MILITARY TECHNICAL ACADEMY

FACULTY OF INFORMATION TECHNOLOGY

HOTEL MANAGEMENT

SOFTWARE REQUIREMENTS SPECIFICATION

Ha Noi, 12/2018

CATALOG

1. Introduce

1.1. Purpose of the document

This document was developed for the purpose of analyzing, specifying the requirements for the bookstore management software development project. This document describes software requirements for the entire system or for each of the subsystems used as input to the design process, the programming usecase construction, the system test of the system build.

1.2. Document scope

Documentation is the result of a survey of the requirements, learning the documents related to the necessary functions of the bookstore management system.

1.3. Definitions.

Configuration	Definition	Explaining
BSM	Bookstore Management	Name of project.
DB	Database	Where to store information and allow access.

1.4. References

The references are:

- Document about action of bookstore.

- Projects related to management in the Internet.

1.5. Document description

The structure of the specification document includes the following sections:

- **Part 1 - Introduce**: General introduction of the document, help the reader visualize the content, purpose and general layout of the document.
- **Part 2 - Overview of software**: Identify common requirements, objectives, user objects, and build the overall model of the software
- **Part 3 - Usecase process analysis**: Presentation and analysis of usecase processes of the bookstore management system module.
- **Part 4 - Functional requirements of the software:** Demonstrates the functional requirements that the software should provide.
- **Part 5 - Other requirements**: Presentation of non-functional requirements: ease of use, stability, performance, security, backup and restore capabilities, supportability, and more.
- **Part 6 - Software acceptance standards**: Present the acceptance criteria for the software if it satisfies the requirements

2. Overview of software

2.1. General requirement of software

General requirements of bookstore management software:

- Administer the user by admin: admin will assign the user group by "import", "sales". User can change password to access the system.

- Process the updating of goods information, employee information, customer information.

- Handling of goods import and receipt.

- Handle sales process and bill sales.

2.2. Purpose of software

The bookstore management process is more convenient, faster and more accurate.

2.3. User

There are two user group :

- Management group: control all of the whole system.
- Major group :
  - Import staff.
  - Salesman.

2.4. The overall model of the software

Bookstore Management Software

3. Analysis business process

Describe in detail each specific profession, allowing members to build on the best quality software. With the UseCase (UC) model, software requirements are described by UCs and in additional specifications.

Use case diagram
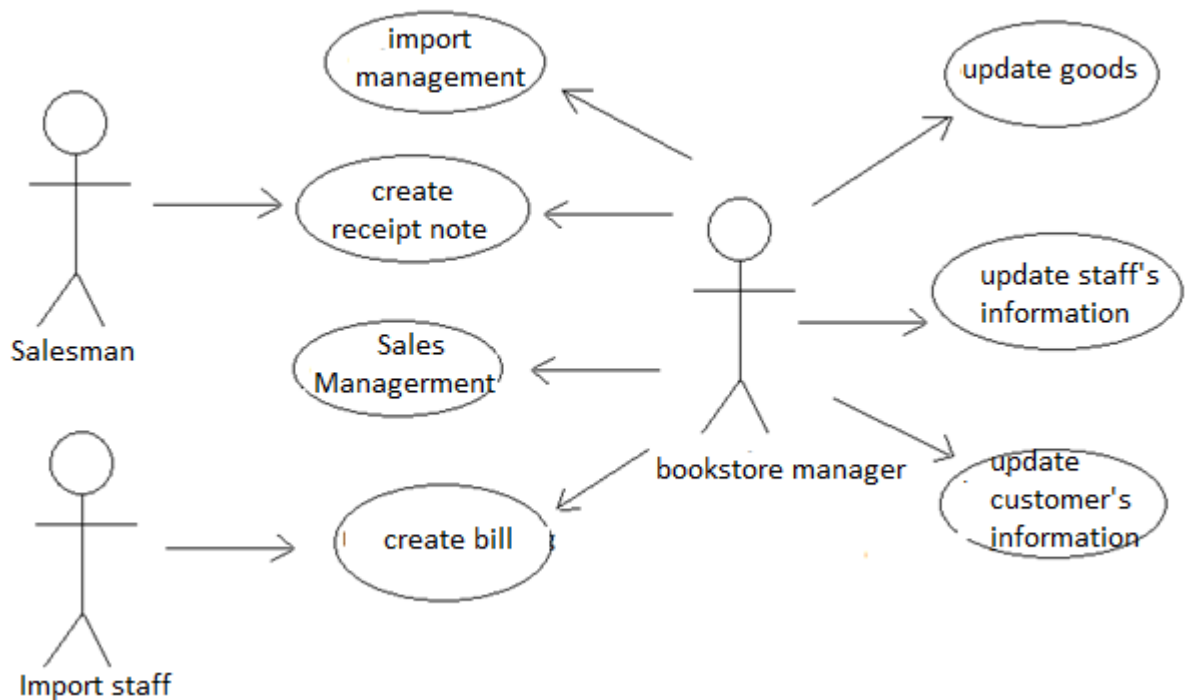
3.1. Use case "Update goods"

3.1.1. Event triggered

When entering the goods or changing the information of goods, information of the goods must be updated.

3.1.2. Business process model

```
        ┌──────────┐
        │  start   │
        └──────────┘
             │
             ▼
     ┌────────────────┐
     │  import goods   │
     └────────────────┘
             │
             ▼
     ┌────────────────┐
     │ get information│
     │    of goods    │
     └────────────────┘
             │
             ▼
     ┌────────────────┐
     │ save into list │
     │   of goods     │
     └────────────────┘
             │
             ▼
        ┌──────────┐
        │   end    │
        └──────────┘
```

3.1.3. Describe the steps

- Step 1 : Get information of goods
  - Input: Import note
  - Out put: Good's information entered
- Step 2 : Update to inventory file
  - Input : Information of goods need to store
  - Đầu ra: File stores information of goods

3.2. Use case "Update information of staff"

3.2.1. Event triggered

Any employee changes (addition, modification, deletion) will update the employee's information.

3.2.2. Business process model
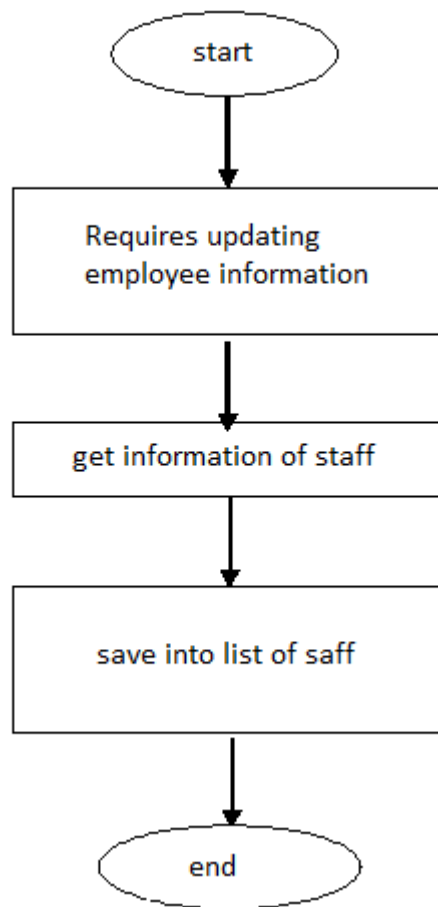
3.2.3. Describe the steps

- Step 1 : Get information of staff
  - Input: Requires updating employee information.
  - Output: information of staff
- Step 2 : Update to employee's information file
  - Input : information of staff
  - Output: The file stores employee information.

3.3. Use case "Update information of customer"

3.3.1. Event triggered

Whenever there is a change in the employee's information (addition, correction, abandonment), the employee management department will have to update the customer information file.

3.3.2. Business process model

```
           ┌─────────┐
          (   start   )
           └─────────┘
                │
                ▼
    ┌───────────────────────┐
    │   Request to enter     │
    │  customer information  │
    └───────────────────────┘
                │
                ▼
    ┌───────────────────────┐
    │ get customer information│
    └───────────────────────┘
                │
                ▼
    ┌───────────────────────┐
    │    save into customer  │
    │    information file    │
    └───────────────────────┘
                │
                ▼
           ┌─────────┐
          (    end    )
           └─────────┘
```
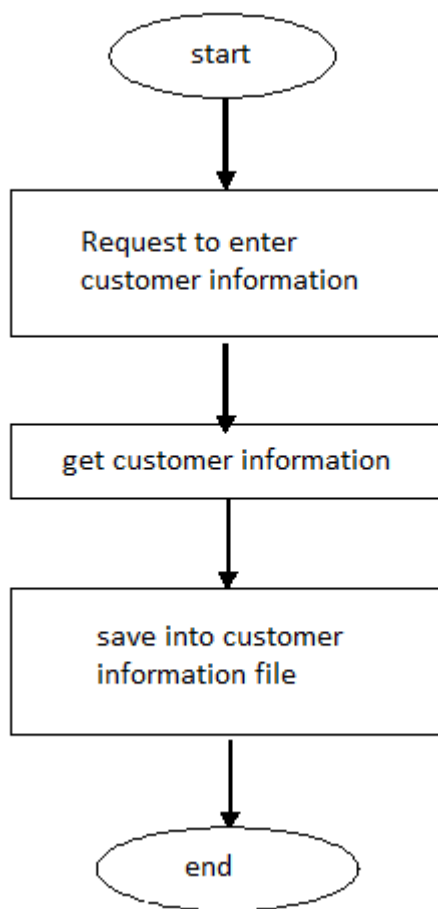
3.3.3 Describe the steps

- Step 1 : Get information of customer
  - Input: request to update customer information.
  - Output: information of customer

- Step 2 : Update to the file store customer information
  - Input : information of customer
  - Output: The file stores customer information.

3.4. Use case "Goods import management"

3.4.1. Event triggered

When there is a change in the goods import information (add, edit, remove), bookstore management will have to update the import file.

3.4.2. Business process model
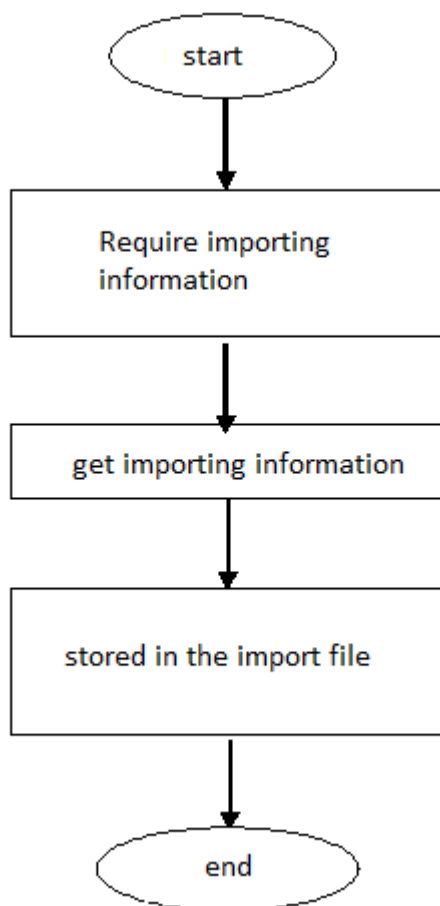
3.4.3. Describe the steps

- Step 1 : Get importing information
  - Input: Request to update importing information.
  - Output: importing information
- Step 2 : Update to the import information file
  - Input : importing information.
  - Output: The file stores the importing information

3.5. Use case "Sales Manager"

3.5.1. Event triggered

When there is a change of sales information (supplement, edit, remove), bookstore management will have to update the sales information file.

3.5.2. Business process model

3.5.3. Describe the steps

- Step 1 : Get sales information.
  - Input: Request updated sales information
  - Output: sales information.
- Step 2 : Update to sales information file
  - Input : sales information
  - Output: salses information file

3.6. Use case "Create receipt note"

3.6.1. Event triggered

When the goods are imported, the import staff create a receipt note.

3.6.2. Business process model

```
        ┌─────────┐
        │  start  │
        └─────────┘
             │
             ▼
   ┌──────────────────────┐
   │                      │
   │  import requirements │
   │                      │
   └──────────────────────┘
             │
             ▼
   ┌──────────────────────┐
   │ get importing information │
   └──────────────────────┘
             │
             ▼
   ┌──────────────────────┐
   │                      │
   │  create receipt note │
   │                      │
   └──────────────────────┘
             │
             ▼
        ┌─────────┐
        │   end   │
        └─────────┘
```
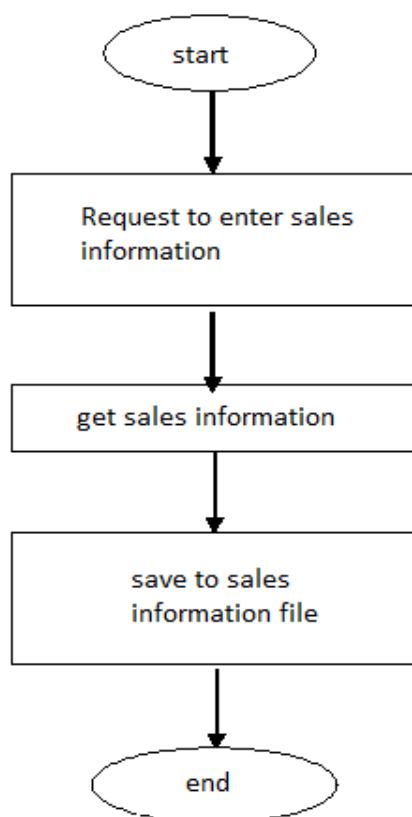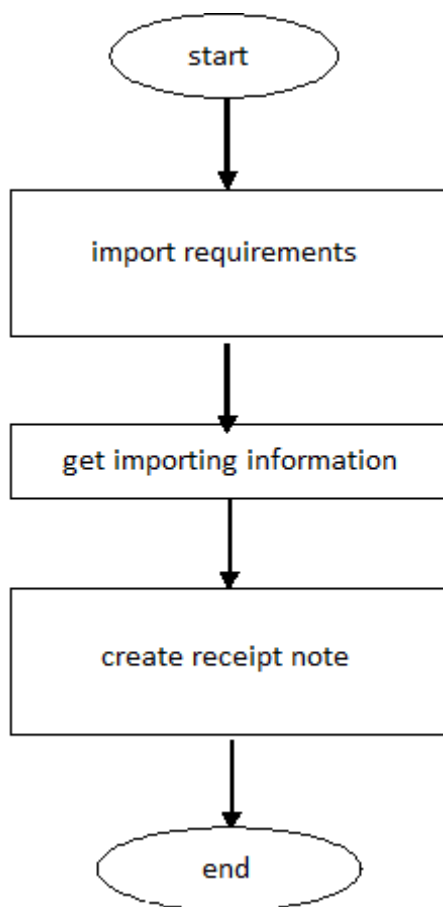
3.6.3. Describe the steps

- Step 1 : get importing information
    - Input: request update importing information.
    - Output: goods import information.
- Step 2 : Create receipt note
    - Input: goods import information.
    - Output: receipt note.

3.7. Use case "Create bill"

3.7.1. Event triggered

When have ordering, the salesman create bill.

3.7.2. Business process model
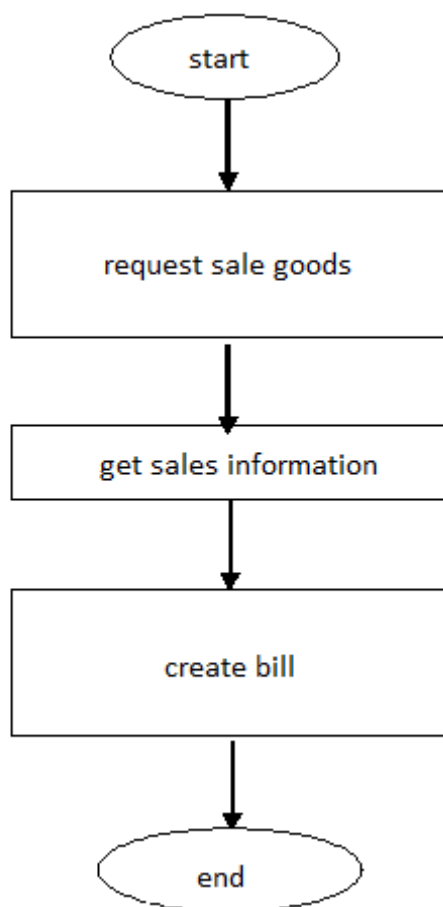
3.7.3. Describe the steps

- Step 1 : Get information on the goods sold and customer information

  - Input: request sale goods.

  - Output: information on the goods sold and customer information.

- Step 2 : Create bill

  - Input : information on the goods sold and customer information.

  - Output: bill.

4. Specific requirements for functional software

To perform the above mentioned operations, the software must have the following functions:

4.1 Specifies "the login" function

Use case: {UC_01_ User login system}	
Purpose	The user logs in to perform their tasks.
Describe	Allows the user to log in to use the supported functions for this user object.
Actor	User
Pre-conditions	Access to bookstore management software.
Basic flows	- Enter account name - Enter your account password
Alternative Flows	- Login failed because of wrong account name - Login failed because password does not match account
The following conditions	Log in successfully and start using other system functions.

4.2. Specifies "View information of goods"

Use case: {UC_02_View information of goods}	
Purpose	View information stored
Describe	Show detail information of goods
Actor	Bookstore management
Pre-conditions	- Successfully logged in with bookstore management access - Click on the goods to see
Basic flows	Show all merchandise in the bookstore

Alternative Flows	View detail of a goods
The following conditions	Know the goods in the bookstore

4.3. Specifies "Add goods" function.

Use case: {UC_04_Add goods}	
Purpose	Add merchandise sold in bookstores
Describe	Add goods not in the bookstore or add information to the goods
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Merchandise, commodity code is required - Add cargo information - Activate more button on commodity form
Basic flows	Add a goods
Alternative Flows	Commodity information is missing
The following conditions	Goods have been added

4.4. Specifies "Edit information of goods" function

Use case: {UC_03_ Edit information of goods }	
Purpose	Update information of goods
Describe	Change the previously entered information of the goods
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click on the item and select the item you want to repair - Goods need to change the information being displayed

	- Activate the Edit button on the commodity form
Basic flows	Change all the information of a commodity except the commodity code
Alternative Flows	After correcting some incomplete information: name of goods, quantity, price, ..
The following conditions	Commodity information is stored in the database with the information has been changed correctly

4.5. Specifies "Delete goods" function

Use case: {UC_04_Delete goods}	
Purpose	Remove the merchandise sold in the bookstore
Describe	Delete the previously entered information of the goods
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click the item and select the goods to delete - The goods to be deleted are being displayed - Activate the Delete button on the commodity form
Basic flows	Delete all information of a staff
Alternative Flows	After deleting merchandise is no longer stored.
The following conditions	Goods cleared

4.6. Specifies "View staff information" function

Use case: {UC_02_View staff information}	
Purpose	View employee information stored
Describe	Display detail of staff information

Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click to select employee
Basic flows	View all staffs
Alternative Flows	View detail of staff
The following conditions	Know the staff working for the bookstore

4.7. Specifies "Add staff" function

Use case: {UC_04_Add staff}	
Purpose	Add staff
Describe	Add staff or add information to employees
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Enter employee, must have employee code - Add employee information - Activate additional button on employee management form
Basic flows	Add a staff
Alternative Flows	Staff information is missing
The following conditions	Staff has been added

4.8.Specifies "Edit staff information" function

Use case: {UC_03_ Edit staff information }	
Purpose	Edit staff information

Describe	Change the employee's previously entered information
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click on employee management and select employee to edit - Employees need to change the information being displayed - Activate the Edit button on the employee management form
Basic flows	Change all information of an employee except commodity code
Alternative Flows	After some correction, the input is not complete.
The following conditions	Staff information is stored in the database with the information has been changed correctly

4.9.Specifes "Delete staff information" function

Use case: {UC_04_ Delete staff information }	
Purpose	Delete staff information
Describe	Deletes the employee's previously entered information
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click on employee management and select employee to delete - Display employee needs to be removed - Activate the Delete button on the employee management form
Basic flows	Delete staff information
Alternative Flows	After the deletion of employees no longer be stored.
The following conditions	Employee has been deleted the whole row

4.10.Specifies "View customer information" function

Use case: {UC_02_View customer information}	
Purpose	View stored customer information
Describe	Display detail customer information
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click to select customers to view detail
Basic flows	Display all customers
Alternative Flows	View detail information of customer
The following conditions	Know customer information

4.11.Specifies "Add customer" function

Use case: {UC_04_ Add customer }	
Purpose	Add a customer
Describe	Add customers or add information to customers
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Enter customer, customer code is required - Add customer information - Activate additional button on customer form
Basic flows	Add a customer
Alternative Flows	Customer information is missing
The following conditions	Customer has been added

4.12.Specifies " Edit customer information" function

Use case: {UC_03_Edit customer information }	
Purpose	Edit customer information
Describe	Change the previously entered information of the customer
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click on customer management and select customer to edit - Customers need to change the information being displayed - Activate the Edit button on the customer management form
Basic flows	Change all of a customer's information except the code
Alternative Flows	After some correction, the input is not complete.
The following conditions	Customer information is stored in the database with the information has been changed correctly

4.13.Specifies "Delete cuatomer information" function

Use case: {UC_04_Delete customer information }	
Purpose	Delete customer information
Describe	Deletes the previously entered information of the customer
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click on customer management and select customer to delete - Customer need to delete is being displayed - Activate the Delete button on the customer management form
Basic flows	Delete all information a customer
Alternative Flows	After deleting the customer is no longer stored.

The following conditions	Customer has been deleted.

4.14Specifies "View import information" function

Use case: {UC_02_View import information }	
Purpose	View import information
Describe	Show details of imports
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click to enter
Basic flows	Shows all imports
Alternative Flow	View detail of a receipt note
The following conditions	Know importing

4.15.Specifies " View detail of receipt note" function

Use case: {UC_02_View detail of receipt note }	
Purpose	View the information of a receipt note
Describe	Displays the goods entered in the import
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - - Click on the receipt note to view
Basic flows	Display all the goods in the receipt note
Alternative Flows	

The following conditions	Know detail of a receipt note

4.16.Specifies "Add receipt note" function

Use case: {UC_04_Add receipt note}	
Purpose	Add a receipt note
Describe	Add information of receipt note
Actor	The bookstore manager và import staff
Pre-conditions	- Successfully logged in with bookstore management and import staff access - Add a receipt note, code is required - Activate more buttons on the form
Basic flows	Add a receipt note
Alternative Flows	A receipt note is missing information
The following conditions	A receipt note has been added

4.17.Specifies "View sales information" function

Use case: {UC_02_View sales information }	
Purpose	View sales information
Describe	Show detailed sales information
Actor	The bookstore manager

Pre-conditions	- Successfully logged in with bookstore management access - Click to view a bill
Basic flows	Show all bookstore sales
Alternative Flows	View detail of bill
The following conditions	Know the sales information

4.18. Specifies "View detail of bill" function

Use case: {UC_02_View detail of bill }	
Purpose	View deatail of bill information
Describe	Displays the goods entered in the sale
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - -Click on the invoice to view
Basic flows	Display all the goods and customer information in the invoice.
Alternative Flows	
The following conditions	Get a detail of the bill

4.19. Specifies "Add bill" function

Use case: {UC_04_Add bill}	
Purpose	Add bill
Describe	Bill information
Actor	The bookstore manager và salesman
Pre-conditions	- Successful login with bookstore manager access and sales staff - Adding bill, must have a bill code - Activate the add button on the sales form
Basic flows	Add a bill
Alternative Flows	Bill is missing information
The following conditions	Bill have been added

4.20. Specifies "Search for goods" function

Use case: {UC_26_ Search for goods }	
Purpose	Move fast to goods to perform other operations
Describe	Look for department stores so you can quickly go to the department to view or change information
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click to enter the goods information on the goods management function

Basic flows	Find goods with the information just entered
Alternative Flows	No goods found with the information just inserted
The following conditions	Find and display full information on the goods on the goods management form

4.21. Specifies "Search for staff" function

Use case: {UC_26_ Search for staff }	
Purpose	Quickly move to the staff to perform other operations
Describe	Search for employees so you can quickly jump to that employee to view or change information
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click on the employee information entry on the employee management function
Basic flows	Find employees who have entered information
Alternative Flows	No staff member has found the information
The following conditions	Find and display employee information on the employee management form

4.22. Specifies "Search for customer" function

Use case: {UC_26_ Search for customer }	
Purpose	Quickly move to the customer to perform other operations
Describe	Search for customers to quickly get to that customer to view or change informatio

Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore management access - Click on the customer information entry on the customer management function
Basic flows	Find customers who have entered information
Alternative Flows	No customer found the information just inserted
The following conditions	Find and display customer information on the customer management form

4.23. Specifies "Print receipt note" function

Use case: {UC_32_ Print receipt note }	
Purpose	Printed full information of the receipt note
Describe	Printed full information of the receipt note
Actor	The bookstore manager h và import staff
Pre-conditions	- Successfully logged in with bookstore management and import staff access. - Click on import management and select the menu item to print - Receipt note information to print is being displayed - Click the Print button on the form
Basic flows	Export all information of the application form to print.
Alternative Flows	
The following conditions	Receipt note information is displayed according to the specified print format so that it can be printed immediately.

4.24. Specifies "Print bill" function

Use case: {UC_32_ Print bill }	
Purpose	Print the full information of the bill
Describe	Print out the full information of the paper bill.
Actor	The bookstore manager và salesman
Pre-conditions	- Successful login with bookstore manager access and sales staff - Click on the sales management and select the invoice to print - The billing information to be printed is displayed - Click the Print button on the form
Basic flows	Export all information of the bill to the form prescribed for printing.
Alternative Flows	
The following conditions	The bill information is displayed according to the specified printed form so that it can be printed immediately.

4.25. Specifies "Create user account" function

Use case: {UC_64_ Create user account }	
Purpose	Enter user account
Describe	Enter user account information
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore administrator access - Click on User Account on System Admin - Click the Add button on this form
Basic flows	Enter user name, password for user account
Alternative	

Flows	
The following conditions	User account information is stored in the database

4.26. Specifies "Delete user information" function

Use case: {UC_66_ Delete user account information }	
Purpose	Delete user account
Describe	Delete user account information
Actor	The bookstore manager
Pre-conditions	- Successfully logged in with bookstore manager access - Click on User Account - Select the user account to delete in the list - Click the Delete button on this form
Basic flows	Remove the user account in the list
Alternative Flows	
The following conditions	User account deleted from database

5. Other requirements

5.1. Ease of Use Requirements

Request code	Describe
YC 5.1.1	Interface language easy to understand
YC 5.1.2	Symbols should have a consistent meaning
YC 5.1.2	Support for using fast shortcuts
YC 5.1.2	Building the notification system
YC 5.1.3	The functions are consistent with the user's habits
YC 5.1.4	Icons, interface close to the working environment
YC 5.1.5	Manipulation directly on icons to represent a function
YC 5.1.6	Functions need to enter data, must create a form for the user to enter data

5.2. Stability requirements

Request code	Describe
YC 5.2.1	Operates 24/24

5.3. Security requirements

Request code	Describe
YC 5.3.1	The user is granted a unique account and password
YC 5.3.2	Authorize the user to each function

Request code	Describe
YC 5.3.3	The user only has the right to change the login password, can not change the account name.

5.4. Backup and restore requirements

Request code	Describe
YC 5.4.1	Ask before performing a function such as delete, save.
YC 5.4.2	Temporary deletions can be resumed by using checkpointing.

5.5. Support eligibility requirements

Request code	Describe
YC 5.5.1	Have help categories to guide the user
YC 5.5.2	The information must be short, easy to understand
YC 5.5.2	Support for installation and operation

5.6. Technology requirements

Request code	Describe
YC 5.6.1	Applying new and modern technologies.
YC 5.6.2	Buy software support to ensure the software runs securely in all environments.

Request code	Describe
YC 5.6.3	Minimum configuration: The software must be installed on the windows operating system, from the windows xp version upwards.

5.7. Communication requirements

Request code	Describe
YC 5.7.1	Use natural language.
YC 5.7.2	Use sequence diagrams to represent the operations of the system.

5.8. Requires user documentation and online support

Request code	Describe
YC 5.8.1	Maintain software to ensure that the software does not give the wrong results, perform the correct functions.

5.9. Legal requirements

Request code	Describe
YC 5.9.1	Do not violate copyright laws when developing software.
YC 5.9.2	Ensures software privacy and security

5.10. Requirements for applicable standards

Request code	Describe
YC 5.10.1	Meets IEEE standards for software documentation