways : by the author button(filter), the publisher, most recent or simply through a list of all existing books
- Create an inventory of the customer selected books for buying : the checkout routine
- Calculate the total amount of money the customer needs to pay for the books

Activity Diagram



2.3 User Classes and Characteristics

The typical product user is simply anyone that has access to the Internet and a web browser. It is assumed that the user/customer is familiar enough with a computer and to operate a browser and knows how to search for a desired book using the given buttons for filters. The customers can access all the functionalities provided by the product including logging in and buying the books.

There will be an administrator type user. The administrator log on to the system by inserting administrator name and password. Administrator can do any transaction as well as editing all details inside the database such as adding, editing, deleting a new item.

2.4 Operating Environment

The application will support Windows Operating System, starting with Windows 7. The main Web browser that is going to be used will be Google Chrome.

2.5 User Documentation

The product will be released together with the SRS (Software Requirements Specifications) document

2.6 Design and Implementation Constraints

- The browser should support java.
- The information of all the users must be stored in a database.
- There are no hardware limitations
- Product only available in English

3. External Interface Requirements

3.1 User Interfaces

3.1.1 Log in interface

Log in Interface is the interface that appears after the user selected the **Login** button. It contains two fields: one for the username and one for the password. If any of the inserted information is wrongly introduced, and error message will show up. After the user successfully logged in, he can continue browsing and shopping on the site.

3.1.2 Sign up interface

Sign up Interface is the interface that appears after the user selected the **Sign Up** button. Like the Log in interface, it contains two fields, one for the username and one for the password. Once the user introduces the desired username and password, a new user will be created in the data base and the customer can further log in.

3.1.3 The main user interface

This interface is the one that shows up after the user access the application. It contains all the buttons that will lead him to the product features and other interfaces, like log in, sign up and all the filters for the books.

3.1.4 The books interface

The books interface shows the user all the books that the product is currently having in stock. This interface will show up after the user selects the books button.

3.1.5 The authors interface

This interface lets the user type in the author that he wishes to search the books by. After he introduces the desired author, the application displays only the books written by the specified author.

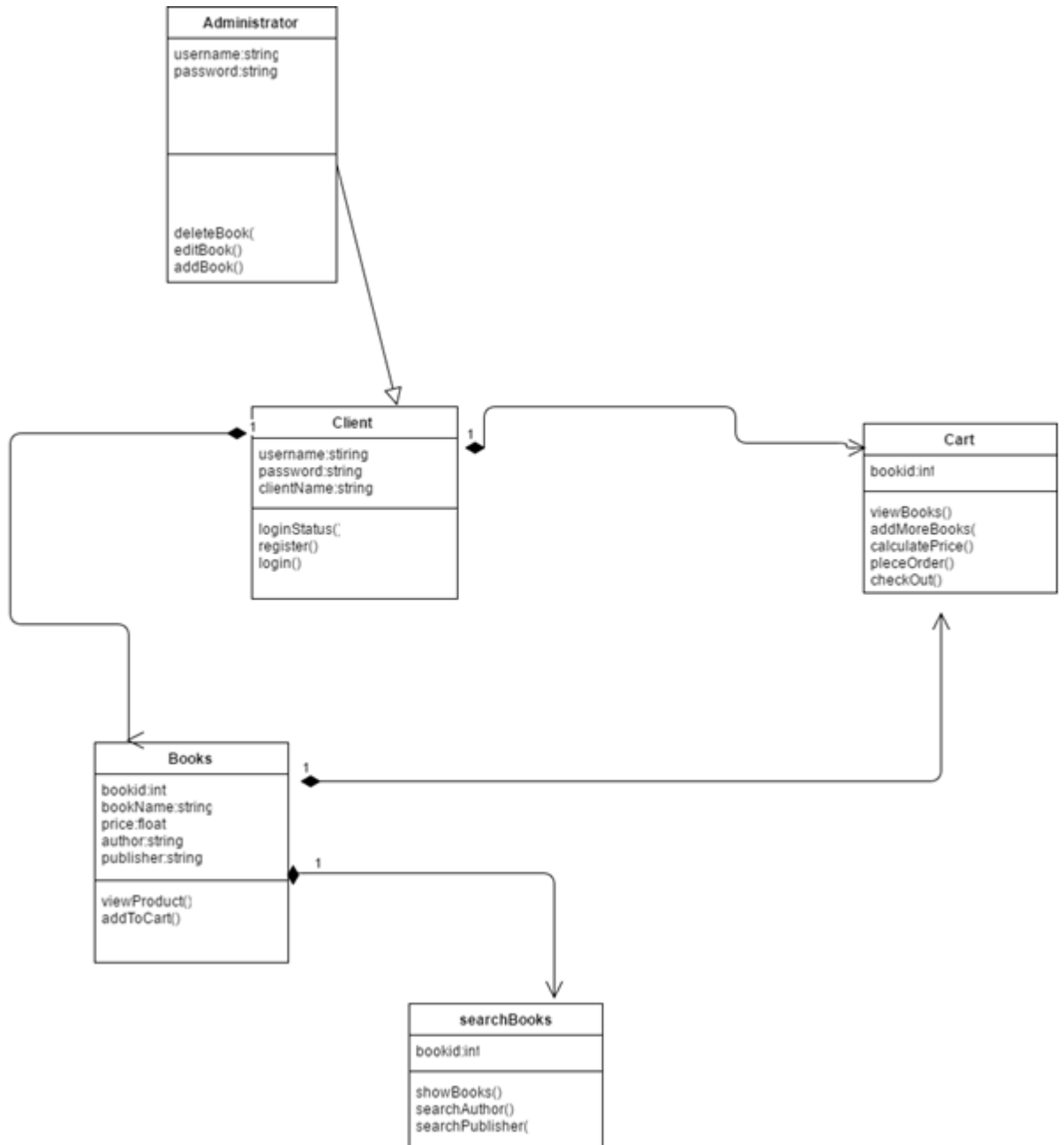
3.1.6 The publisher interface

The publisher interface lets the user type in the publisher that he desires to search for by typing the name of the publisher in a search box. Once this action is done, the product will display only the books published by that particular publisher.

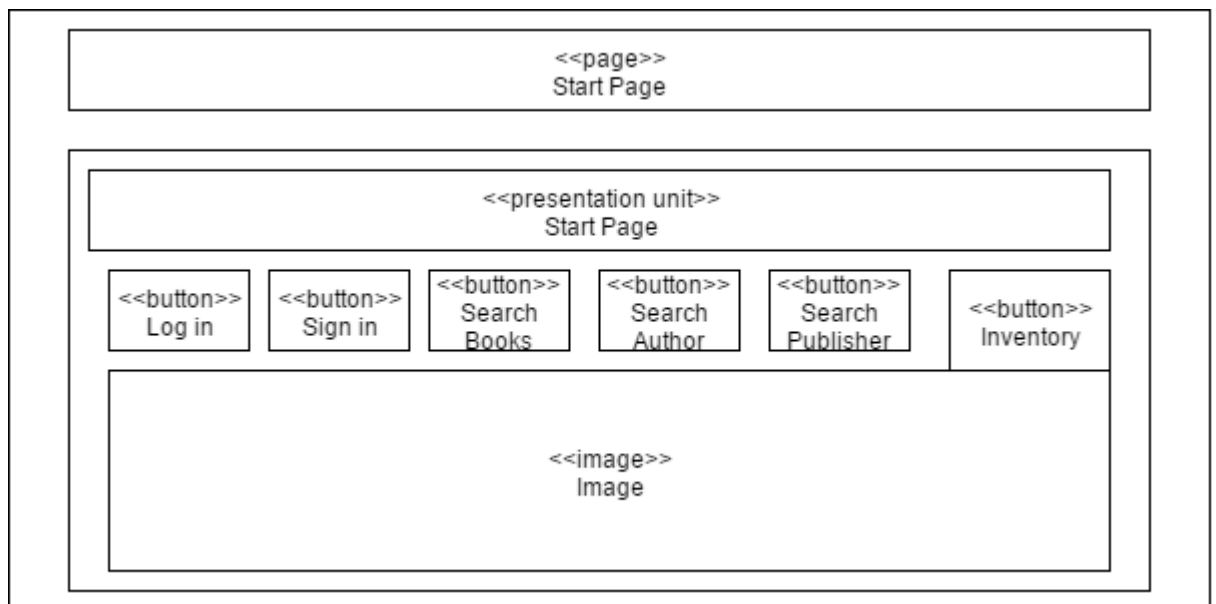
3.1.7 The inventory interface

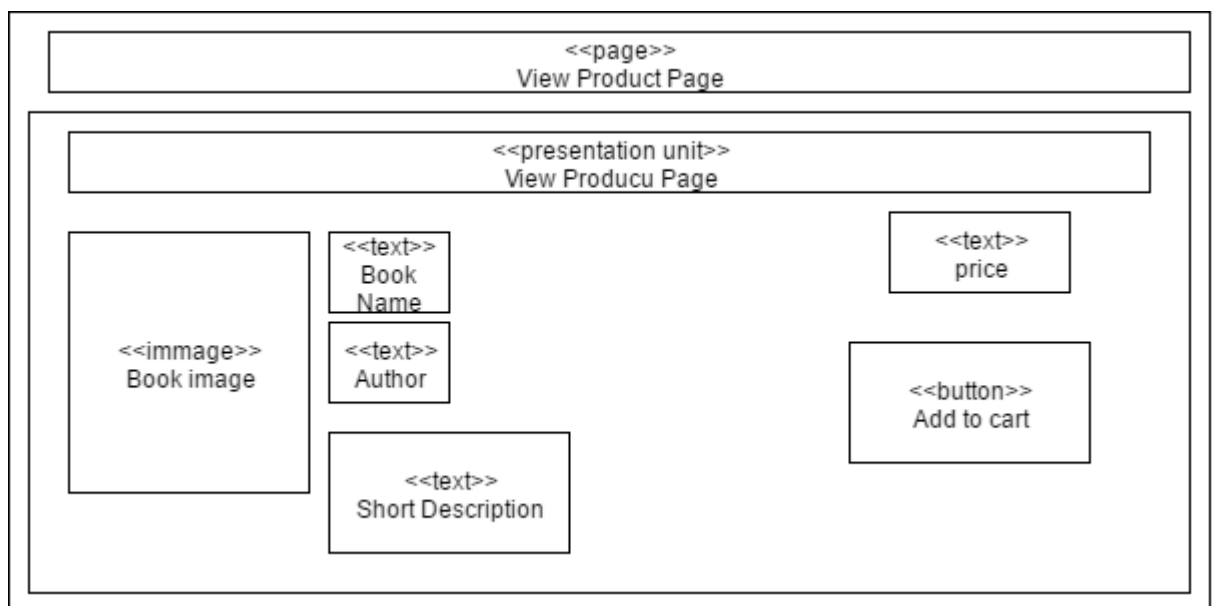
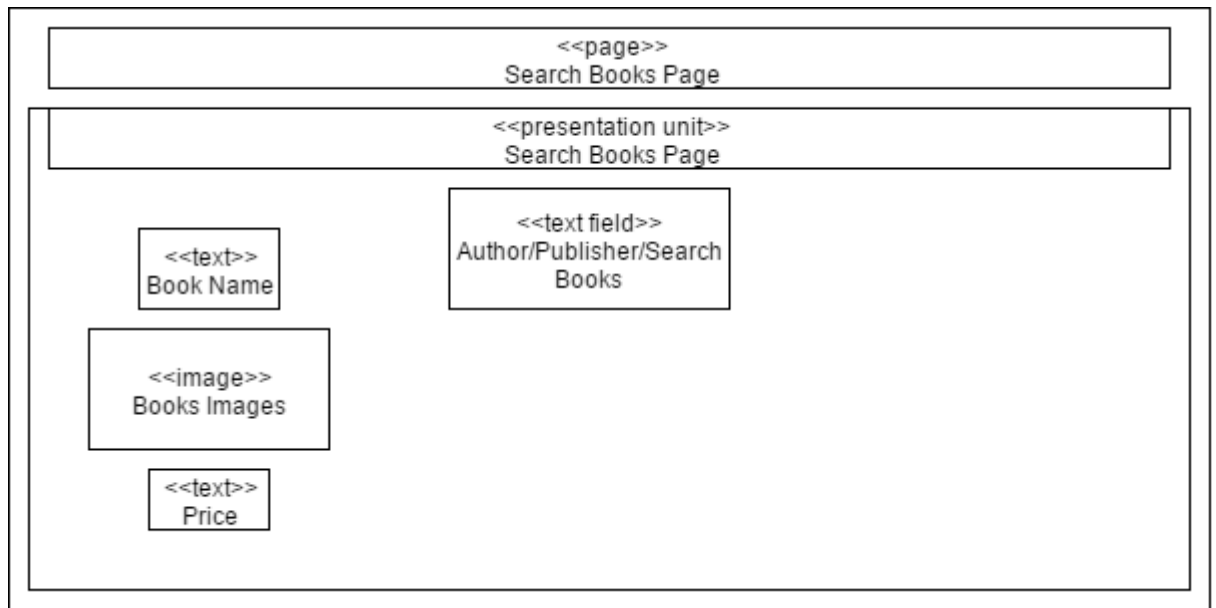
The inventory interface allows the customers to see the desired books that they selected to buy and the cost of all of them. From this interface, the customer can make the desired purchases.

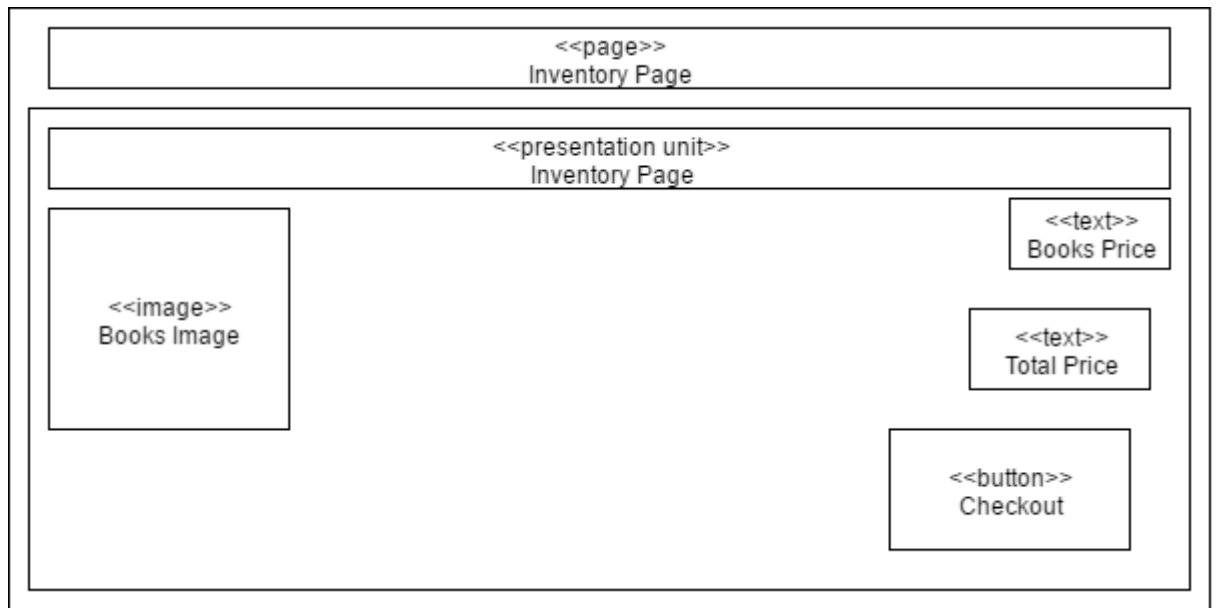
Class Diagram



Presentation Diagram







3.2 Hardware Interfaces

Not Applicable

3.3 Software Interfaces

This product development requires the support of the following products: MySQL, JDK and HTML editor, Windows Operating System, starting with Windows 7.

3.4 Communications Interfaces

The user/client will be using HTTP/HTTPS protocol.

4. System Features

4.1 Account Log in

- The system will allow a user to log in in their account
- Two fields will be shown: one for username and one for password. The information is stored in a data base.
- The system verify the username and the password
- If any of them is wrong, an error message will display, if now, the user is logged-in

4.2 Search for books

- The application has multiple ways to search for books
- One way is to search through all the books from the database
- The system will redirect the user to an interface that contains all the books that are currently in stock.

4.3 Search by Author

- Another way to search for books
- The system shall allow a field for the user to type in the author that he wishes to search for
- The system will filter the books and only the books written by that specific author will be displayed
- If the name is wrong, no books will be shown

4.4 Search by Publisher

- Another way to search for books
- The system shall allow a field for the user to type in the publisher that he is interested in
- The system will filter the books and only the books released by that publisher will be displayed
- If the publisher doesn't exist, no books will be shown

4.5 The inventory

- The system will allow the customer to add the desired book to the cart
- The customer can see all the books he selected in an inventory
- The system will allow to delete books from inventory
- The system will allow the customer to introduce personal information like name, surname, credit card number and place the order for the books

4.6 View Product

- The system will allow the user to see details about the products

5. Other Nonfunctional Requirements

5.1 Performance Requirements

- Decent working PC

- The online shop should not be overloaded
- The time needed for searching a book should not be more than 5 seconds
- The time needed to show the information fields should not be more than 5 seconds

5.2 Safety Requirements

Not Applicable

5.3 Security Requirements

All users should be properly authenticated before allowed to make a purchase. The information introduced when making a purchase should be valid.

5.4 Business Rules

Not Applicable

