HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

School of Information and Communications Technology

Final Report

Version 1.1

AIMS.

Môn: Thiết kế và xây dựng phần mềm

Giảng viên: TS. Nguyễn Thị Thu Trang

Nhóm: 20

*Hanoi,* *<12, 2023>*

# Phân chia nhiệm vụ:

|  |  |  |
| --- | --- | --- |
| **Thành viên** | **Đóng góp** | **Phần trăm** |
| Trương Công Thắng | * Thiết kế và xây dựng cho use case xem danh sách sản phẩm, sắp xếp sản phẩm, tìm kiếm sản phẩm và đăng ký đăng nhập | 25% |
| Hoàng Trần Xuân Sơn | * Thiết kế và xây dựng cho use case Quản lý sản phẩm | 25% |
| Ngô Đức Thắng | * Thiết kế và xây dựng cho use case Quản lý tài khoản | 25% |
| Lù Mạnh Thắng | * Thiết kế và xây dựng cho use case Quản lý cart | 25% |

# Tổng quan

## Actors:

Admin: Quản lý tài khoản

Product Manager: Quản lý sản phẩm

Customer: Người dùng của hệ thống AIMS

VNPay: Hệ thống hỗ trợ thanh toán

## Biểu đồ use case tổng quan và biểu đồ use case phân rã:

A diagram of a person

Description automatically generated

A diagram of a person

Description automatically generated

A diagram of a diagram

Description automatically generated

A diagram of a product manager

Description automatically generated

# Thiết kế cho từng use case:

## Use case Quản lý sản phẩm:

### Tài liệu đặc tả:

* ***Specification of Use case UCS00 - “Add product”***
* **Use case code**

UCS00

* **Brief Description**

This use case describes the process in which the Product Manager can add a single product to AIMS Software.

* **Actors**

Product Manager

* **Preconditions**

The product manager requires to add a product.

* **Basic Flow of Events**

Step 1. The product manager requires to add a product

Step 2. The product manager provide the product information

Step 3. The AIMS software checks if the new product meets the requirements

Step 4. The AIMS software adds the product to Product List

Step 5. The AIMS software saves the add information

* **Alternative flows**

**Table Alternative flows of events for UC Add product**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Location** | **Condition** | **Action** | **Resume location** |
| 1. | At Step 3 | If the products details don’t meet the requirements | AIMS notifies that the products details don’t meet the requirement | At step 2 |

* **Input data**

**Table A-Input data of product details**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Data fields** | **Description** | **Mandatory** | **Valid condition** | **Example** |
|  | Title |  | Yes |  | “Design Pattern” Book |
|  | Category |  | Yes | Equals “Book”, “CD”, “LP”, or “DVD” | Book |
|  | Value | Valuation of product | Yes | Vietnamese currency | 100000 VND |
|  | Price | Amount of money customer has to pay (not include VAT) | Yes | Vietnamese currency | 90000 VND |

***Specification of Use case UCS01 - “Delete product”***

* **Use case code**

UCS01

* **Brief Description**

This use case describes the process in which the product manager can delete some products (maximum of 10).

* **Actors**

Product Manager

* **Preconditions**

The product manager requires to delete some products.

**Basic Flow of Events**

Step 1. The product manager requires to delete some products

Step 2. The AIMS software delete all the chosen products from Product List

Step 3. The AIMS software saves the delete information

* **Alternative flows**

**Table Alternative flows of events for UC Delete product**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Location** | **Condition** | **Action** | **Resume location** |
| 1. | At Step 2 | If number of chosen products doesn’t meet the requirements | * The AIMS software notifies that the action is declined | Use case ends |

***Specification of Use case UCS02 - “Update product”***

* **Use case code**

UCS02

* **Brief Description**

This use case describes the process in which the Product Manager can update a specific product

* **Actors**

Product Manager

* **Preconditions**

The product manager requires to update a specific product

**Basic Flow of Events**

Step 1. The product manager requires to update a specific product

Step 2. The product manager update details of chosen product

Step 3. The AIMS software checks if the new details meets the requirements

Step 4. The AIMS software saves the update information

**Alternative flows**

**Table Alternative flows of events for UC Update product**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Location** | **Condition** | **Action** | **Resume location** |
| 1. | At Step 3 | If the products details don’t meet the requirements | * AIMS notifies that the products details don’t meet the requirement | At Step 2 |

* **Input data**

**Table A-Input data of payment form is shown as follows.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Data fields** | **Description** | **Mandatory** | **Valid condition** | **Example** |
| 1. |  |  |  |  |  |
| 2. |  |  |  |  |  |
| 3. |  |  |  |  |  |
| 4. |  |  |  |  |  |

***Specification of Use case UCS03 - “View product”***

* **Use case code**

UCS03

* **Brief Description**

This use case describes the process in which the Product Manager can view details of a specific product

* **Actors**

Product Manager

* **Preconditions**

The product manager requires to view details of a specific product

**Basic Flow of Events**

Step 1. The product manager requires to view details of a specific product

Step 3. The AIMS software shows the product details

**Alternative flows**

**No**

### Activity Diagram:

A diagram of a product

Description automatically generated

A diagram of a product

Description automatically generated A screenshot of a diagram

Description automatically generated A screenshot of a diagram

Description automatically generated

A diagram of a product

Description automatically generatedA diagram of a product

Description automatically generatedA diagram of a customer and software

Description automatically generated

### Analysis Class:

A screenshot of a diagram

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Description automatically generated A screenshot of a computer

Description automatically generated A screenshot of a computer

Description automatically generated

### Interaction Diagram A diagram of a product Description automatically generatedA diagram of a square with lines and dots Description automatically generated A diagram of a product Description automatically generatedA screenshot of a computer screen Description automatically generated A diagram of a process Description automatically generatedA diagram of a project Description automatically generated with medium confidence A diagram of a product Description automatically generatedA screenshot of a computer Description automatically generated

A diagram of a product

Description automatically generatedA screenshot of a computer

Description automatically generated