



TRƯỜNG ĐẠI HỌC FPT



Bookstore Management System

Project Members



Nguyễn Thị Hải Năng
Supervisor

Lê Mạnh Hùng
Team Leader

Lê Khả Chính
Team member

Tạ Kiến Quốc
Team member

Nguyễn Trung Kiên
Team member

Lê Minh Tùng
Team member

Outline

1. Project Overview
2. Project Management Plan
3. Software Requirement Specification
4. Software Design
5. Software Testing
6. Demo - Q&A

1.

Project Overview

Product Background



- The challenges faced by Ngoại Ngữ bookstore.
- Current sales methods: In-store transactions and Zalo.
- Inefficiencies in Zalo usage leading to time wastage, difficult to track order status information



Existing Systems

Ngoại Ngữ Bookstore (261 Tran Quoc Hoan) management system

Pros:

- Save Time: The system optimises the payment process, saving valuable time and increasing overall productivity.
- The ability to create and manage orders ensures uninterrupted operation, even without an internet connection.

Cons:

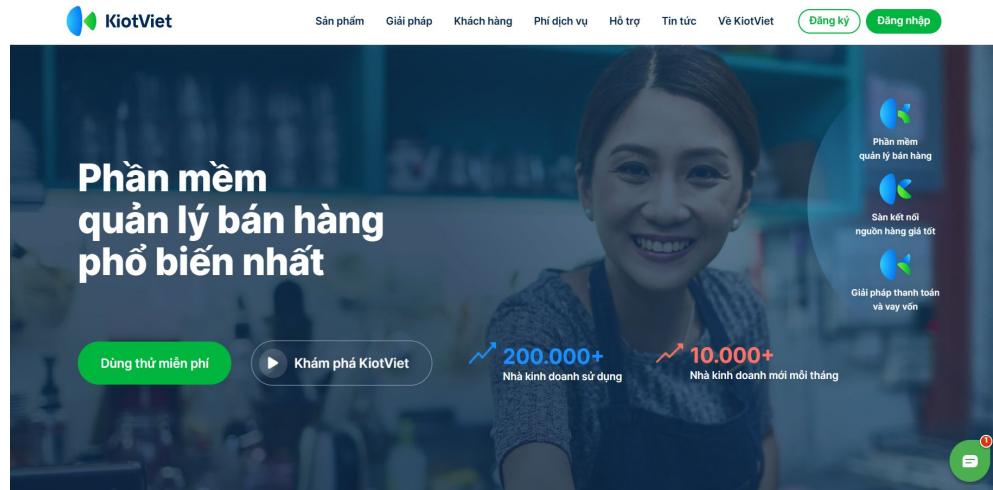
- Only provide a single screen for both online and in-store sales.
- Unable to promote the brand to many customers

03/06/2023	Người dùng Hàng	360,400					
14h56	Chứng từ HBL/12/23/06-00075						
Mã hàng							
Khuyến mãi	Thành tiền	Không đồng					
T	Mã hàng	Tên hàng	ĐVT	Số	Đơn giá	Khuyến mãi	Thành tiền
1	i	IELTS 1 đến 17		2	45.000	0	90.000
2	8935246937129	Destination B1 Grammar & Vocabulary with answer key		1	169.000	20	135.200
3	8935246937136	Destination B2 Grammar & Vocabulary with answer key		1	169.000	20	135.200

Existing Systems

KiotViet

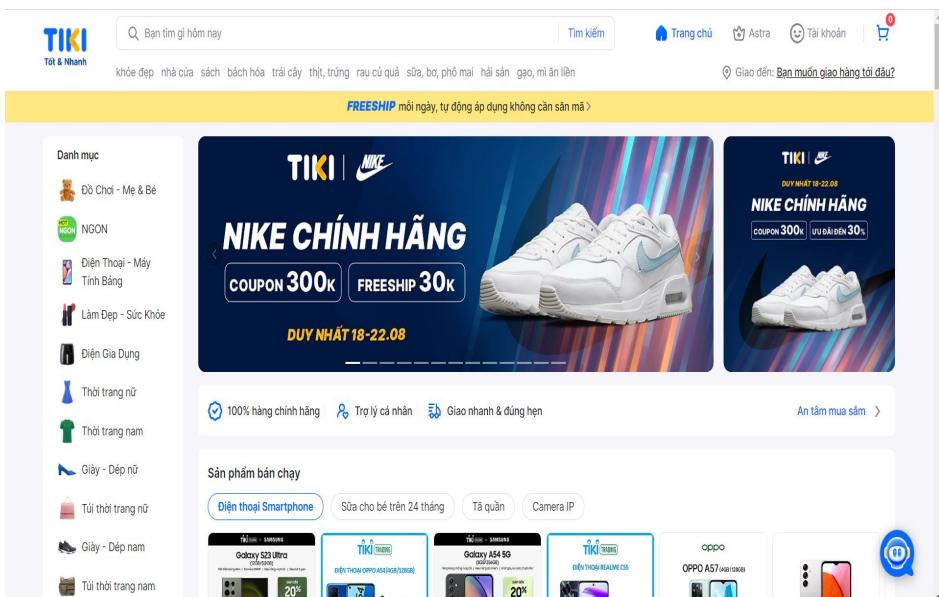
- Support for most industries, such as fashion, grocery, supermarket, cosmetics, electronics
- The design is sleek, uncomplicated, and handles tasks on your behalf.
- The user experience is excellent, making it accessible and easily modifiable for anyone.



Existing Systems

Tiki

- Full interface, eye-catching
- Newbie-friendly, optimised methods management
- Wide range of products and payment methods
- Full seller management support
- Hotline and chat with a counsellor



Business Opportunity

Bookstore Management System:

- **Online Transactions:** The new system not only expedites invoice creation for online customers but also facilitates management of products, orders, and revenue statistics for the store.
- **Time and Convenience:** Online customers save time through simplified invoicing, while the store benefits from convenient product and order management.
- **Website Branding and Trust:** A website establishes a unique brand identity and fosters customer trust.

Project Scope

In-Scope

- Dashboard: Revenue for the day, month, year.
- Creating a customer website where they can view products and place orders.
- Product Management
- Order Management
- Purchase Order Management
- Customer Management

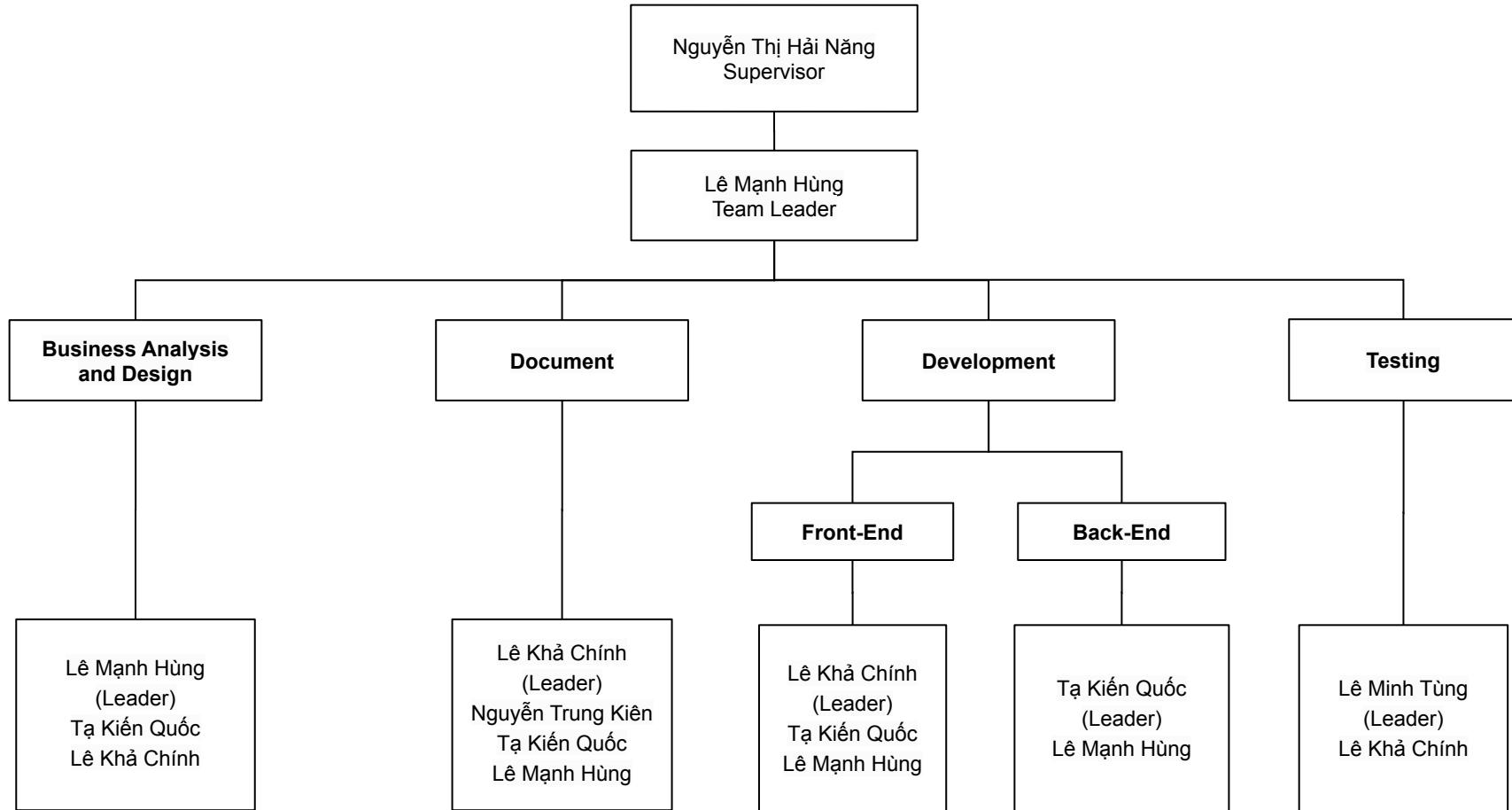
Out-Scope

- Check-out with e-wallet for customer
- Create sales invoice by scanning barcode
- Activity log function for owner
- Update quantity in inventory with product that have difference unit(Example product: Pen available in units and boxes.)
- Staff Management, Expense and Income Management, Inventory Checking Management, Return Product Management

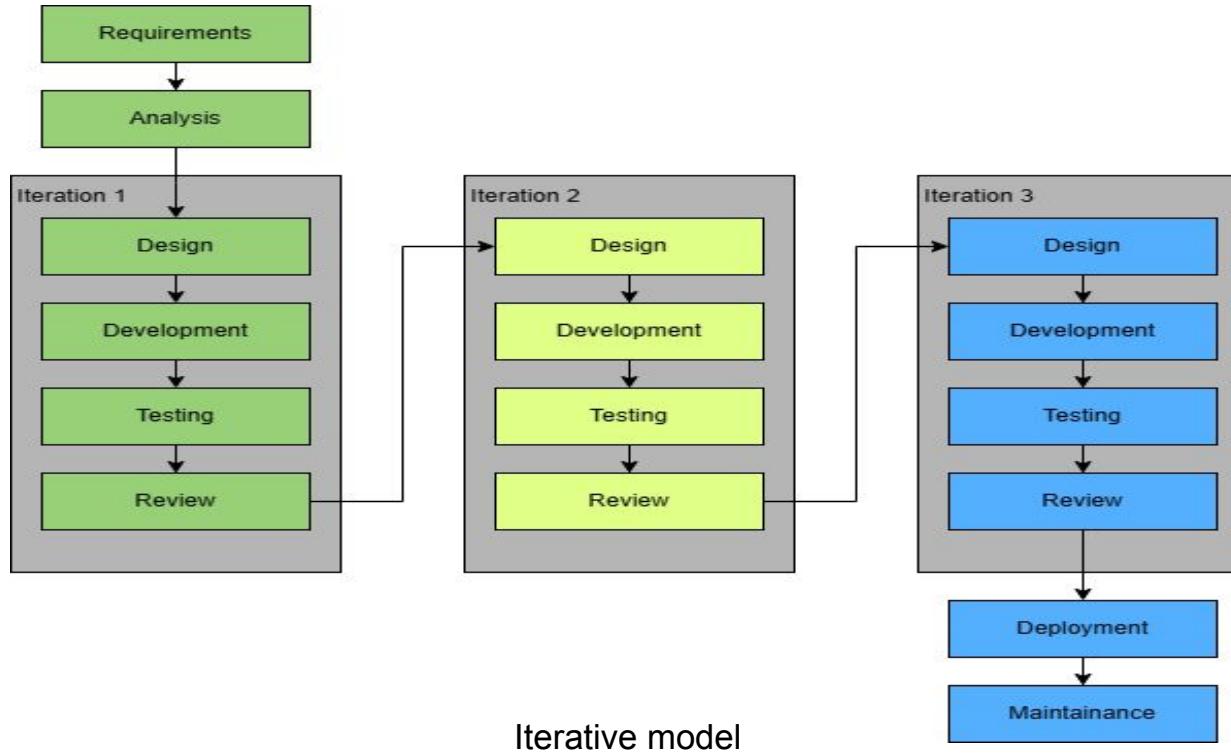
2.

Project Management Plan

Project team members



Software process model



Team work & Communications

- Supervisor meeting: Once a week
- Team meeting: 5 days a week
- Contact form: Offline, Online



Technologies



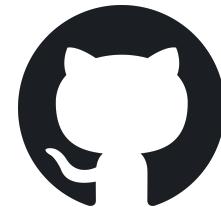
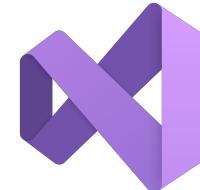
ASP.NET



Microsoft®
SQL Server
Manager



Project tools



Risk Management Plan

No.	Risk Description	Impact	Possibility	Response Plans
1	Incorrect estimates break the project plan	High	High	<ul style="list-style-type: none">• Create a schedule carefully• Start early• Add backup time (or backup schedule)• Focus on close targets
2	Source Code Conflicted	Medium	Medium	<ul style="list-style-type: none">• Test carefully before push.• Back-up code regularly
3	Team members do not clearly understand the requirements	High	Medium	<ul style="list-style-type: none">• BA hold meetings to clarify their requirements
4	Internet connection issue in Capstone project defence	High	Medium	<ul style="list-style-type: none">• Prepare personal wireless internet connection• Record demo video before the Capstone project defence
5	Server failure	High	Medium	<ul style="list-style-type: none">• Use paid and certified servers• Use a different server

3.

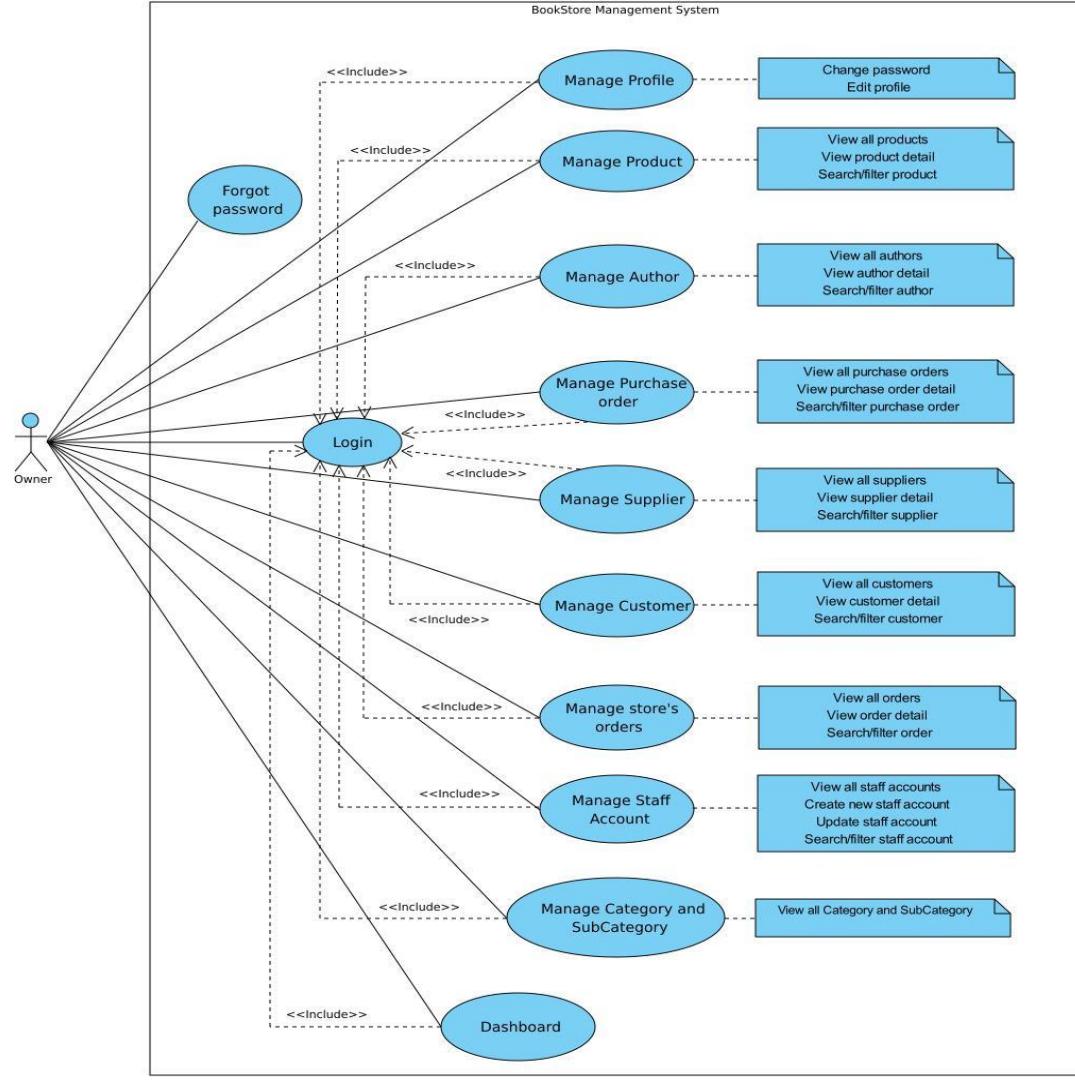
Software Requirement Specification

Actor

- **Owner**
- **Staff**
- **Customer**
- **Guest**

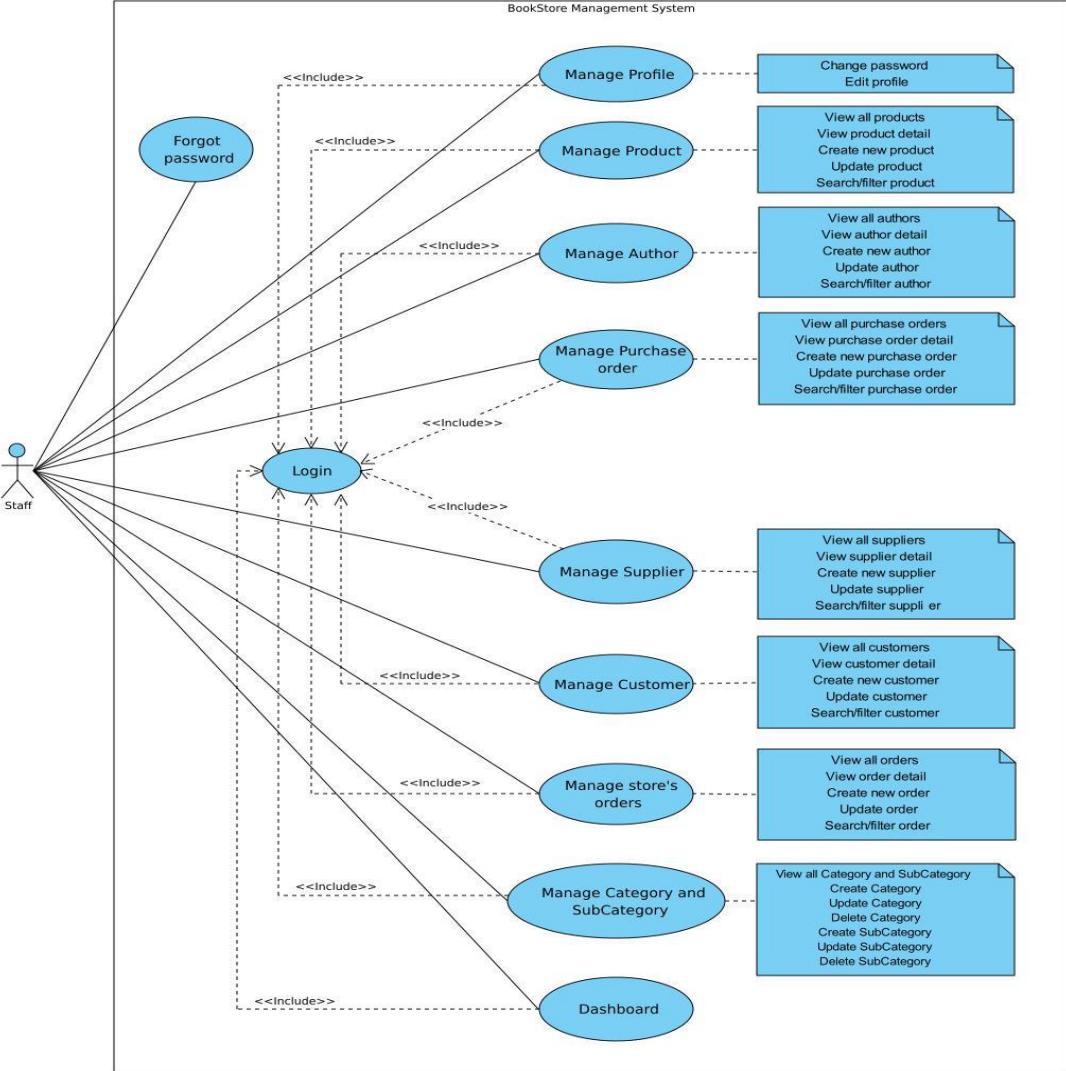
Use Case

Owner Details Use Case Diagram



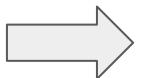
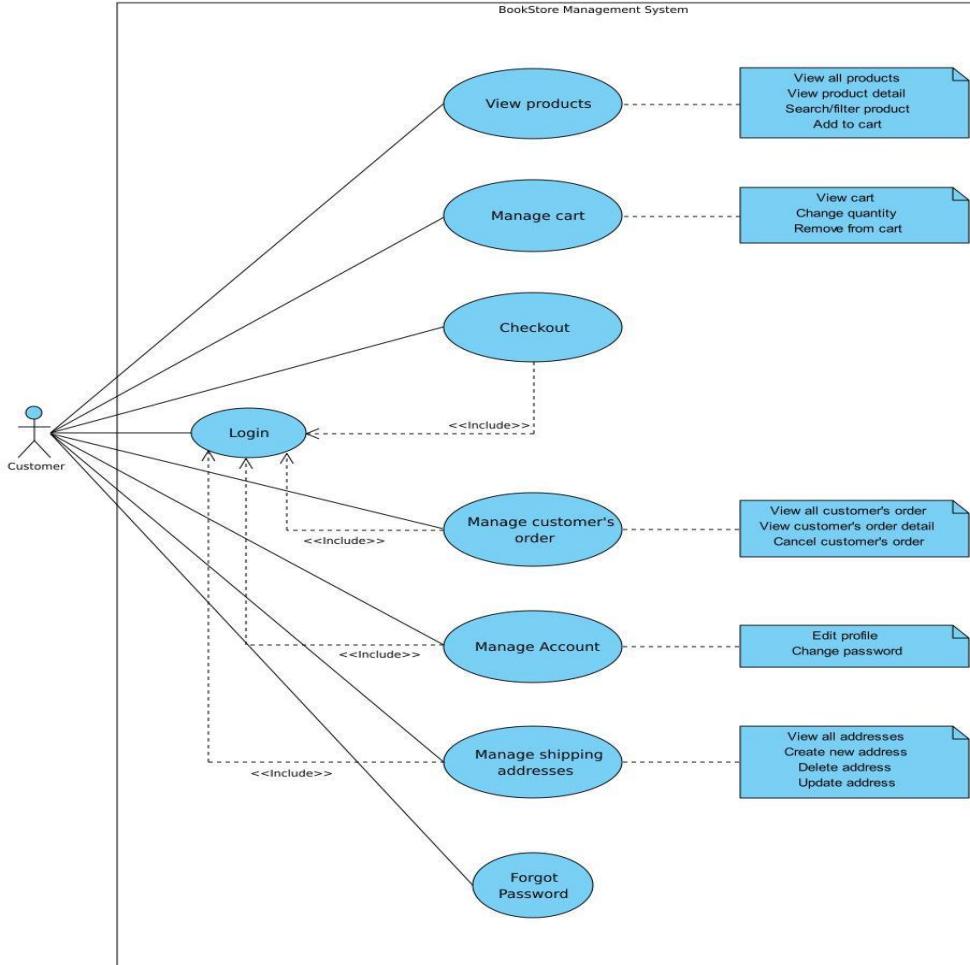
Use Case

Staff Details Use Case Diagram



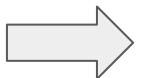
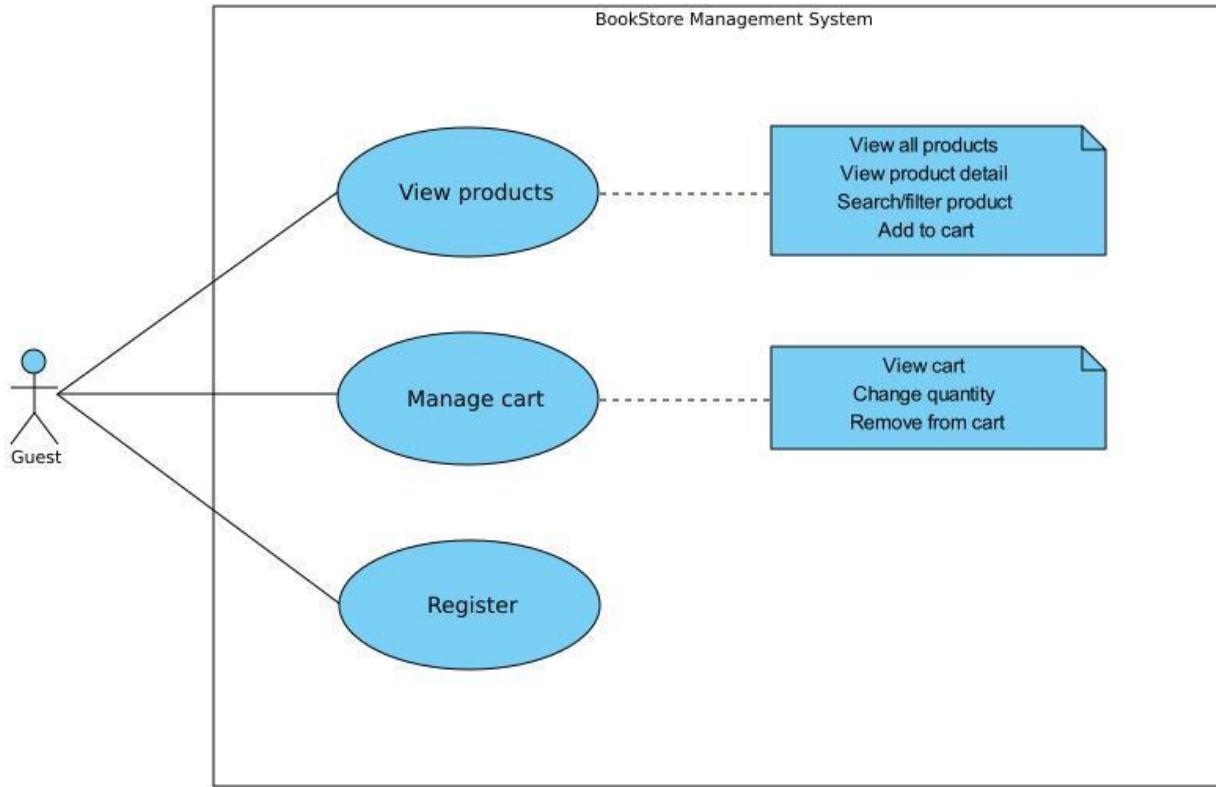
Use Case

Customer Details Use Case Diagram



Use Case

Guest Details Use Case Diagram



Homepage

The screenshot shows a website header with a user ID (0123456789), navigation links (Wish List, Đăng Nhập, Đăng Kí), and a search bar. A purple icon of stacked books is on the left. Below the header is a yellow and purple promotional banner with text: "UP TO 50% DISCOUNT" and "BUY NOW". To the right is another banner for "BOOKSTORE GRAND OPENING" on 28/8/2023, featuring a globe icon and colorful geometric shapes. The main content area is titled "SẢN PHẨM BÁN CHẠY" (Popular Products) and displays four book covers with their titles and prices:

- TÙ ĐIỀN TIẾNG "EM" - TÁI BẢN 2021
69000 VNĐ
65550 VNĐ
- CÂY CAM NGỌT CỦA TÔI
81000 VNĐ
76950 VNĐ
- NHÀ GIÁ KIM (TÁI BẢN 2020)
69000 VNĐ
57000 VNĐ
- SỰ KÝ TÙ MÃ THIÊN (TÁI BẢN 2023)
198000 VNĐ
188100 VNĐ



Place Order

The screenshot shows a web-based e-commerce platform interface. At the top, there is a navigation bar with the phone number "0123456789", user information "Xin chào customer1@gmail.com | My Account | Wish List (0) | Đăng Xuất", and a search bar with a count of "2". Below the navigation bar is a header with a logo, "Trang Chủ", "Sản Phẩm", and a search icon.

A large promotional banner is displayed prominently. It features a yellow and purple design with the text "UP TO 50% DISCOUNT" and a "BUY NOW" button. To the right of this is another banner for a "BOOKSTORE GRAND OPENING" on "28/8/2023", featuring icons of books and a globe.

The main content area contains two boxes:

- | ĐỊA CHỈ GIAO HÀNG**

Nguyễn Văn Nam
Số nhà 01, Phường Phúc Xá, Quận Ba Đình, Thành phố Hà Nội
0956519568

THAY ĐỔI
- | ĐƠN HÀNG**

Những Cuộc Phiêu Lưu Của Tom Sawyer (Tái Bản 2023) x 3	190,950 VND
How Business Works - Hiểu Hết Về Kinh Doanh x 2	722,000 VND
Tổng cộng	912,950 VND

ĐẶT HÀNG



Customer's Order

Trang Chủ Sản Phẩm

3

Q | 🛍

Đơn hàng của tôi

Tất cả đơn hàng Chờ xác nhận Đang xử lý Đang vận chuyển Đã giao Đã hủy

Tìm đơn hàng theo tên sản phẩm, mã sản phẩm

TÌM KIẾM

#2 Giao hàng thành công

Tô Bình Yên Vẽ Hạnh Phúc (Tái Bản 2022) 83,600 VND

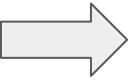
Giá: 88,000 VND
Chiết khấu: 5%
Số lượng: 1

Người Bà Tài Giới Vùng Saga 95,000 VND

Giá: 95,000 VND
Chiết khấu: 0%
Số lượng: 1

Tổng tiền: 178,600 VND

Xem chi tiết



Update order status

TẠO ĐƠN ✓ CHỜ XÁC NHẬN ✓ ĐANG XỬ LÍ ○ ĐANG VẬN CHUYỂN ○ ĐÃ GIAO HÀNG ○ ĐÃ HOÀN THÀNH ○

Khách hàng

Tên khách hàng: Nguyễn Văn Nam
Số điện thoại:

Địa chỉ giao hàng

Tên người nhận: Nguyễn Văn Nam
Số điện thoại: 0956519568
Địa chỉ: Số nhà 01

Lịch sử thanh toán

Thanh Toán

Tiền khách cần trả : 912,950 VNĐ	Đã trả: 0 VNĐ	Còn phải trả: 912,950 VNĐ
----------------------------------	---------------	---------------------------

Chi tiết đơn hàng

STT	Ảnh	Tên SP	Đơn vị	Số lượng	Đơn giá	Chiết khấu	Thành tiền
1		Những Cuộc Phiêu Lưu Của Tom Sawyer (Tái Bản 2023)	Quyển	3	67,000 VNĐ	5%	190,950 VNĐ
2		How Business Works - Hiểu Hết Về Kinh Doanh	Quyển	2	380,000 VNĐ	5%	722,000 VNĐ

Giao Hàng Hủy Đơn Quay Lại

Thông tin bổ sung

Xuất hóa đơn

Nhân viên xử lý đơn: Bùi Văn Nam

Ngày tạo đơn: 25/08/2023

Ghi chú:

27

Dashboard

Kết Quả Doanh Thu

Lọc
Trong 7 ngày

Tổng Doanh thu

534,850VND



Nhân viên: Nguyễn Văn Nam

251,750 VND

Nhân viên: Trần Thị Hằng

283,100 VND

Đơn hàng cần xử lý

1

Đơn hàng hoàn thành

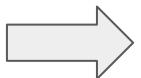
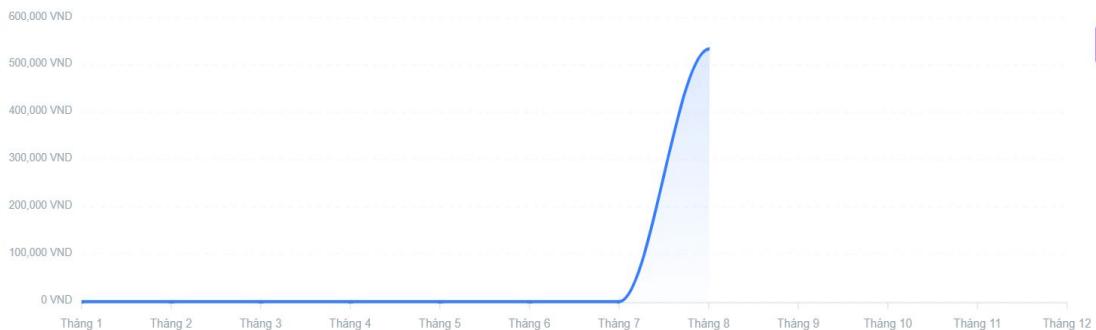
3

Đơn hàng hủy

0

Năm
2023

Doanh Thu Bán Hàng



Non-Functional Requirements



Security

- All **password** stored is **encrypted**
- Authentication and Authorization in ASP.NET MVC Application with ASP.NET Identity



Performance

- Response time under 2 second for a transaction



Usability

- The UI should be elegant and simple, easy to use
- Support many popular browsers and cross-platform
- Responsive on almost devices

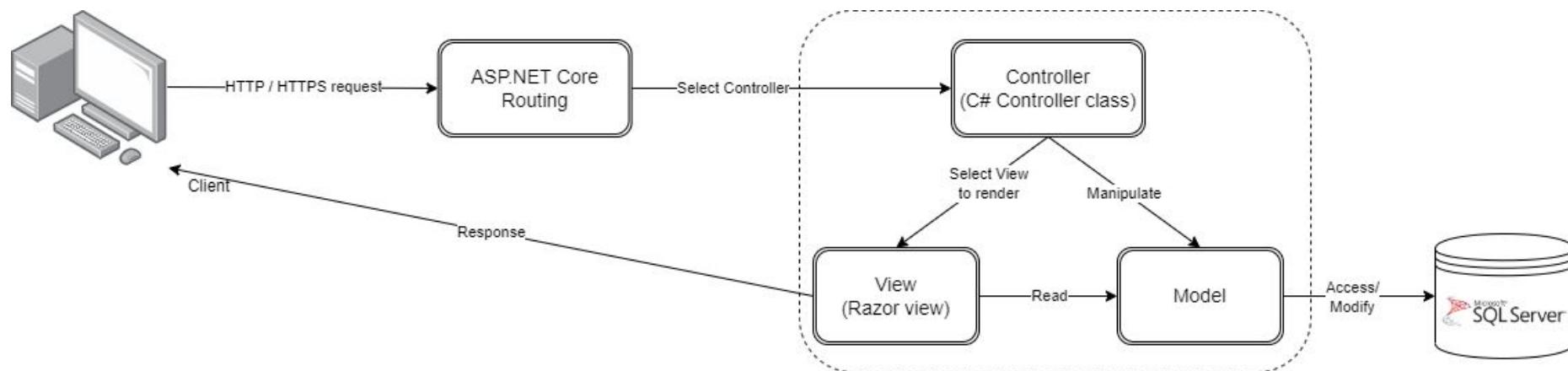


Portability

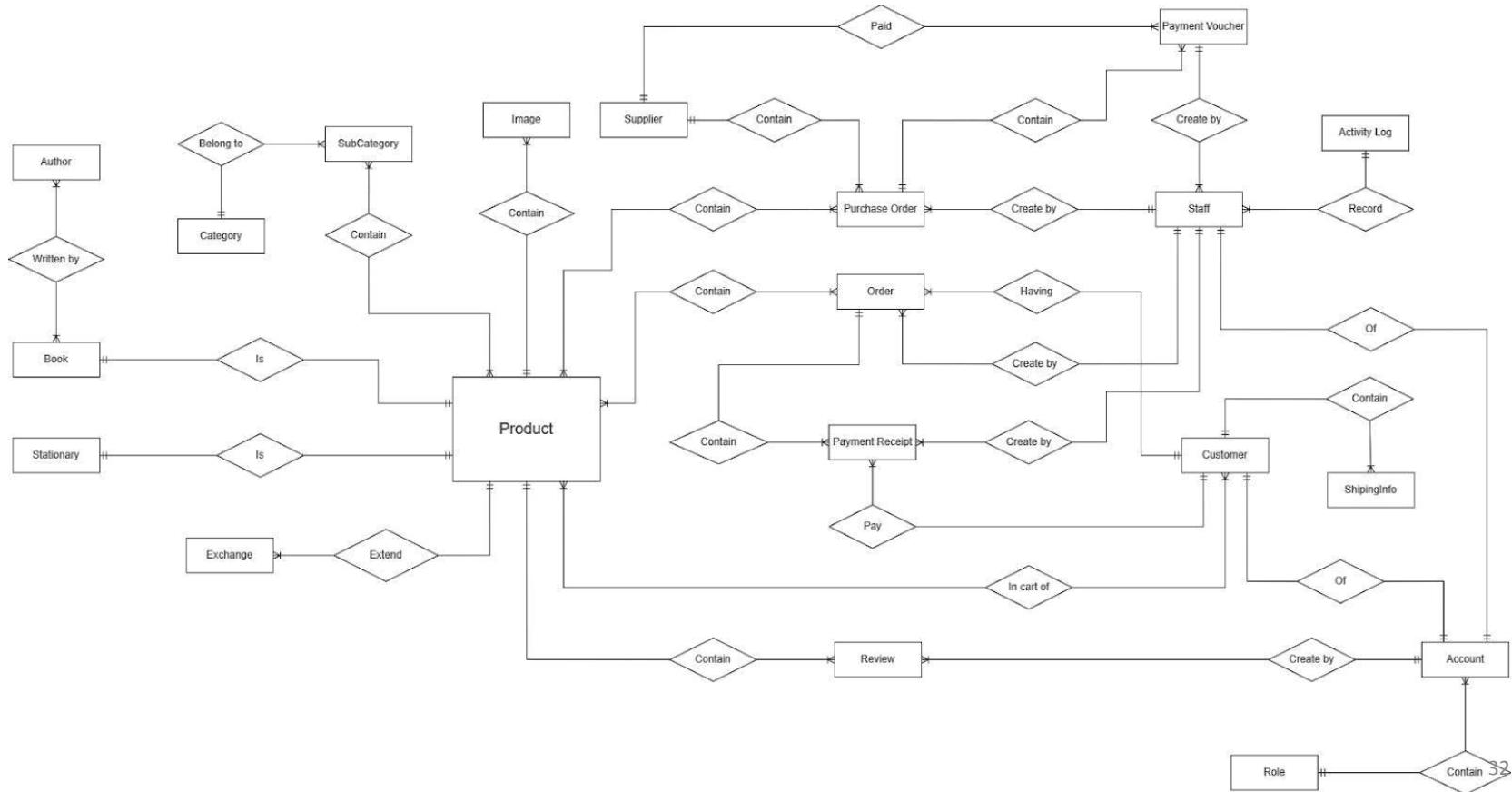
- The system will have maintenance to improve quality and security
- User guide is a support documents

4. Software Design

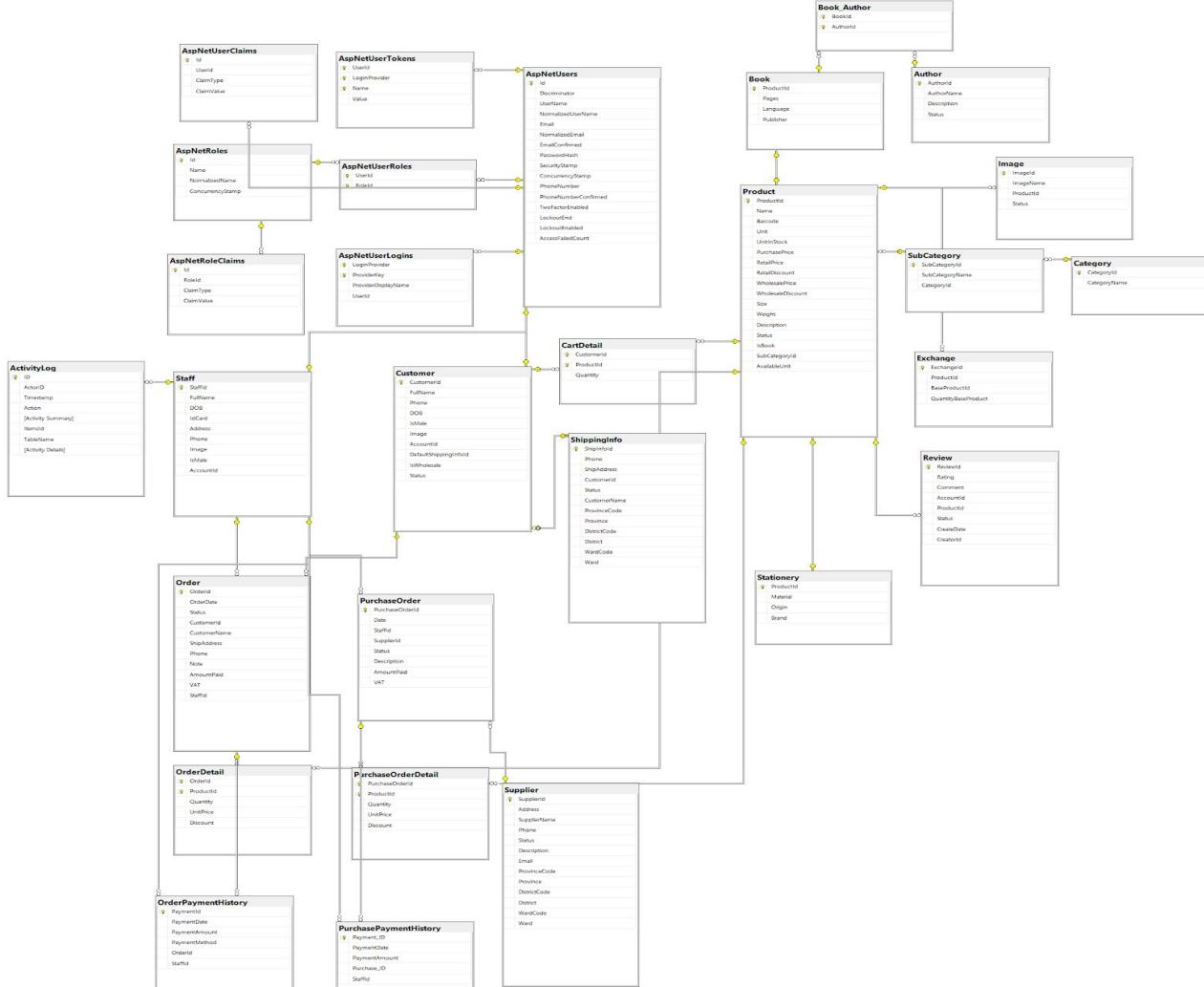
Architecture Design



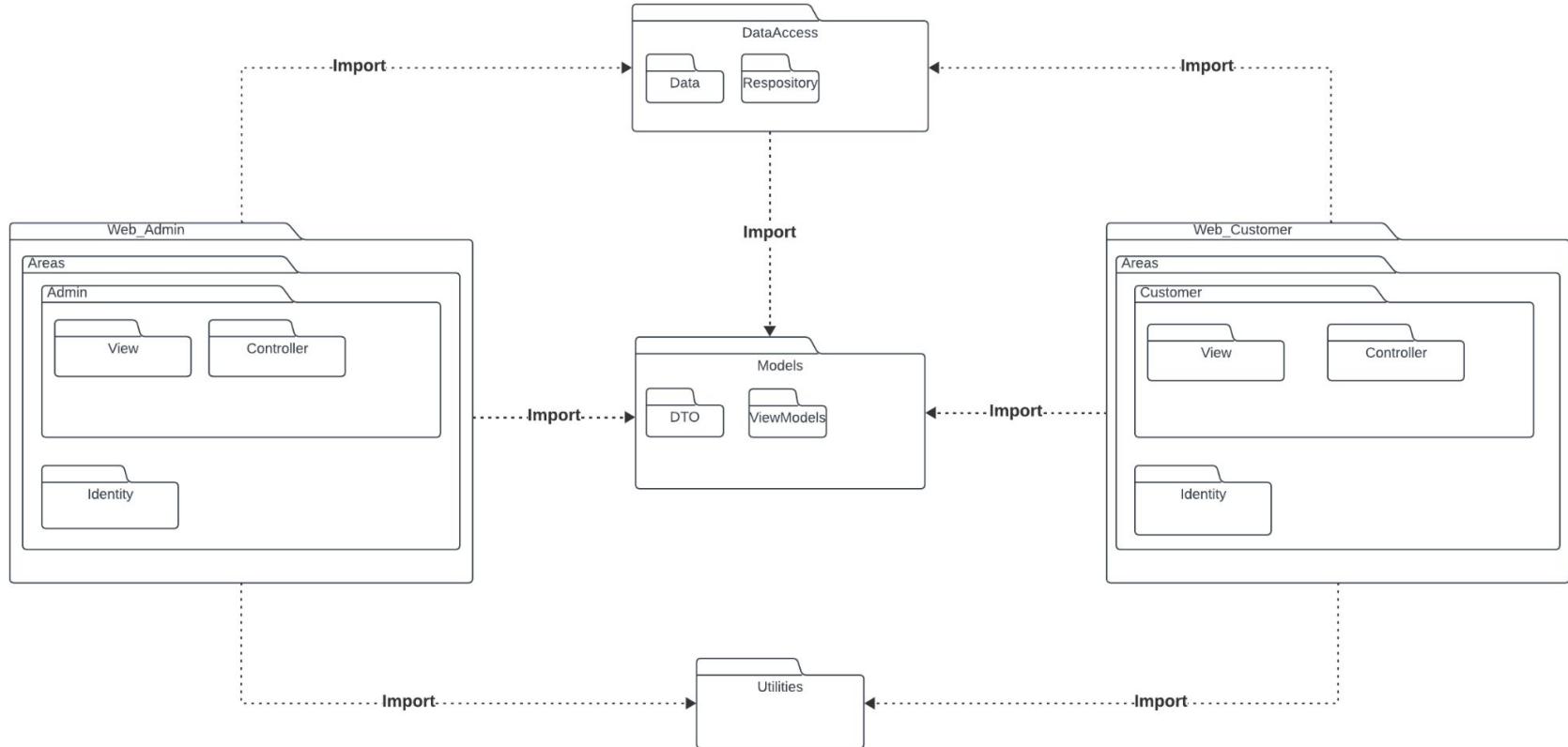
Entity Relationship Diagram



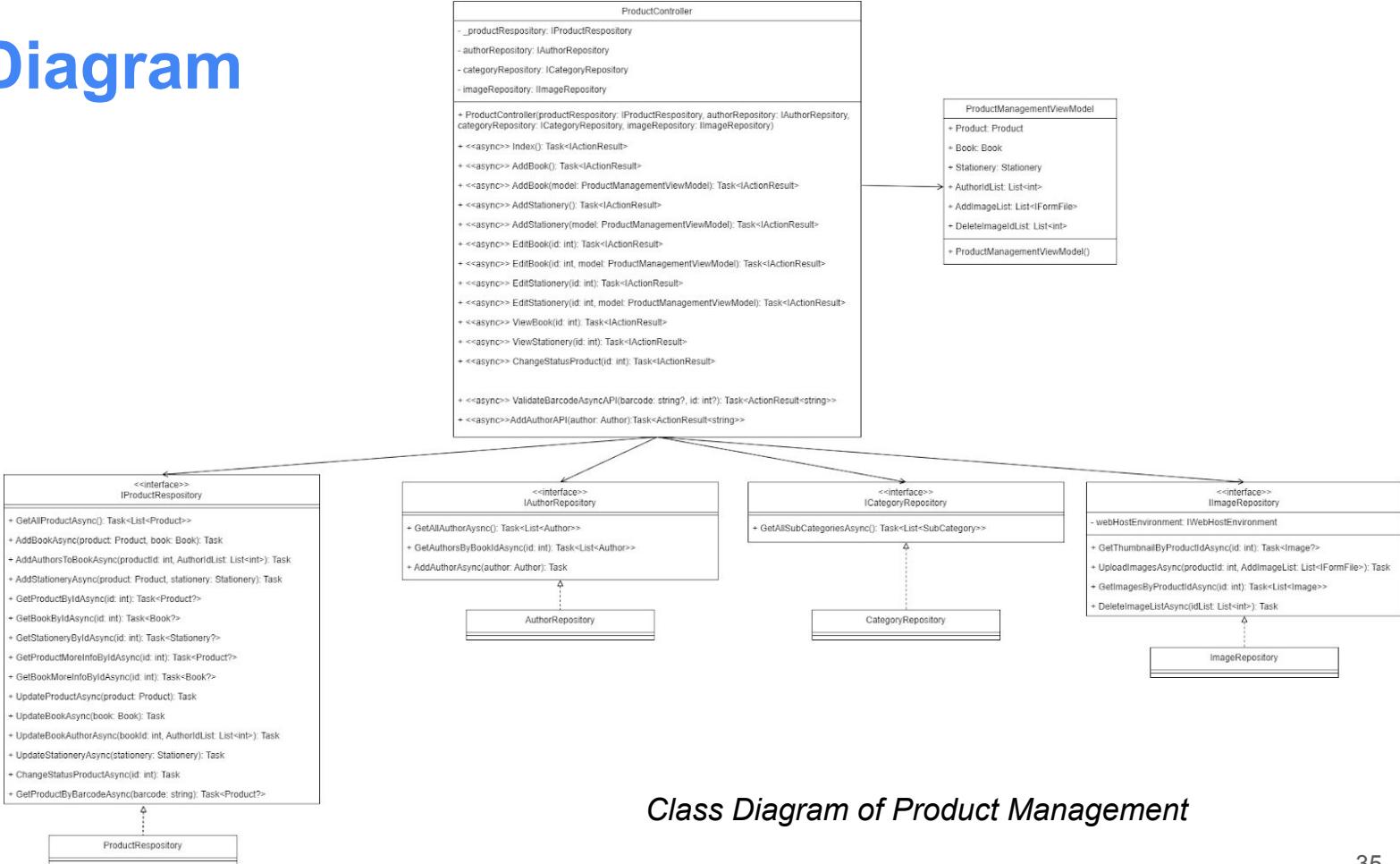
Database Design



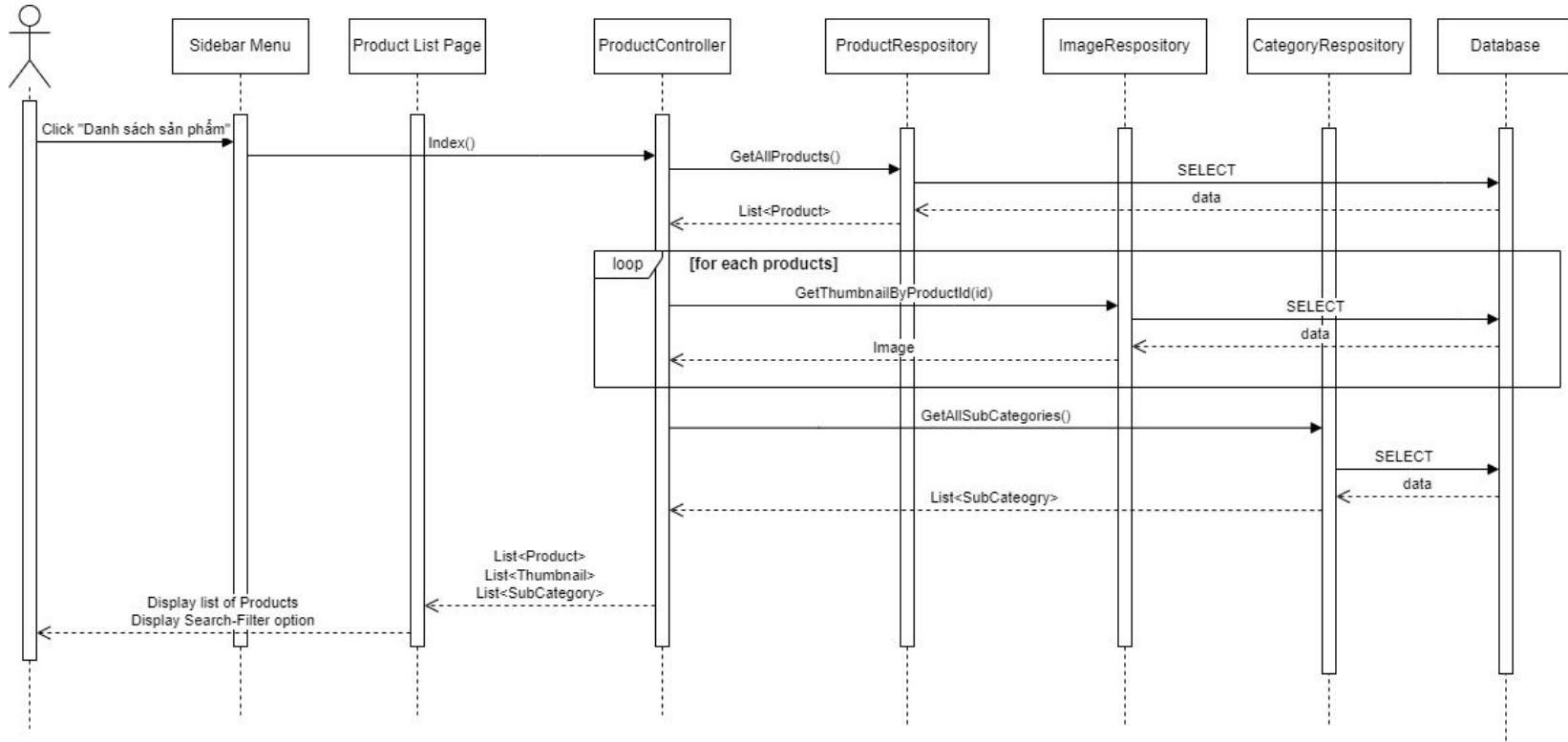
Package Diagram



Class Diagram



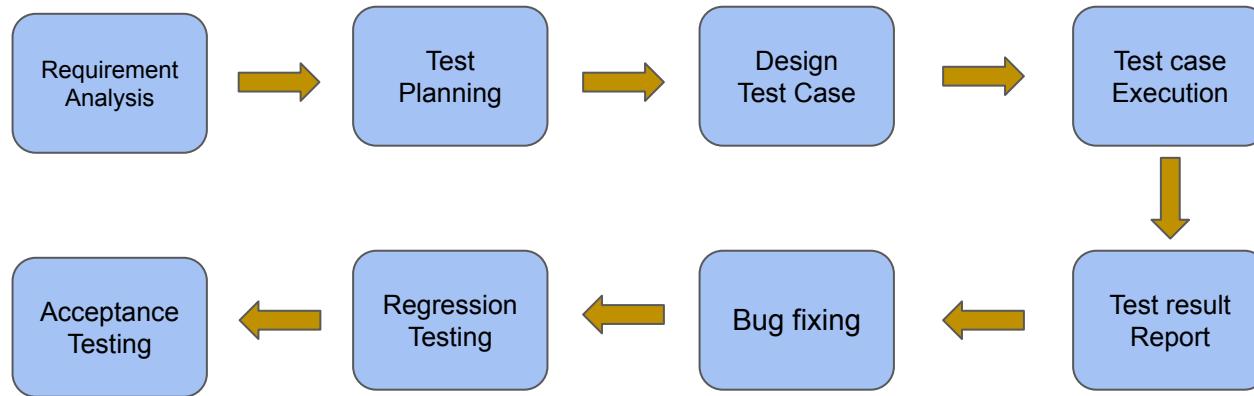
Sequence Diagram



Sequence
diagram of
View
Product List

5. Software Testing

Test process



Testing tool



Postman

Manage list all API and test API result



Google Chrome

Preview, inspect element front-end



NUnit

NUnit helps write and run tests to ensure source code



Google Sheets

Google Sheets

Manage test case

Testing Environment

Hardware

- Laptop Dell, Parallels Desktop
- Windows 10 Professional

Software

- Visual Studio 2022
- Postman
- Google Sheets
- SQL Server Management Studio

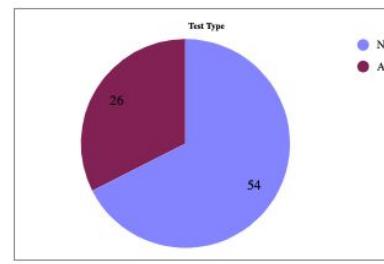
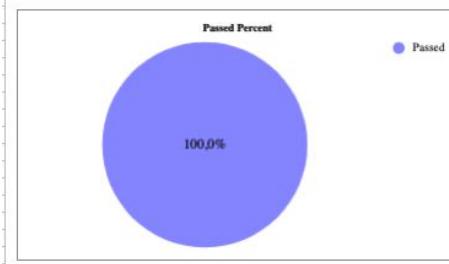
Unit Test report

UNIT TEST REPORT

Project Name	BookStore - Book Management System	Creator	TungLM
Project Code	SEP490_G30_SU23	Reviewer/Approver	HungLM
Document Code	SEP490_G30_SU23_Test Report_1.0	Issue Date	6/20/2023
Notes			

No	Function code	Passed	Failed	Untested	N	A	B	Total Test Cases
1	Login	4	0	0	1	3	0	4
2	Register	8	0	0	2	6	0	8
3	CreateProducts	13	0	0	8	5	0	13
4	CreateCategory	2	0	0	1	1	0	2
5	CreateSubCategory	3	0	0	2	1	0	3
6	CreateAuthor	3	0	0	2	1	0	3
7	CreateSupplier	8	0	0	7	1	0	8
8	CreatePurchase	9	0	0	6	3	0	9
9	CreateOrder	7	0	0	6	1	0	7
10	CreateCustomer	11	0	0	10	1	0	11
11	CreateStaff	12	0	0	9	3	0	12
Sub total		80	0	0	54	26	0	80

Test coverage **100,00 %**
Test successful coverage **100,00 %**
Normal case **67,50 %**
Abnormal case **32,50 %**
Boundary case **0,00 %**



Integration Test report

TEST STATISTICS

Project Name	Bookstore Management System	Creator	TungLM
Project Code	Bookstore Management System	Reviewer/Approver	HungLM
Document	Bookstore Management System Test Report_1.0	Issue Date	20/6/2023

No	Module code	Passed R1	Failed R1	Pending R1	N/A R1	Number	Passed R2	Failed R2	Pending R2	N/A R2	Number of test	Passed R3	Failed R3	Pending R3	N/A R3	Number of test
1	Login	12	0	0	0	12	12	0	0	0	12	12	0	0	0	12
2	Register	13	0	0	0	13	13	0	0	0	13	13	0	0	0	13
3	EmailReconfirm	7	1	0	0	8	8	0	0	0	8	8	0	0	0	8
4	ForgotPassword	10	0	0	0	10	10	0	0	0	10	10	0	0	0	10
5	View list products	11	2	0	0	13	13	0	0	0	13	13	0	0	0	13
6	Create products	15	0	0	0	15	15	0	0	0	15	15	0	0	0	15
7	UpdateProducts	15	0	0	0	15	15	0	0	0	15	15	0	0	0	15
8	View list category	6	2	0	0	8	6	2	0	0	8	8	0	0	0	8
9	Create category	5	0	0	0	5	5	0	0	0	5	5	0	0	0	5
10	Update category	7	0	0	0	7	7	0	0	0	7	7	0	0	0	7
11	View list SubCategory	5	0	0	0	5	5	0	0	0	5	5	0	0	0	5
12	Create SubCategory	6	0	0	0	6	6	0	0	0	6	6	0	0	0	6
13	UpdateSubCategory	6	0	0	0	6	6	0	0	0	6	6	0	0	0	6
14	View list Staff	15	0	0	0	15	15	0	0	0	15	15	0	0	0	15
15	Create staff	17	0	0	0	17	17	0	0	0	17	17	0	0	0	17
16	Update Staff	18	0	0	0	18	18	0	0	0	18	18	0	0	0	18
17	Disable Staff	5	0	0	0	5	5	0	0	0	5	5	0	0	0	5
18	View list supplier	6	0	0	0	6	6	0	0	0	6	6	0	0	0	6
19	CreateSupplier	11	0	0	0	11	11	0	0	0	11	11	0	0	0	11
20	UpdateSupplier	12	0	0	0	12	12	0	0	0	12	12	0	0	0	12
21	ViewListPurchase	9	0	0	0	9	9	0	0	0	9	9	0	0	0	9
22	CreatePurchase	16	5	0	0	21	21	0	0	0	21	21	0	0	0	21
23	UpdatePurchase	12	0	0	0	12	12	0	0	0	12	12	0	0	0	12
24	ViewlistAuthor	1	4	0	0	5	5	0	0	0	5	5	0	0	0	5
25	Create Author	5	0	0	0	5	4	1	0	0	5	5	0	0	0	5
26	Update Author	4	0	0	0	4	4	0	0	0	4	4	0	0	0	4
27	View list Customer	6	0	0	0	6	6	0	0	0	6	6	0	0	0	6
28	Create Customer	10	0	0	0	10	10	0	0	0	10	10	0	0	0	10
29	UpdateCustomerDetail	10	1	0	0	11	11	0	0	0	11	11	0	0	0	11
30	CustomerProfile	7	0	0	0	7	7	0	0	0	7	7	0	0	0	7
31	Customer Cart	5	0	0	0	5	5	0	0	0	5	5	0	0	0	5
32	Customer Shipping Information	8	1	0	0	9	8	1	0	0	9	9	0	0	0	9
33	Customer Order	10	0	0	0	10	10	0	0	0	10	10	0	0	0	10
34	View list order	8	0	0	0	8	8	0	0	0	8	8	0	0	0	8
35	Create Order	12	4	0	0	16	12	4	0	0	16	16	0	0	0	16
36	Update Order	10	0	0	0	10	10	0	0	0	10	10	0	0	0	10
Sub total		335	20	0	0	355	347	8	0	0	355	355	0	0	0	355

Test coverage R1

100.00 %

Test coverage R2

94.37 %

100.00 %

Test successful cover

Test coverage R3

100.00 %

Test successful coverage R3

100.00 %

System Test report

TEST STATISTICS

Project Name	BookStore - Book Management System	Creator	TungLM
Project Code	BookStore	Reviewer/Approver	TungLM
Document Code	Report5_SystemTest	Issue Date	16/8/2023
Notes			

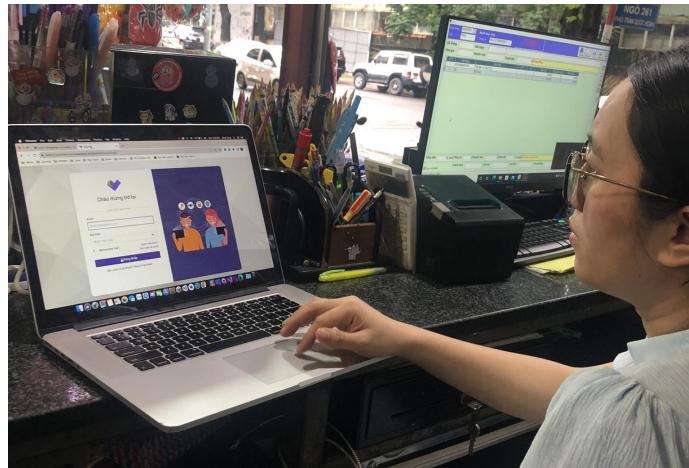
No	Module code	Passed	Failed	Pending	N/A	Number of test cases
1	Owner	27	0	0	0	27
2	Staff	45	0	0	0	45
3	Customer	19	0	0	0	19
Sub total		91	0	0	0	91

Test coverage **100.00 %**

Test successful coverage

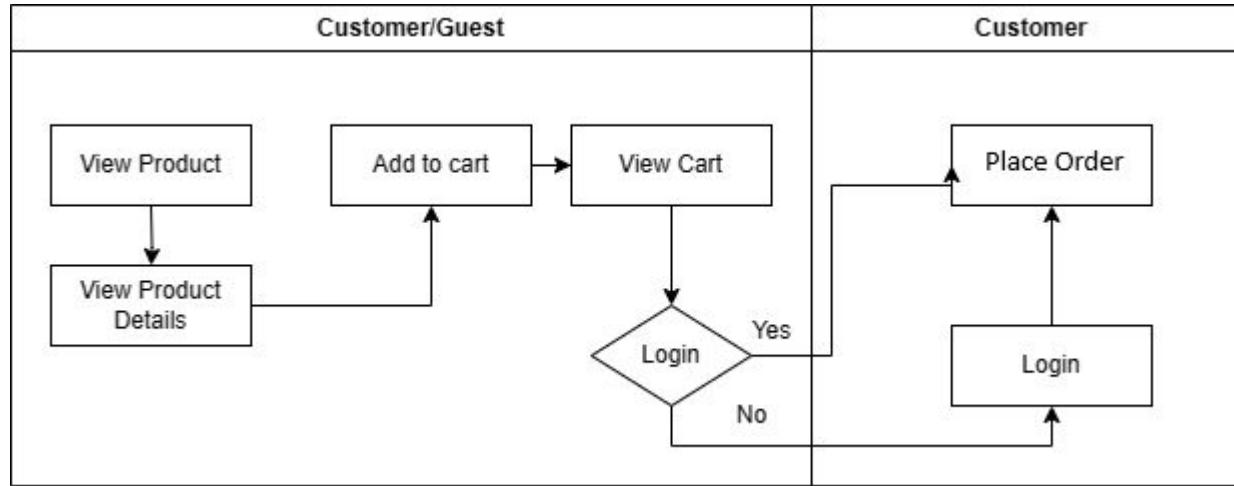
Acceptance Test report

TEST STATISTICS				
Project Name	BookStore - Book Management System	Creator	TungLM	
Project Code	BookStore - Book Management System	Reviewer/Approver	HungLM	
Document Code	BookStore - Book Management System_Acceptance Report_1.0	Issue Date	20/8/2023	
Notes				
No	Question	Yes	No	
1	Tính năng đặt hàng có hoạt động đúng cách, bao gồm thêm sách vào giỏ hàng, chỉnh sửa giỏ hàng và xóa sách ra khỏi giỏ hàng không?	Y ▾	✗ ▾	
2	Có thể tìm kiếm sách dựa trên tiêu đề, tác giả hoặc thể loại không?	Y ▾	✗ ▾	
3	Có xác nhận đơn hàng và cung cấp thông tin chi tiết của đơn hàng sau khi hoàn tất thanh toán không?	Y ▾	✗ ▾	
4	Thao tác quản lý tài khoản người dùng như thay đổi thông tin cá nhân, đổi mật khẩu hoặc đăng xuất có hoạt động bình thường không?	Y ▾	✗ ▾	
5	Có thể đọc mô tả chi tiết về mỗi cuốn sách và xem hình ảnh của chúng không?	Y ▾	✗ ▾	
6	Có hệ thống giảm giá hoặc khuyến mãi được áp dụng đúng cách không?	Y ▾	✗ ▾	
7	Tính năng tạo danh sách yêu thích cho các cuốn sách có hoạt động không?	✗ ▾	N ▾	
8	Hiện tại chỉ có một hình thức vận chuyển qua zalo thì cần thêm tính năng này không?	Y ▾	✗ ▾	
9	Tính năng tìm kiếm sách theo khoảng giá có hoạt động không?	Y ▾	✗ ▾	
10	Có thể xem lịch sử đặt hàng và theo dõi trạng thái đơn hàng không?	Y ▾	✗ ▾	



6. Demo - Q&A

Customer making order workflow



New Order Processing Workflow

