

**NATIONAL UNIVERSITY OF HO CHI MINH CITY  
UNIVERSITY OF INFORMATION TECHNOLOGY  
DEPARTMENT OF INFORMATION SYSTEMS**



**PROJECT REPORT  
E-COMMERCE SYSTEM DESIGN  
TOPIC  
BUILDING A B2C E-COMMERCE  
SYSTEM FOR AN ORGANIC  
COSMETICS BUSINESS WEBSITE**

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CLASS: EC312.O21.TMCL**

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**Ho Chi Minh City, 05/2024**

## INTRODUCTION

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# THANK YOU

First and foremost, we would like to express our sincere gratitude to Mr. Nguyen Duong Tung (the instructor of the E-commerce System Design course). Thanks to his guidance, our team had the opportunity to access and grasp the basic knowledge of e-commerce system design. This knowledge has provided us with a solid foundation to embark on our research and project.

Throughout the implementation of the project "Building a B2C E-commerce System for an Organic Cosmetics Business Website", based on the knowledge provided by Mr. Tung combined with self-learning new tools and knowledge, our team has endeavored to carry out the project to the best of our ability. However, due to the limited individual capacity and time of each team member, along with the shortcomings in practical experience and practical knowledge, our project may not be truly perfect and may still have many flaws.

We highly appreciate and thank Mr. Tung for his valuable feedback, which helped our team draw valuable lessons and enhance our knowledge base so that we can continue to complete other projects and products in the future. We also aim to apply this knowledge in real business environments.

Once again, our whole team sincerely thanks Mr. Tung for dedicating his time and passion to guide us. We wish him good health, happiness, and success in his teaching career.

Ho Chi Minh City, 05/2024

Nguyen Mai Huu Phuc

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## LECTURE' COMMENTS

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## INTRODUCTION

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# DOCUMENT MANAGEMENT & CHANGE HISTORY

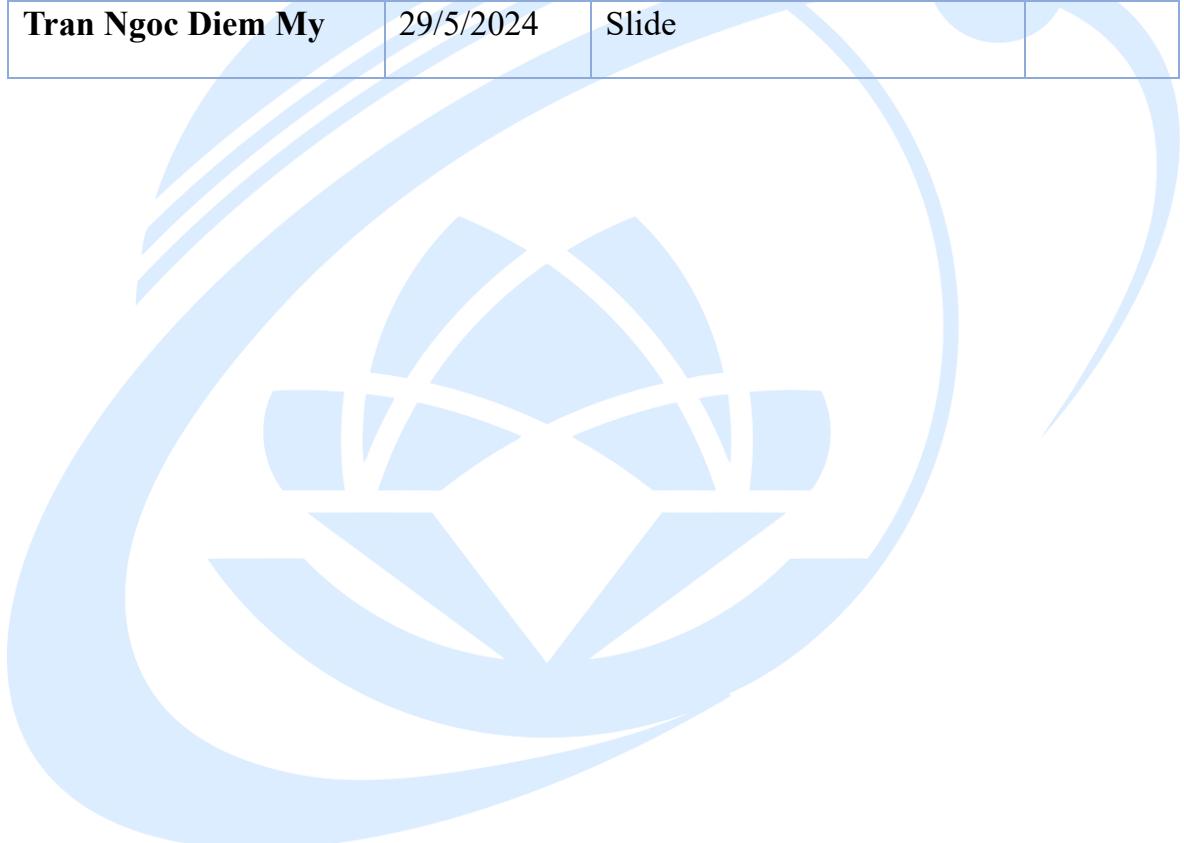
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Tran Ngoc Diem My	8/4/2024	Chapter 1: Introduction Chapter 2: Market information Chapter 3: Business model	
Nguyễn Hoàng Quân	19/05/2024	Chapter 2: Market information Chapter 5: System business process analysis	
Tran Ngoc Diem My	25/05/20224	Chapter 6: System analysis and design Chapter 8: Promotion	

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<b>Phan Nhat Hoang</b>	26/05/2024	Chapter 4: System requirement analysis Chapter 7: Deployment	
<b>Hoang Minh Hung</b>	27/05/2024	Chapter 7: Deployment Chapter 9: Assessment and future directions	
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<b>Tran Ngoc Diem My</b>	29/5/2024	Slide	



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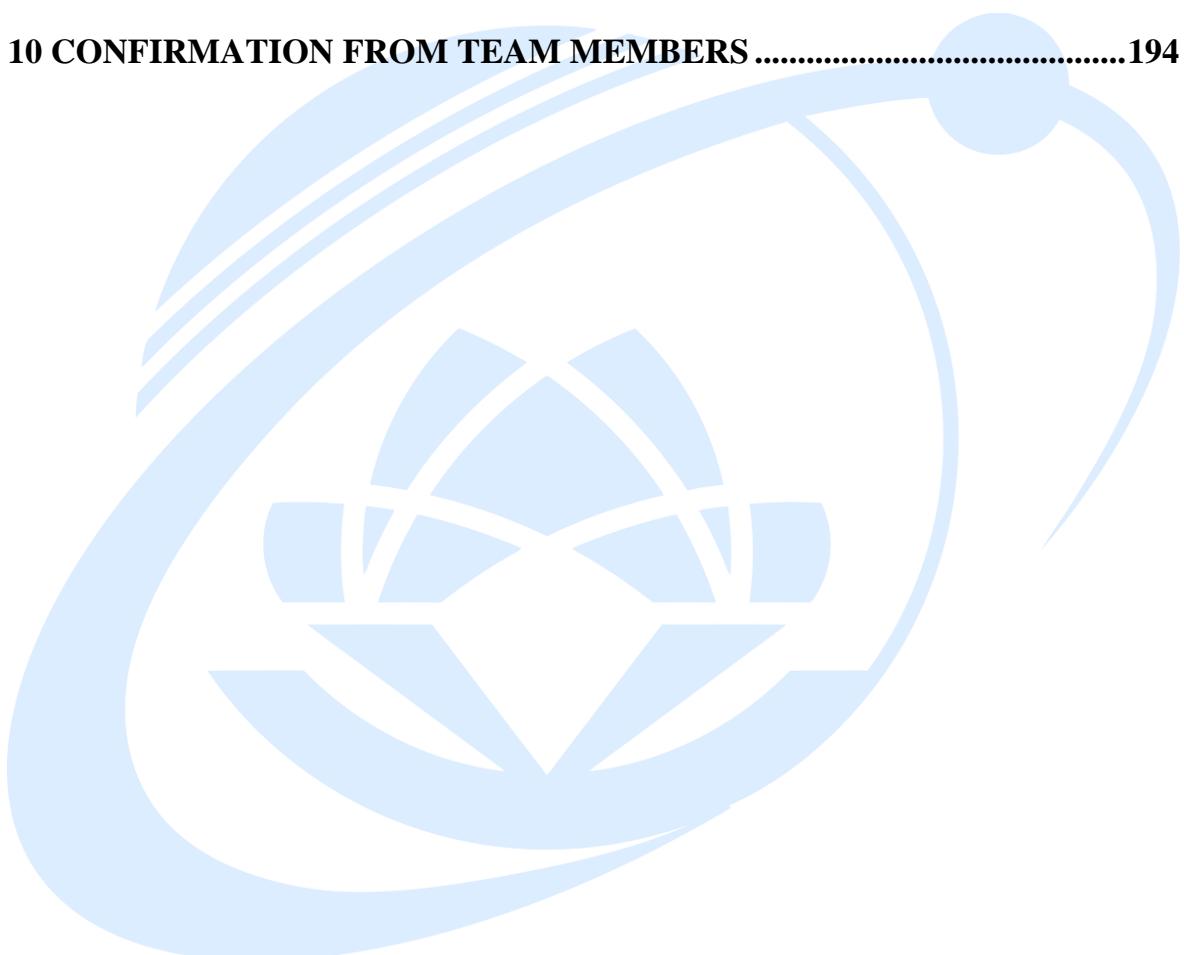
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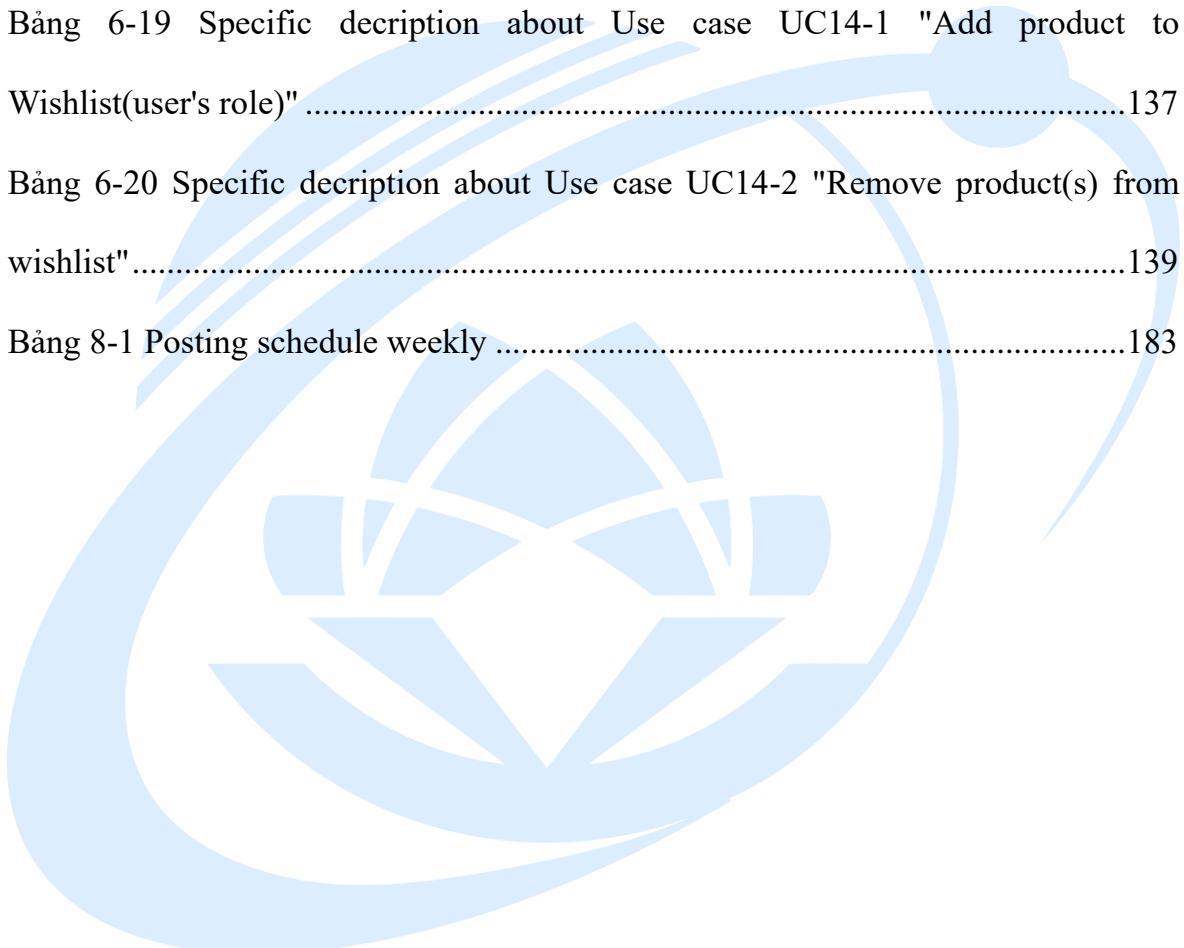
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# 1

## INTRODUCTION

### Reason for choosing the topic

With the current proliferation of counterfeit cosmetics with unknown origins on the market, in recent years, the trend of using natural-origin cosmetics has been increasingly embraced by beauty enthusiasts. Due to concerns about using products that may harm the skin, hair, etc., the preference for organic cosmetics, which are made entirely from natural ingredients and do not contain chemicals, has grown rapidly. Unlike conventional cosmetics that require strict processes, most organic cosmetics use inexpensive natural ingredients, so they are generally sold at much lower prices than other products on the market. When comparing, organic cosmetics are priced similarly to products originating from China, but they are perceived as much safer. This formula is customized according to individual needs. Cosmetic producers will experiment with the product before customizing it to find the perfect formula that meets customer demands. Since more and more people are turning to natural products, when running a natural cosmetic business, it's easy to win the hearts of customers without much effort.

There is a wide variety of organic cosmetic products available today to meet the beauty needs of women. From skincare, hair care, lipsticks to relaxing products like essential oils, scented candles, etc. Commonly used ingredients include coconut oil, olive oil, essential oils extracted from fruits and natural plants, etc. The cost to purchase these ingredients usually accounts for only about 30% of the selling price on the market. Recognizing the growing demand for natural beauty products among women, selling organic cosmetics has become a trend that attracts many young entrepreneurs, especially in online cosmetic businesses.

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Recognizing the significant growth and potential of the market, our team has leveraged the potential of this trend to study and analyze the market with the target customer group we are aiming for. In addition, during the project implementation process, our team will also find the most suitable direction and marketing channels for the most effective results for larger real-world projects in the future.

### Scope of the project

- Market Analysis:

- + Demand and trends in the use of organic cosmetics.
- + Competitors in the market.
- + Target customers.

- Determining System Functions:

- + Product management: add, edit, delete products, manage categories, images, descriptions.
  - + Order management: receive, process, deliver, and payment.
  - + Customer management: customer information, purchase history, promotional programs.
  - + Payment system: integrate online payment gateway, cash on delivery.
  - + Shipping system: integrate with reputable shipping carriers.

- Website Interface Design:

- + Attractive, user-friendly interface.
  - + Easy navigation, product search.
  - + Display comprehensive product information.
  - + Integration of necessary functions.

- Testing and System Deployment:

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- + Test website with various scenarios.
- + Fix errors and refine the website.
- + Deploy the system in a real environment.

- Website Promotion:

- + Attract potential customers.

- Additionally:

- + System Security: Ensure safety for customer information and system data.
- + Customer Support: Provide quick and efficient customer support services.

### Objectives

- General Objectives:

- + Build a B2C e-commerce website on the WooCommerce and WordPress platform.
- + Identify the benefits and potential that an e-commerce system brings to businesses.
- + Provide customers with a convenient, safe, and efficient shopping experience.
- + Contribute to the development of the organic cosmetics market in Vietnam.
- + Acquire basic knowledge of e-commerce systems.

- Specific Objectives:

- + Functionality: The system will have all the necessary functions for an e-commerce website such as:

Product search.

Detailed product introduction.

Ordering and payment.

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Order management.

Customer support.

Integration of convenient and secure payment methods such as online payment, cash on delivery, with the ability to process orders quickly and efficiently.

### Mission and Vision

#### 1.4.1 Mission

- Provide high-quality organic cosmetic products free from harmful chemical ingredients, ensuring safety for both health and the environment.
- Promote awareness of using natural and organic products to protect and beautify the skin naturally.
- Create positive change in the cosmetics industry by encouraging sustainability and responsibility towards the environment and community.

#### 1.4.2 Vision

- To become a leading organic cosmetic brand, trusted and chosen by customers for our commitment to quality, safety, and sustainability.
- Spread the message of natural beauty and health within the community, creating positive change in the way cosmetics are used and produced.

### Core values

- Natural and Organic: Our products are made from natural and organic ingredients, free from harmful chemicals, ensuring safety for customers and the environment.
- Quality and Effectiveness: We are committed to delivering high-quality products that meet beauty needs and provide real results for customers.
- Sustainability and Social Contribution: We pledge to act sustainably, respect the environment, and contribute to the community through social activities.

## INTRODUCTION

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### Projects Connection

Hạnh Dung Organic Cosmetic Business Model		
1	Selling Organic Cosmetics through an E-commerce Website and Social Media Platforms	Project Management for Developing a Market Research Plan to Build an Effective Marketing Strategy for the Organic Cosmetic Business Model
2	Interface Design for a Vegan Cosmetic Brand	Project Management for Building and Designing Interface for Business Model
3	Applying SEO to the Awning Business Model	Project Management for Implementing SEO into the Business Model



# 2

## MARKET INFORMATION

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### 2.1 Market Analysis

The Health and Beauty Market size is estimated to reach USD 174.37 billion by 2024 and is projected to reach USD 233.56 billion by 2029, growing at a CAGR of 6.02% during the forecast period (2024-2029).

The COVID-19 pandemic has significantly impacted the health and beauty market. Consumers have changed their shopping trends with a heightened awareness of the importance of healthy skin. As a result, they tend to prefer organic and natural products. For example, Organic Cattier, one of the major names in this industry, reported an 8% increase in net revenue according to their annual report. This indicates that the pandemic has positively affected the organic cosmetics market.

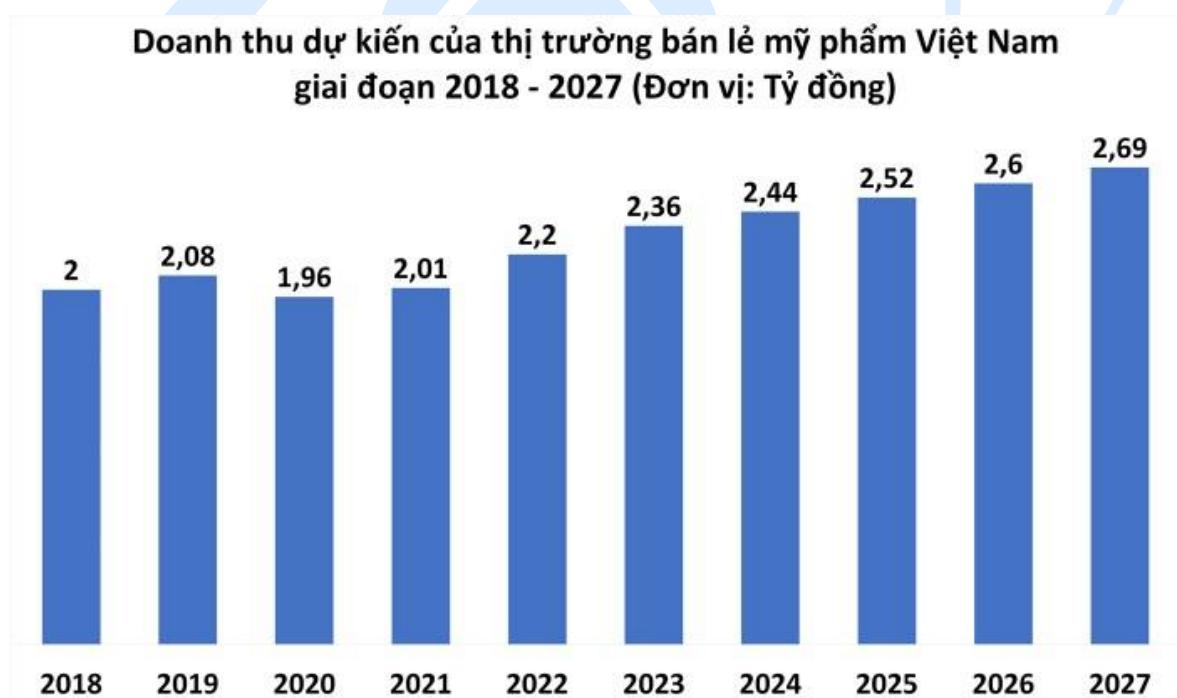
The organic cosmetics industry is expected to grow robustly due to increasing demand for products labeled as clean. Consumers are increasingly focusing on the health and skincare products they use, paying particular attention to ingredients, origin, and certifications from government agencies to ensure organic and sustainable practices. With changing lifestyles, consumers' awareness of health is growing, leading to a preference for organic cosmetics over processed foods. For instance, in France, the number of consumers using organic cosmetics has significantly increased, primarily due to the health benefits for their skin. Organic cosmetics offer many health benefits as they do not contain preservatives and are made from natural ingredients, whereas other products are mainly produced from chemicals. Some chemicals in cosmetics can be harmful to health if used for a long time or at high concentrations. With the rising demand for organic products, sales have also

## **MARKET INFORMATION**

increased. Consumers are prioritizing natural skincare products over those containing chemical preservatives, which is a key factor driving the market's growth.

According to data from Statista, Vietnam is one of the countries with the fastest-growing middle-class population in Southeast Asia. As people's incomes increase, so does the demand for personal health and beauty care, helping the retail cosmetics market to develop further.

Data published by Statista shows that the retail cosmetics market revenue in Vietnam reached USD 2.2 billion in 2022, and is expected to reach USD 2.69 billion by 2027. In 2023, Statista predicts that the revenue from the retail cosmetics market in Vietnam will reach USD 2.36 billion. The compound annual growth rate (CAGR) of the Vietnamese retail cosmetics market for the period 2023-2027 is estimated at 3.32%.



Hình 2-1 Forecast Revenue of cosmetic retail market in Viet Nam in 2018-2027 period

According to data from Allied Market Research, the size of the health and beauty care products market in Vietnam was USD 854.3 million in 2019, and it is expected to grow at a compound annual growth rate (CAGR) of 11.7% during the period 2021-2027. Meanwhile, according to Mintel, a global market research company, the Vietnamese cosmetics market is valued at approximately USD 2.3 billion. Among these, skincare products are the most popular, with over 60% of consumers using them daily.

The report from Allied Market Research indicates that Gen Z (those born between 1997 and 2012), who grew up during the internet boom and are easily influenced by online advertisements, will be the driving force behind the growth of Vietnam's retail cosmetics market in the coming years.

### 2.2 Market Survey

The organiccosmecs market in Vietnam has been developing for a long time. However, to have a more objecve view of the organic cosmetics market, a comprehensive understanding of the market for organic cosmetics is necessary to provide development directions that are genuinely correct, unfortunely there isn't much research to support it. Therefore, survey the knowledge of organic cosmetic consumers will assess the level of consumer awareness and understanding to implement educational programs to increase awareness of the benefits of organic cosmetics.

- **Objecves:** The purpose of survey is to assess knowledge about organic cosmecs of consumers in Can Tho City.
- **Methods:** The surey is conducted by interviewing 559 organic cosmecs consumers in Can Tho City using a set of interview quesons to assess consumers' knowledge of organic cosmecs.

## MARKET INFORMATION

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Characteristic		Frequency (n=559)	Rate (%)
<b>Gender</b>	Male	164	29.3
	Female	395	70.7
<b>Age</b>	Under 18	29	5.2
	From 18 to 35	403	72.1
	From 36 to 50	121	21.6
	From 51 to above	6	1.1
<b>Educational background</b>	Under high school	41	7.3
	High school	80	14.3
	College	121	21.6
	<b>University and higher</b>	<b>317</b>	<b>56.7</b>
<b>Occupation</b>	Pupil - Student	228	40.8
	Worker	45	8.1
	Healthcare worker	73	13.1
	Office staff	92	16.5
	Farmer	6	1.1
	Homemaker	31	5.5
	Civil servant	26	4.7
	Other	58	10.4
<b>Area</b>	Rural areas	157	28.1
	Urban areas	402	71.9
<b>Price of purchased organic cosmetics</b>	Under 4.23 USD	102	18.2
	From 4.23 USD to under 8.46 USD	215	38.5
	From 8.46 USD to under 21.14 USD	159	28.4
	From 21.14 USD to under 42.3 USD	59	10.6
	Above 42.3 USD	24	4.3
<b>Marital status</b>	Single	392	29.9
	Married	167	70.1

*Hình 2-2 Table of General information consumers buying organic cosmetics*

Women have a higher rate of purchasing organic cosmetics than men (accounting for 70.7%), consumers aged 18-35 have the highest purchase rate (accounting for 72.1%). The majority of consumers have university degrees (accounting for 56.7%) and are often students (accounting for 40.8%).

## MARKET INFORMATION

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Question	Frequency (n)	Correct rate (%)
1.Organic cosmetics are cosmetics originating from nature.	423	75.7
2.Organic cosmetics containing at least 95% organic substances (except salt and water) have been certified.	332	50.9
3. Organic substances in organic cosmetics only come from plants.	233	41.7
4.Organic cosmetics may contain preservatives (in very small amounts) if a suitable natural replacement cannot be found.	330	59.0
5.In organic cosmetics, there are some heavy metal residues such as chromium, lead, nickel, etc.	306	54.7
6. Organic cosmetics are safe for pregnant women and children.	324	58.0
7. Homemade natural cosmetics are also organic cosmetics.	240	42.9
8.Organic cosmetics are not only limited to makeup but also other products such as toothpaste, shampoo, perfume, etc.	364	65.1
9. Because of its high effectiveness and safety, organic cosmetics can be chosen as a substitute for other cosmetics.	345	61.7
10. The shelf life after opening the box of organic cosmetics is usually shorter than conventional cosmetics because it only contains a small amount of allowed preservatives.	364	65.1

Hình 2-3 Table of Consumer knowledge about organic cosmetics

Most consumers correctly answered the question "Organic cosmetics are natural cosmetics" accounting for the highest rate of 75.7%. The question "Organic substances in organic cosmetics only come from plants" has the highest number of users answering incorrectly (58.3%).

Knowledge	Frequency (n)	Rate (%)
Good	129	23.1
Medium	343	61.4
Not good	87	15.6

Hình 2-4 Table of Consumers' general knowledge scores about organic cosmetics

The majority of consumers have average or higher knowledge (61.4%). There are 129 people with good knowledge (23.1%) which is lower than the number of people with average knowledge (61.4%). The number of consumers with poor knowledge has the lowest rate of 15.6%.

⇒ **Conclusion:** The results show that the majority of people have quite good knowledge, but there are still many people who do not clearly understand organic cosmetics. In addition, highly specialized people, especially medical

staff, often understand organic cosmetics better than other groups. From there, it is necessary to continue to improve detailed knowledge and ensure information transparency to increase consumer trust and satisfaction.

### 2.3 Consumer Behavior Analysis

#### *Purchase motivation.*

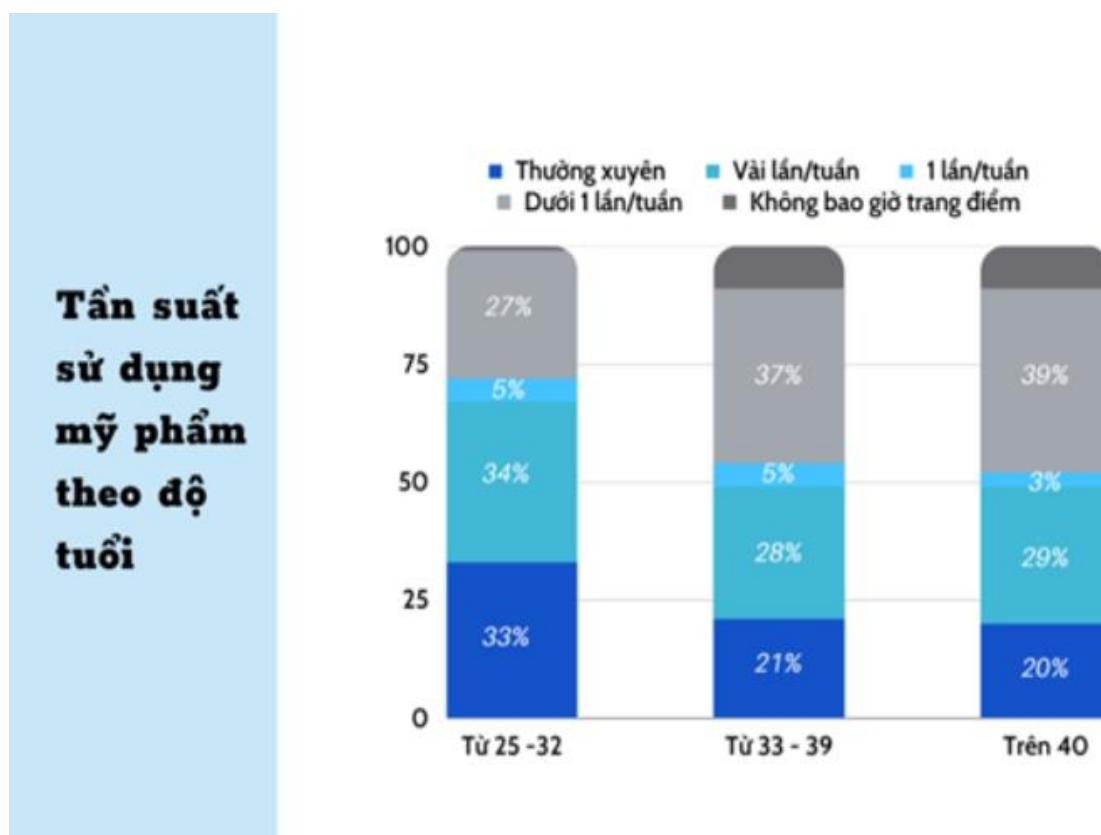
- **Health and Safety:** One of the main motivations for consumers choosing organic cosmetics is the desire to improve skin health and quality products. According to a 2023 survey by the Organic Trade Association (OTA), 82% of consumers choose organic products for the desire to have better skin. They believe that organic cosmetics do not contain synthetic chemicals, are generally gentler, and less likely to cause irritation, making them suitable for people with sensitive skin.
- **Environmental Protection:** Organic cosmetics use natural ingredients, avoiding chemical synthesis processes, which help minimize environmental pollution. The cultivation and extraction of organic ingredients typically avoid the use of pesticides and chemical fertilizers, contributing to the protection of soil and water. Furthermore, many organic cosmetic brands use recyclable or biodegradable packaging, helping to reduce plastic waste and its negative impact on the environment.
- **Personal Values and Consumer Trends:**
  - + Consumers choose organic cosmetics as part of a healthy lifestyle, focusing on the use of natural products that are not harmful to their bodies and the environment.
  - + Consumers want to contribute to protecting the planet by choosing environmentally friendly products, reducing pollution and waste. They participate in a community of environmentally conscious consumers and promote sustainable actions.

### *Awareness and Understanding*

- ***Understanding of Organic Certification:*** Awareness of organic certification is increasing. Organic cosmetics are often certified by reputable organizations such as USDA Organic, COSMOS, and Ecocert. These certifications ensure that the products comply with strict standards regarding their origin and production processes. Consumers trust these certifications because they provide assurance of the quality and safety of the products.
- ***Awareness of Benefits:*** Consumers are becoming more aware of the health benefits of organic cosmetics. They believe that organic cosmetics are generally less irritating and safer for the skin compared to products containing synthetic chemicals. Additionally, the environmental benefits of organic cosmetics, such as reducing pollution and supporting sustainable agriculture, are becoming increasingly apparent.

### *Habits*

- ***Frequency of use:***



Hình 2-5 Frequency of using cosmetics by age

#### Average Monthly Expenditure on Beauty Products by Age Groups:

- + Ages 25-32: 700,000 VND
- + Ages 33-39: 610,000 VND
- + Ages 40 and above: 590,000 VND

Thus, the age group from 25-32 is the most potential customer group due to their leading frequency of use and expenditure on beauty care products.

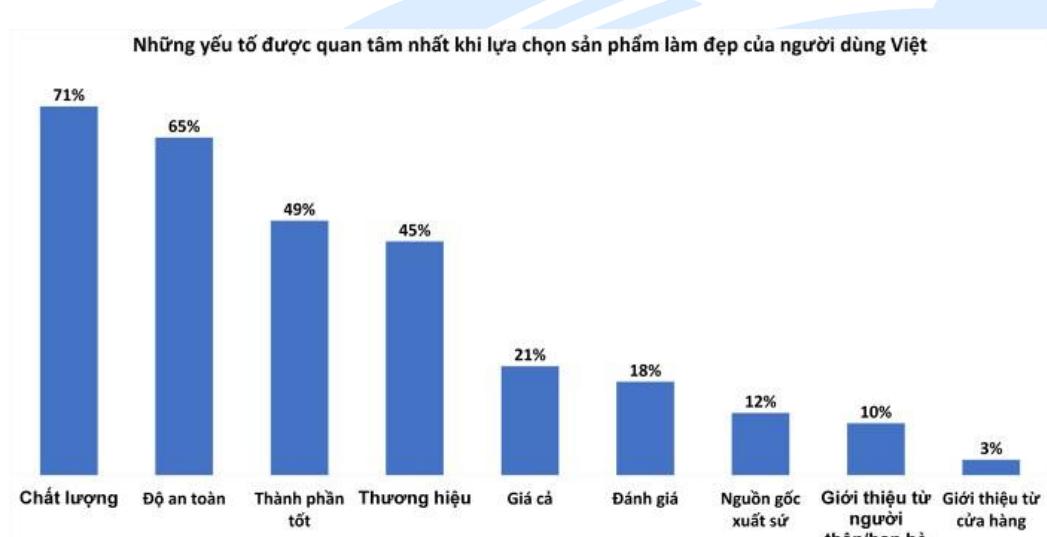
#### - Shopping Channels

- + **E-commerce:** Online shopping through e-commerce platforms like Amazon, Shopee, and Lazada is becoming popular due to its convenience and the wide variety of products available.

+ **Brand Websites:** Many consumers prefer to purchase directly from the websites of organic cosmetics brands to ensure authenticity and receive detailed product information.

+ **Specialty Organic Cosmetics Stores:** Specialty stores that sell organic products provide a direct shopping environment where consumers can try products and receive advice from staff.

### *Determining factor*



Hình 2-6 The most important factors considered by Vietnamese consumers when choosing beauty products (Source Q&A)

When analyzing the factors influencing purchasing decisions, it is evident that consumers often consider various aspects before making a choice. Firstly, product quality is always the top priority, with an emphasis on freshness, natural ingredients, and the absence of harmful preservatives. The brand and the manufacturer's reputation also significantly impact purchasing decisions, as consumers tend to trust brands that have proven quality and sustainability. Price is another crucial factor, especially in challenging economic times, where consumers seek a balance between quality and cost. Additionally, factors such as product origin, organic certifications, and transparent production processes play important roles in building trust and attracting customers.

### 2.4 Market information



Hình 2-7 Interest level over time in organic cosmetics

According to Google Trends, search interest in organic cosmetics has been on an upward trajectory in recent years. This indicates a growing consumer inclination towards beauty products that are safe and beneficial for the skin. This trend reflects an increasing awareness and demand for products that emphasize health and safety in their formulations.

### 2.5 Current Trends in the Organic Cosmetics Industry:

There is a significant push towards sustainable practices, including the use of eco-friendly packaging and circular beauty. Brands are focusing on using recycled materials, minimizing packaging waste, and incorporating recycled ingredients from food production, such as pomegranate and lemon peels.

The rise of personalized beauty products is being driven by technological advancements. Digital consultations using apps, AR, and VR allow consumers to receive skincare advice and products tailored to their specific needs. This trend emphasizes the growing importance of personalization in the beauty industry.

Consumers are increasingly seeking products with transparent, non-toxic ingredient labels. The "clean beauty" movement highlights safe, effective formulas free from harmful chemicals. The clean beauty market is rapidly growing, with significant demand for ingredients like hyaluronic acid, vitamin C, and collagen.

Brands are developing products catering to different skin tones and genders, promoting messages of representation and inclusivity in their marketing strategies. This trend is part of a broader movement towards representative and accessible beauty products.

In response to environmental concerns, brands are innovating in sustainable packaging. This includes using biodegradable materials, developing refillable packaging options, and reducing reliance on petroleum-based plastics.

### 2.6 Supply Source Identification

Businesses collaborate with internationally certified organic suppliers as their source of ingredients. These suppliers adhere to organic standards and ensure natural origins that are safe for health.

- Hung Loc Phat Pharmaceutical and Cosmetics Company Limited\*\*: Specializes in supplying organic cosmetic ingredients imported from Europe, the United States, Australia, etc., certified by USDA Organic, Ecocert, Cosmos.
- Nam Long Pharmaceutical and Trading Company Limited\*\*: Offers a variety of organic cosmetic ingredients such as butter, wax, essential oils, plant extracts, additives, etc., certified by USDA Organic, Ecocert, Cosmos.
- Golden Gate Vietnam Limited Liability Company\*\*: Specializes in supplying organic cosmetic ingredients produced in Vietnam and imported from South Korea, certified by USDA Organic, Ecocert, Cosmos.

### 2.7 Competitors

### 2.7.1 Cỏ Mèm Homelab

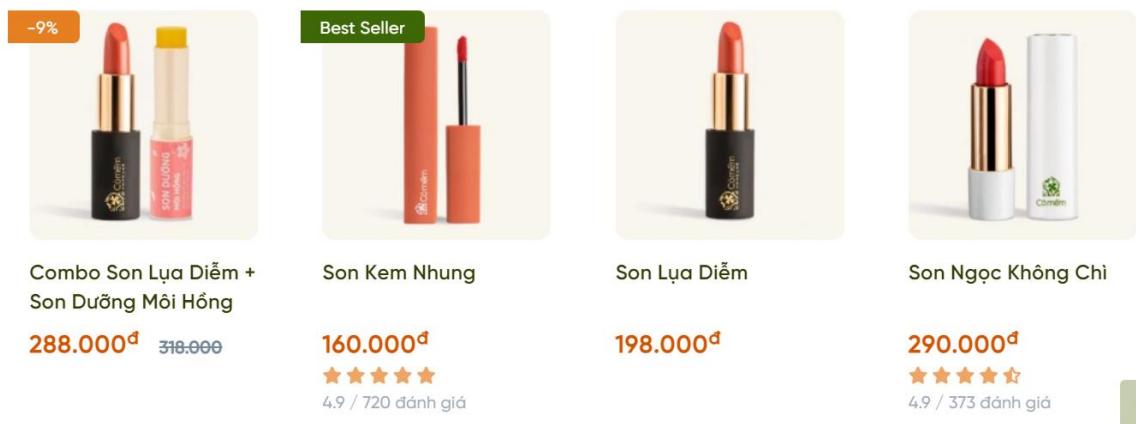


Hình 2-8 Cỏ Mèm HomeLab's logo

- **Cỏ Mèm Homelab** is a Vietnamese natural skincare brand established in 2018. Its products are made from 100% natural ingredients, safe for the skin and hypoallergenic. Cỏ Mèm Homelab is manufactured entirely from pure natural herbal ingredients, free from preservatives. This ensures that the products can be used by all customers, including pregnant and lactating mothers.

Hình 2-9 Cỏ Mèm HomeLab's website interface

## MARKET INFORMATION



Hình 2-10 Cỏ Mềm HomeLab's featured products

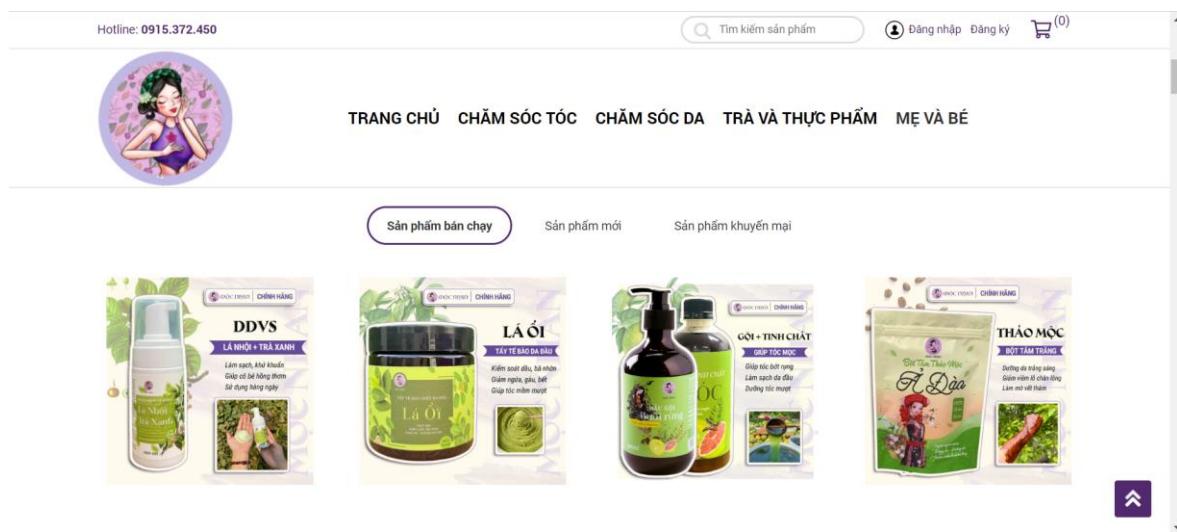
### 2.7.2 Mộc Nhan



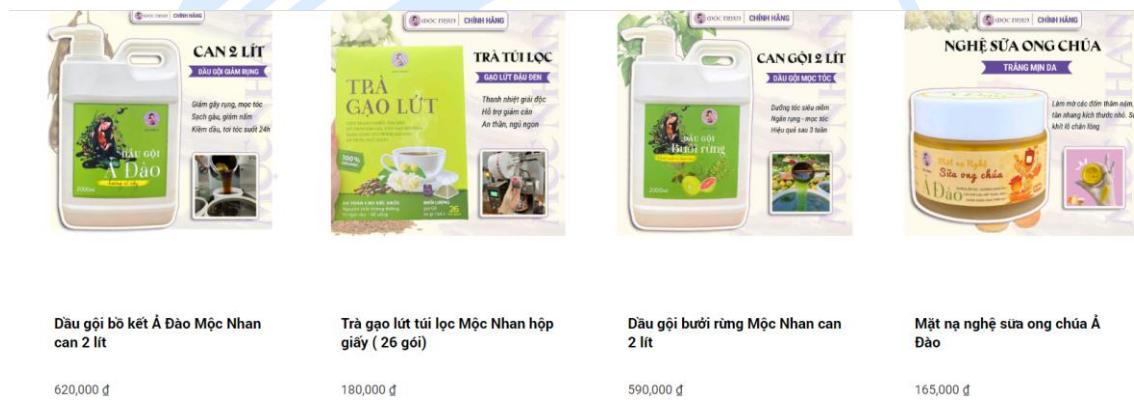
Hình 2-11 Mộc Nhan's logo

- **Mộc Nhan** is an organic skincare brand from Vietnam established in 2018. Its products are made from 100% natural ingredients, safe for the skin. The brand manufactures health and beauty products purely based on traditional methods. They pride themselves on providing high-quality, safe products that do not contain preservatives or artificial fragrances.

## MARKET INFORMATION



Hình 2-12 Mộc Nhan's website interface



Hình 2-13 Mộc Nhan's featured products

### 2.7.3 Naunau



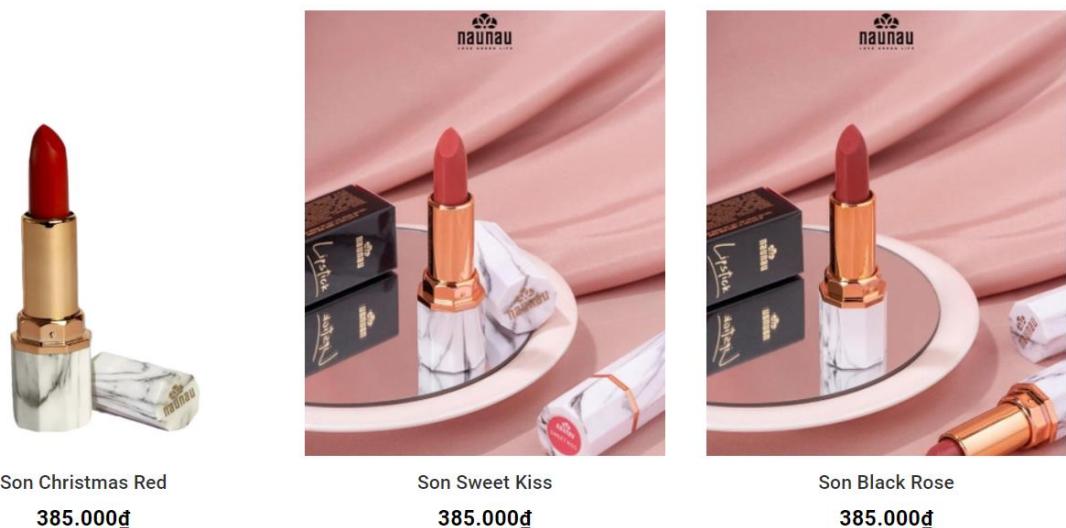
Hình 2-14 Naunau's

logo

**NauNau** is a natural skincare and fragrance brand established since 2013 by Ms. Huynh Hai Yen. This brand has quickly become one of the beloved cosmetic brands in Vietnam. NauNau's products use natural ingredients, environmentally friendly, and are researched based on high standards. NauNau products are made from 100% natural ingredients, safe for the skin. NauNau offers a variety of skincare, haircare, body care products, and even products for living spaces.

The screenshot shows the top navigation bar of the Naunau website. It includes links for 'Đăng nhập | Đăng ký', the 'naunau' logo, 'Hotline: 0938946681', and a search icon. Below the navigation are categories: COLLECTION, FACIAL CARE, BODY CARE, HAIR CARE, AROMATHERAPY PRODUCT, NATURAL PERFUME, SÁCH, and GIÓ HÀNG (0). Further down are links for TIN TỨC and KHUYẾN MÃI. The main visual area displays several bottles of Naunau products, including 'SỮA TẮM BODY CARE MUA NGÀY Verbena', 'Patchouli', 'Bergamot', 'DẦU GỘI HAIRCARE HERBO', and a small bottle of oil. A blue message icon is visible in the bottom right corner of the product image area.

Hình 2-15 Naunau's website interface



Hình 2-16 Naunau's featured products

### 2.8 Customer segments

#### 2.8.1 Age

- Young adults (18-35 years old): Seeking skincare products to maintain youthful skin and makeup products.
- Middle-aged individuals (36-55 years old): Focus on anti-aging products and deep skincare.
- Elderly people (over 55 years old): Prefer products that help maintain healthy skin and minimize wrinkles.

#### 2.8.2 Gender

- Female: Women are the main target customers of cosmetics, including organic cosmetics. They are interested in various types of products, from skincare and makeup to hair and body care.
- Male: Men are increasingly interested in skincare and using cosmetics more. They often choose simple, versatile, and fast-acting products.

#### 2.8.3 Income

- High income: Willing to spend more on premium products.

- Medium income: Seek a balance between price and quality, interested in affordable but safe and effective products.
- Low income: Prioritize affordable products, often seek out promotions and discounts.

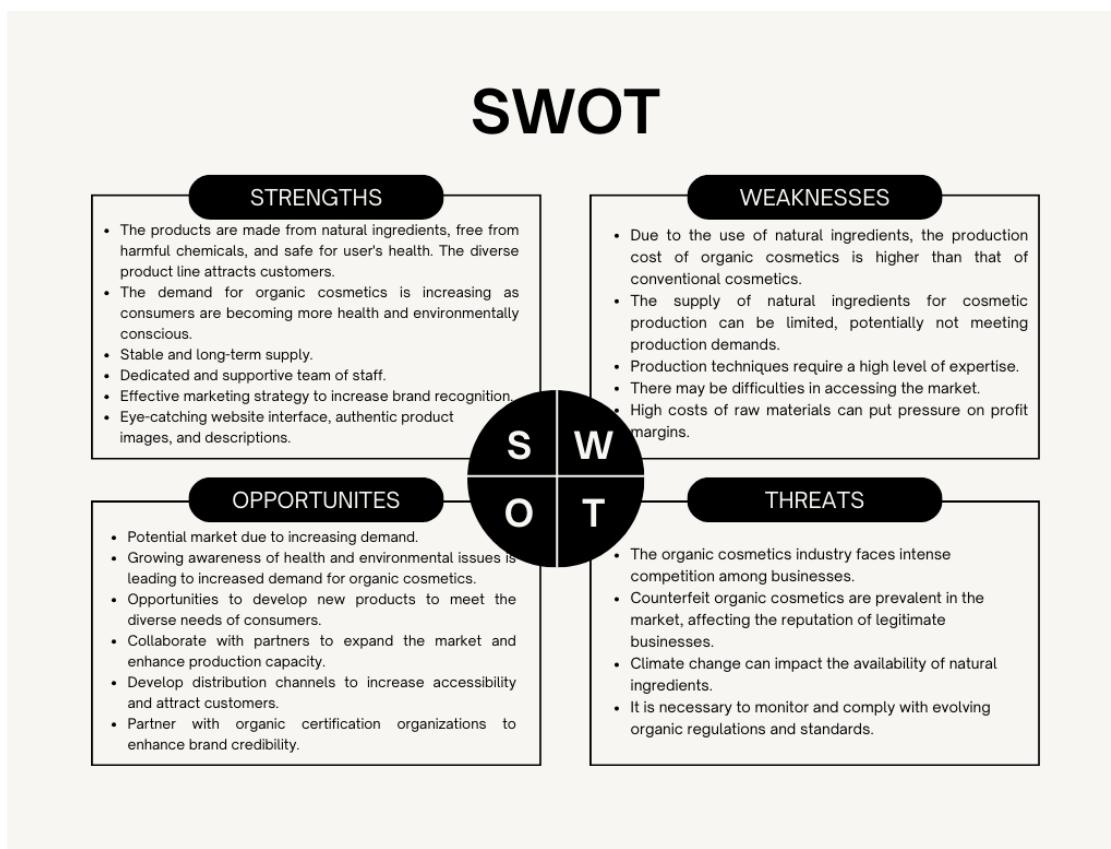
### 2.8.4 Lifestyle

- Advocates of a healthy lifestyle: Care about the natural and organic origin of products, as well as environmental protection factors.
- Individuals with skin or specific health issues: Seek non-irritating products, free from harmful chemicals.
- Followers of the natural beauty trend: Always seek natural beauty methods, prioritize products with natural ingredients, free from preservatives or artificial coloring agents.

### 2.8.5 Geographical location

- Urban customers: Tend to access and adopt new products faster, often have higher incomes and are willing to spend on personal care products.
  - Rural customers: May require more practical and reasonably priced products, sometimes prioritizing traditional and familiar products.
- ⇒ Primary customer segment: Women aged 18 to 35 interested in health and beauty, with at least average income, aware of the harmful effects of chemicals in conventional cosmetics, tend to prioritize natural, health-safe products. Customers with skin issues such as sensitive skin, allergies, etc., have a high demand for gentle organic cosmetics that are safe for the skin.

## 2.9 SWOT analysis



Hình 2-17 Organic cosmetics's SWOT Analysis

### 2.9.1 Identifying Characteristics and Need of Target Customers

- Age: 22 – 45
- Gender: Predominantly female, with a small portion being male
- Region: Across all provinces in Vietnam
- Characteristics: Passionate about beauty, interested in beauty products, high demand for beauty products, quick to update trends, closely engaged with social media and e-commerce platforms, willing to invest in beauty, capable of spending on mid-range beauty products.
- Behavior: Often online during lunch breaks, actively search and research information about your products on social media platforms, share experiences,...

### 2.9.2 Understanding customer' buying habits

## **MARKET INFORMATION**

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Customers' shopping habits for buying cosmetics online can be understood through current shopping trends and mindsets. Here are some common habits of online cosmetic shoppers:

- Research and compare products: Customers often spend time researching and comparing cosmetic products before making a purchase decision. They will read reviews, consider ingredients, and learn about the effectiveness of the product. Cosmetic review websites and forums are often important sources of information for this research.
- Seek information from credible sources: Online cosmetic shoppers typically seek information from credible sources such as the brand's official website, beauty blogs, and celebrities or experts in the beauty field. They want to ensure that the products they buy are safe and effective.
- Interest in natural and organic ingredients: Online cosmetic shoppers tend to be interested in products with natural and organic ingredients. They often look for organic or natural labels and emphasize that the product does not contain harmful chemicals.
- Search for deals and promotions: Customers often focus on finding deals, discounts, and promotions when shopping for cosmetics online. They may sign up to receive information via email or follow brands' social media pages to stay updated on the latest promotions.

# 3

## BUSINESS MODEL

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### 3.1 Brand

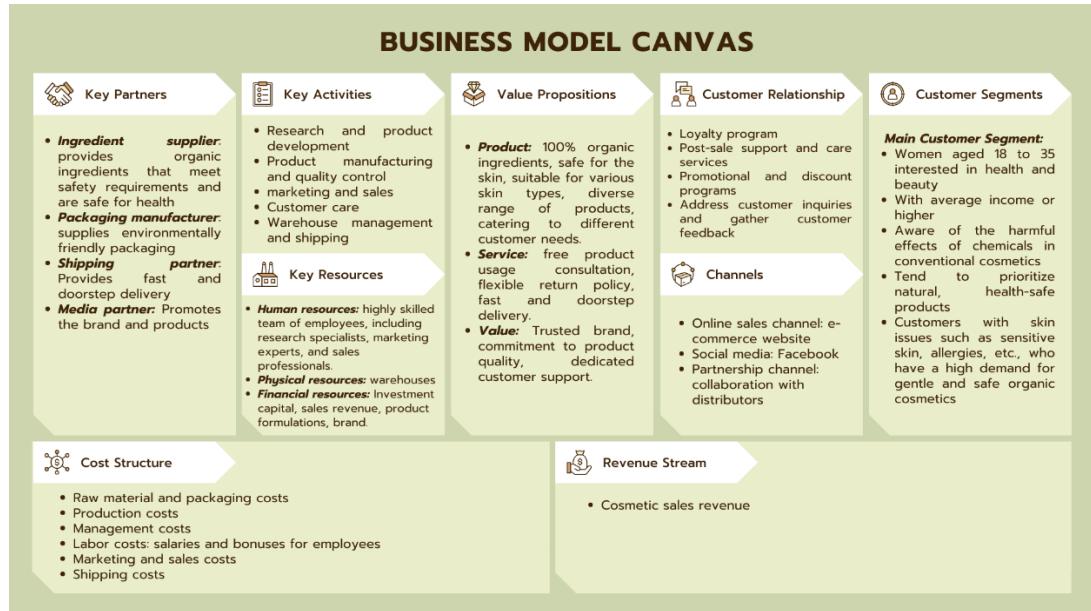
- Brand name: Hạnh Dung Organic
- Slogan: "Treasures from Nature"
- Logo:



Hình 3-1 Hạnh Dung Organic's logo

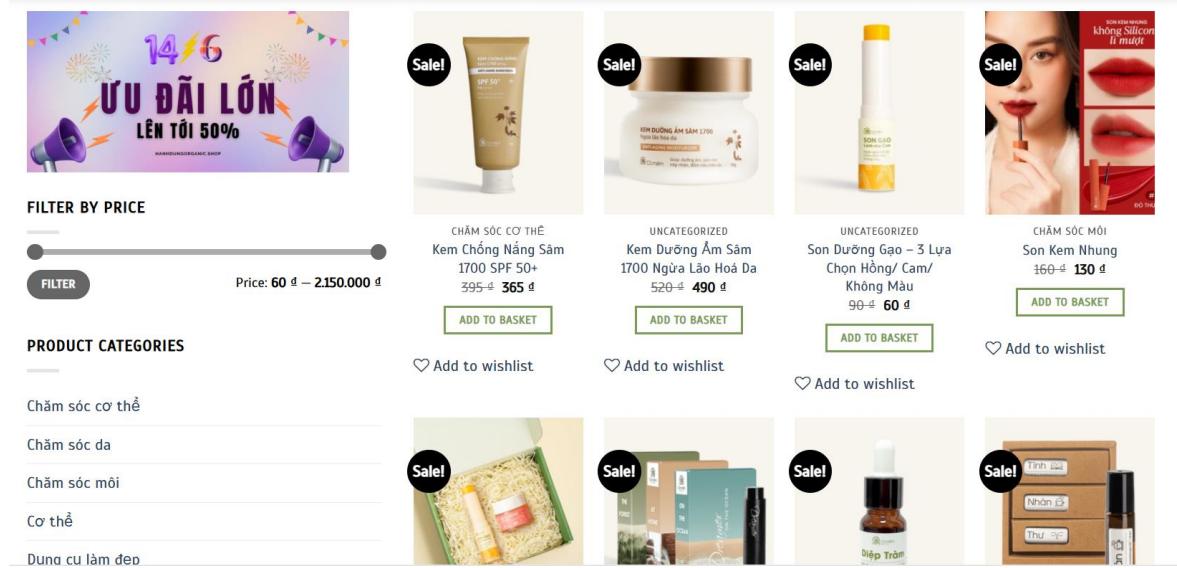
### 3.2 Business model canvas

## BUSINESS MODEL



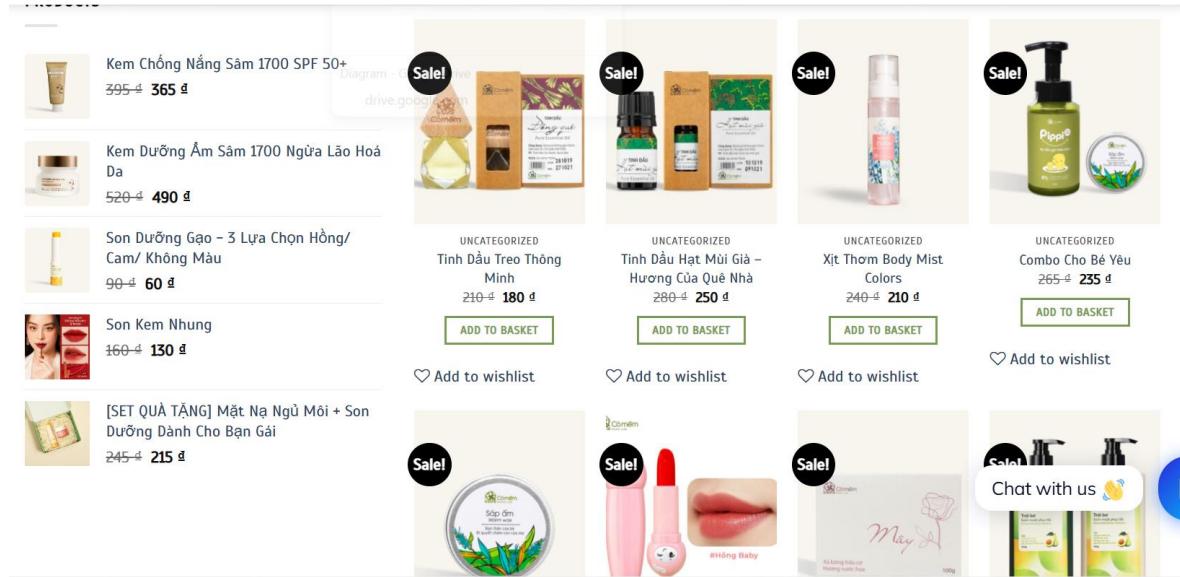
Hình 3-2 Hạnh Dung Organic's Business Model Canvas

### 3.3 Products

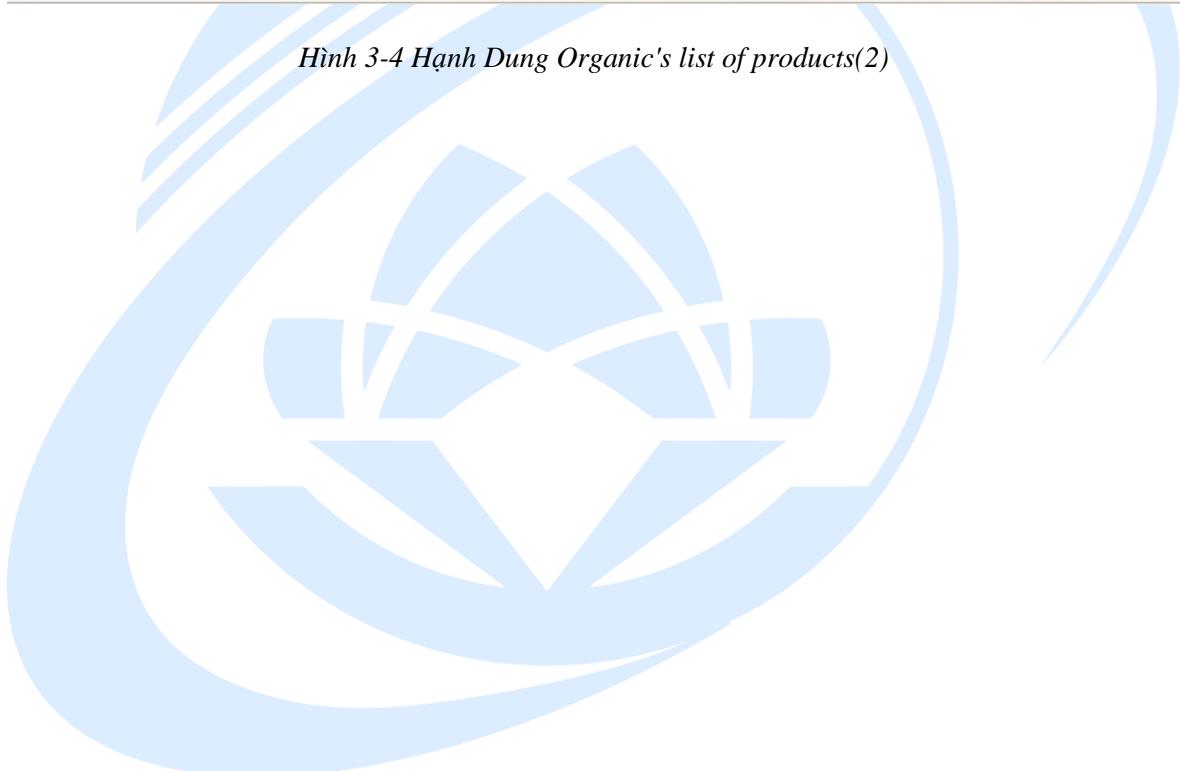


Hình 3-3 Hạnh Dung Organic's list of products(1)

## BUSINESS MODEL



Hình 3-4 Hạnh Dung Organic's list of products(2)



# 4

## SYSTEM REQUIREMENT ANALYSIS

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### 4.1 Non-functional requirements

- Ease of Use: The system should be intuitive, allowing users without coding experience to easily create and manage an e-commerce website.
- Performance: The website should load quickly and provide a seamless shopping experience to users.
- Security: SSL certificates should be installed for website security, and payment gateways should be secure.
- Scalability: The system should be able to handle a high number of monthly visitors and product listings.
- Reliability: Hosting services should provide reliable uptime and backup mechanisms to ensure data safety.

### 4.2 Functional requirements

- Website Design and Customization: Users should be able to design engaging landing pages, customize navigation menus, and adjust website settings easily.
- Product Management: The system should support various types of products (simple, variable, group), product attributes, and customization options.

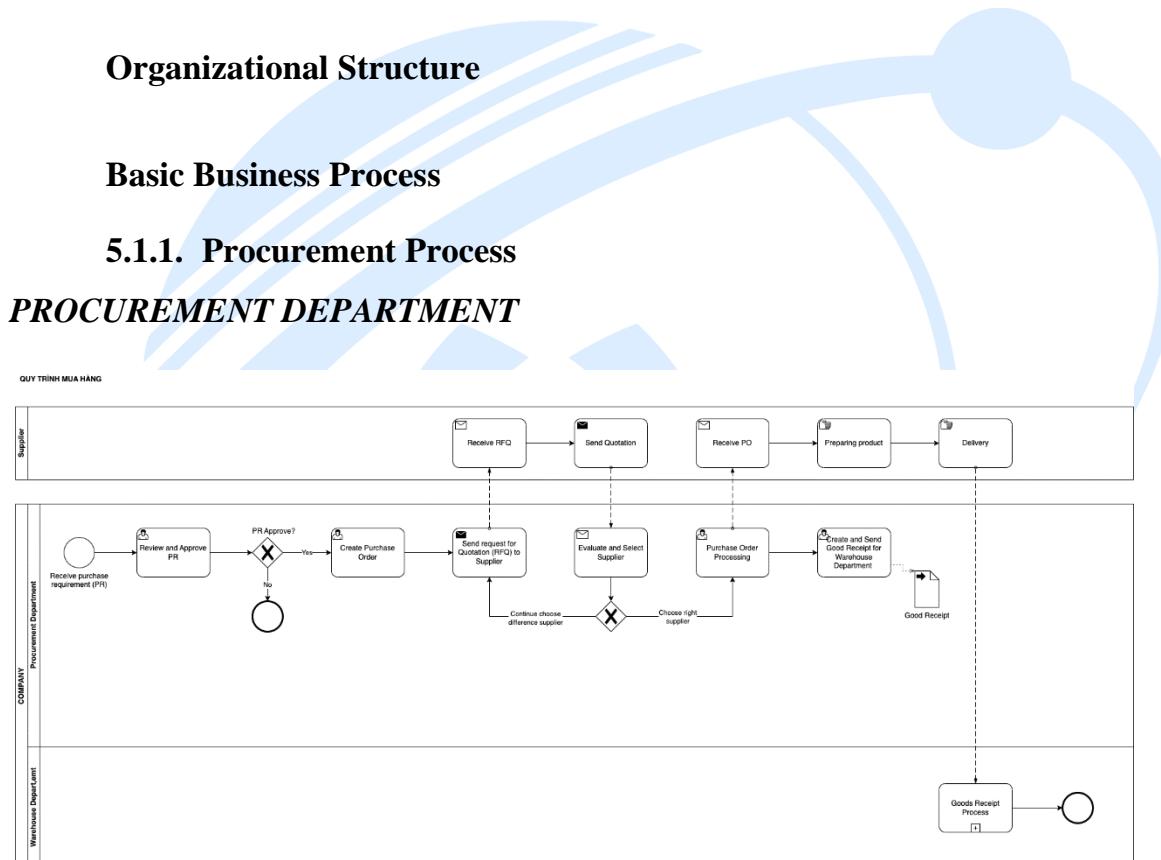
- Order Management: Customers should be able to view and manage their orders, update payment methods, and receive email notifications with order details.
- Integration: Integration with third-party services like email marketing platforms (Sendinblue, Constant Contact), payment gateways (PayPal), and shipping services is required.
- Performance Optimization: Options for caching, CDN integration, and server selection for faster website speed should be available.

### 4.3 Intergrated Features

- Website Builder: Utilize tools like Flatsome theme and Flotsam Builder for website design and customization.
- E-commerce Functionality: Integration with WooCommerce for setting up the online store, managing products, and processing transactions.
- Email Marketing: Integration with Sendinblue and Constant Contact for managing email subscriber lists and sending email campaigns.
- Payment Processing: Integration with Stripe and PayPal for secure payment processing.
- Shipping Management: Configuration of shipping zones, rates, and classes for customized shipping options.

# 5

# SYSTEM BUSINESS PROCESS ANALYSIS



Hình 5-1 Procurement Process

### Specification:

No.	Performing Department	Action	Explanation
1	Warehouse Department	Inventory check and	Warehouse staff check the current quantity of goods in stock, use sales

## SYSTEM BUSINESS PROCESS ANALYSIS

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		demand forecasting	data and forecast future demand to determine items needing replenishment. They then create a Purchase Requisition (PR) and send it to the Purchasing Department.
2	Purchasing Department, Senior Management	Review and approve Purchase Requisition (PR)	The Purchasing Department receives PR from the Warehouse Department, checks the validity and necessity of the request. They then submit the PR to Senior Management for review and approval. If approved, the PR is converted into a Purchase Order (PO).
3	Purchasing Department	Search for suppliers and send Request for Quotation (RFQ)	The Purchasing Department searches for potential suppliers, sends Request for Quotation (RFQ), and receives quotations from suppliers.
4	Supplier	Receive request for quotation and send quotation	The supplier receives the request for quotation and sends back the corresponding quotation.
5	Purchasing Department	Evaluate and select supplier	They compare and evaluate quotations based on price, quality, delivery time, and other terms, then select the most suitable supplier.

## SYSTEM BUSINESS PROCESS ANALYSIS

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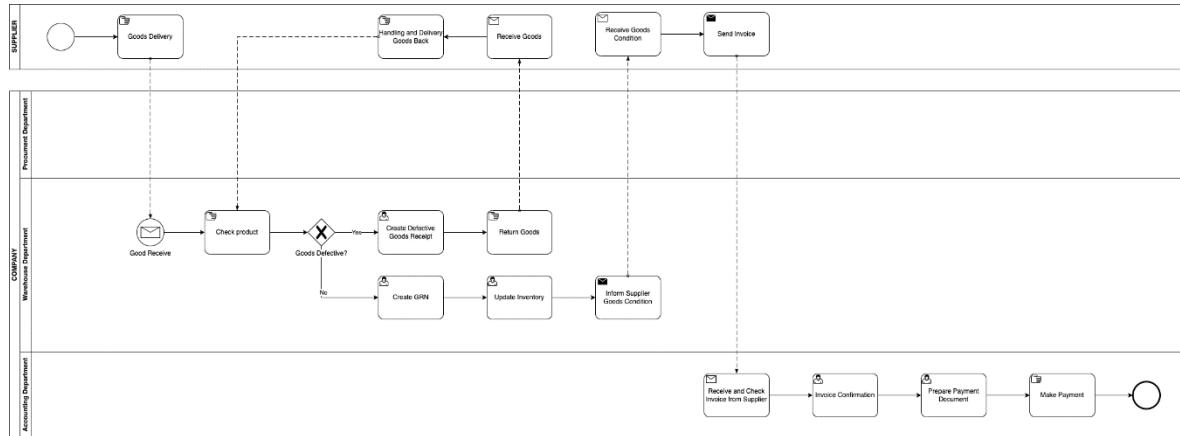
6	Purchasing Department	Create and send Purchase Order (PO)	The Purchasing Department creates an official Purchase Order (PO) based on approved information and sends the Purchase Order to the supplier. They ensure that the terms and conditions are clearly stated in the PO and receive confirmation from the supplier.
7	Supplier	Deliver goods	Upon receiving the order information from the company, the supplier will proceed to deliver the products according to the purchase order.
8	Warehouse Department	Receive goods and check quantity, quality	When the supplier delivers the goods to the warehouse, the Warehouse Department receives the goods and checks the quantity, quality of the goods according to the standards specified in the Purchase Order. If the goods meet the requirements, they will prepare a Goods Received Note (GRN) and proceed with the warehouse entry process.

*Bảng 5-1 Procurement process's specification*

# SYSTEM BUSINESS PROCESS ANALYSIS

## WAREHOUSE DEPARTMENT

### 5.2.2. Goods Receipt Process



Hình 5-2 Good Receipt Process

### Specification:

No.	Performing Department	Action	Explanation
1	Supplier	Deliver goods	Upon receiving the order information from the company, the supplier will prepare the products and proceed with the delivery according to the purchase order.
2	Warehouse Department	Receive information about shipment from supplier	The Warehouse Department receives notification about the upcoming shipment, including information about the items, quantity, and expected delivery date and time.

## SYSTEM BUSINESS PROCESS ANALYSIS

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3	Warehouse Department	Check the quality of the goods	Warehouse staff and/or quality control personnel inspect the goods to ensure they meet the specified quality standards.
4	Warehouse Department	Handle defective goods (if any)	If defective goods are found, warehouse staff prepare a defect report and notify the Supplier. The Warehouse Department contacts the supplier to negotiate a solution such as exchange, repair, or refund.
5	Warehouse Department	Prepare Goods Received Note (GRN)	After the goods have been inspected and meet the requirements, warehouse staff prepare a Goods Received Note and update it in the warehouse management system.
6	Warehouse Department	Update in the warehouse management system	Warehouse staff enter information about the received goods into the warehouse management system, including quantity, type, and other relevant information.
7	Warehouse Department	Notify the supplier	After the goods have been received into the warehouse, the Warehouse Department notifies the Supplier about the status of the goods and requests an invoice.

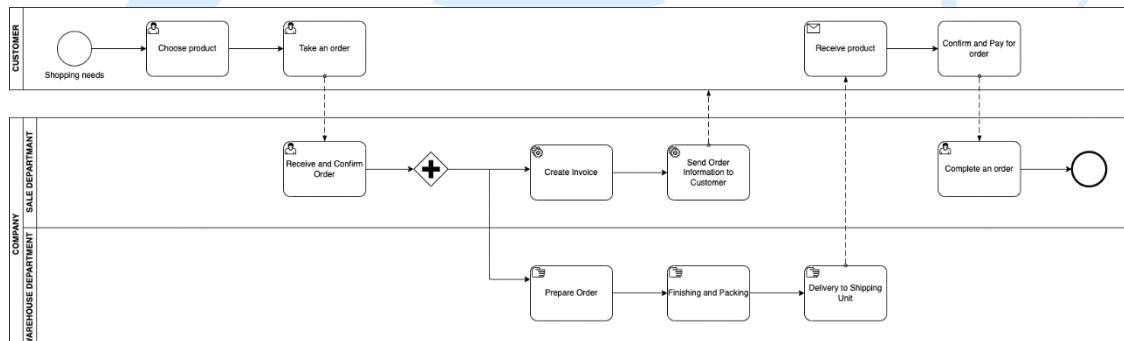
## SYSTEM BUSINESS PROCESS ANALYSIS

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8	Supplier	Receive information and send invoice	Acknowledge the information about the status of the goods and send an invoice to the company's accounting department.
9	Accounting Department	Receive invoice and process payment	The Accounting Department receives the invoice from the supplier, compares it with the Goods Received Note and purchase order to confirm accuracy. Then, they create payment documents and process payment to the supplier according to the agreed terms.

*Bảng 5-2 Good Receipt Process's specification*

### 5.2.3. Goods Delivery Process



*Hình 5-3 Goods Delivery Process*

### Specification:

No.	Performing Department	Action	Explanation

## SYSTEM BUSINESS PROCESS ANALYSIS

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1	Customer	Select product and place order	When customers have a need, they visit the website to search for desired products and proceed to place an order.
2	Sales Department	Receive order	Customers place orders through the store's website. The system records order information and forwards it to the Sales Department.
3	Sales Department	Confirm order information	Sales staff verify order information, quantity, products, and any special requests from the customer.
4	System	Generate invoice	The system automatically generates an invoice with detailed information about the products, customer, shipping, and payment.
5	System	Send email	The invoice is sent to the buyer's email along with the order details.
6	Warehouse Department	Prepare for order	Warehouse staff retrieve items from the warehouse and prepare them for shipping.
7	Warehouse Department	Deliver to shipping partner	The goods are handed over to the shipping partner or delivery service for transportation to the customer's address.
8	Customer	Confirm receipt and payment	The customer receives the goods, makes the payment, and informs the

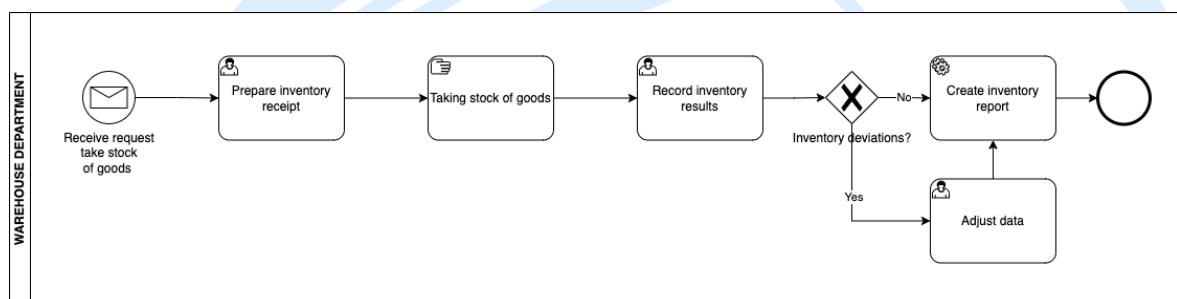
## SYSTEM BUSINESS PROCESS ANALYSIS

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			shop about the successful receipt of the goods.
9	Sales Department	Mark order as completed in the system	The order is marked as completed in the shop's system.

*Bảng 5-3 Goods Delivery Process's specification*

### 5.2.4. Take Stock of Goods Process



*Hình 5-4 Take stock of Goods Process*

#### Specification:

No.	Performing Department	Action	Explanation
1	Warehouse Department	Receive request	After receiving the inventory check request, the Warehouse Management Department will prepare for the inventory check.
2	Warehouse Department	Prepare for inventory check	Print inventory check list, prepare necessary equipment such as barcode scanners, pens, papers, and assign tasks to inventory check staff.

## SYSTEM BUSINESS PROCESS ANALYSIS

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3	Warehouse Department	Conduct inventory check	Count and record the actual quantity of goods in the warehouse. Compare with the quantity on the inventory check list.
4	Warehouse Department	Record inventory check results	Record the actual quantity of each item. Mark any damaged or lost items if applicable.
5	Warehouse Department	Scenario: If discrepancies occur -> Adjust data -> Prepare inventory check report	Adjust data in the warehouse management system to match the actual quantity after the inventory check.
6	Warehouse Department	Scenario: If no discrepancies occur -> Prepare inventory check report	Compile and prepare the inventory check report, record data, and update in the system.

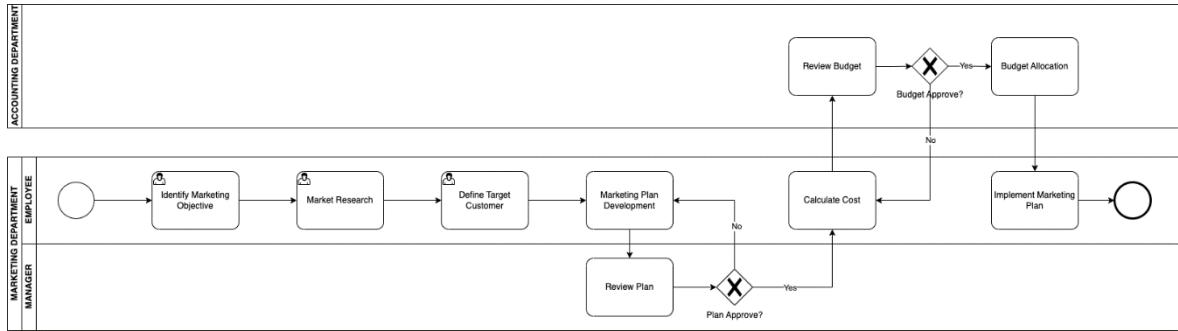
Bảng 5-4 Take stock of Goods Process's specification

## SYSTEM BUSINESS PROCESS ANALYSIS

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### **MARKETING DEPARTMENT**

#### **5.2.5. Building Marketing Campaign Process**



Hình 5-5 Building Marketing Campaign Process

#### **Specification:**

No.	Performing Department	Action	Explanation
1	Marketing Dapartment	Define Marketing Campaign Objectives	Identify specific, measurable, achievable goals within the marketing strategy. Objectives may include increasing sales, growing market share, enhancing brand recognition, and improving customer satisfaction.
2	Marketing Department	Market Research	Gather and analyze information about the market, target customers, and competitors. Utilize research methods such as surveys, interviews, data analysis, and frameworks like SWOT, Design Thinking to

## SYSTEM BUSINESS PROCESS ANALYSIS

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			understand the market and customer needs better.
3	Marketing Department	Identify Target Customers	After market research, select potential customer groups for the company's products.
4	Marketing Department	Develop Marketing Strategy	Develop specific strategies to achieve the set objectives. This includes decisions about product, pricing, distribution channels, and communication strategies.
5	Marketing Department	Submit Strategy to Marketing Management for Approval	If approved -> proceed to step 6. If not approved -> return to step 4.
6	Marketing Department	Estimate Marketing Campaign Costs.	Marketing Department will estimate Marketing campaign costs.
7	Marketing Department	Submit Estimated Costs to the Accounting	If approved -> proceed to step 8. If not approved -> return to step 6.

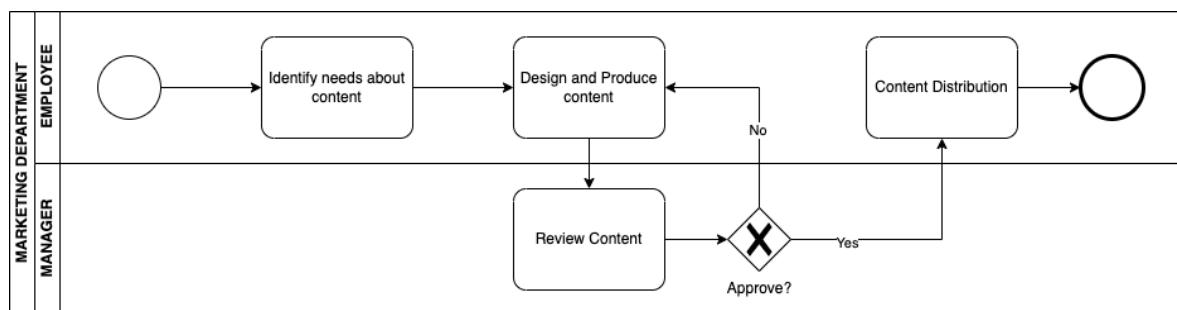
## SYSTEM BUSINESS PROCESS ANALYSIS

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		Department, review the budget's feasibility, and approve or request adjustments.	
8	Accounting Department	Marketing Department Receives Campaign Costs and Launches the Marketing Campaign	
9	Marketing Department	Implement Advertising Campaigns, promotions, events, and other marketing activities.	

Bảng 5-5 Building Marketing Campaign Process's specification

### 5.2.6. Content Production Process



Hình 5-6 Content Production Process

## SYSTEM BUSINESS PROCESS ANALYSIS

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### Specification:

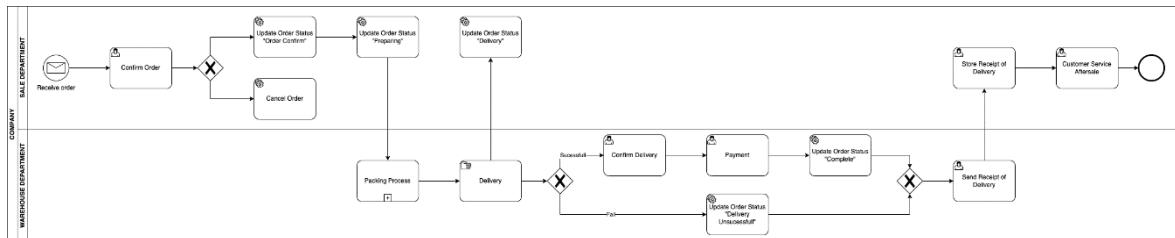
No.	Performing Department	Action	Explanation
1	Employee	Content Needs Identification	The Marketing department identifies specific content needs based on the company's strategy and objectives
2	Employee	Content Design and Editing	The Marketing department designs and edits content according to the pre-established plan.
3	Manager	Content Review and Approval	Content is reviewed, proofread, and approved by the Marketing department to ensure quality and alignment with objectives. If the content is not approved -> return to step 2. If the content is approved -> proceed to step 4.
4	Employee	Content Distribution	Content is distributed across various media channels such as websites, blogs, email marketing, social media, or other communication channels.

Bảng 5-6 Content Production Process's specification

# SYSTEM BUSINESS PROCESS ANALYSIS

## SALES DEPARTMENT

### 5.2.7. Sales Process



Hình 5-7 Sales Process

**Participant Department:** Sales Department, Delivery Department.

**Specification:**

Step 1: Order Reception

The sales department receives orders from customers. Gather detailed information about the products customers want to purchase, quantities, and any special requirements (if applicable).

Step 2: Order Confirmation

Confirm order details with the customer, including products, quantities, prices, and delivery information. Ensure that all order information is accurately and completely recorded.

If the order is not confirmed, end the process.

If the order is confirmed, sales staff update the order status to "Confirmed" and transfer the order to the nearest branch address.

Step 4: Automatic

System transitions order to "Preparing" status.

Step 5: Staff carry out the packaging process for the order.

Step 6: Staff proceed with delivery and update the order status to "Delivery."

Step 7: If delivery is unsuccessful, update the order status to "Don't Receive" and end the process.

If delivery is successful, staff provide a confirmation document for the customer to sign, receive payment from the customer, and update the order status to "Complete."

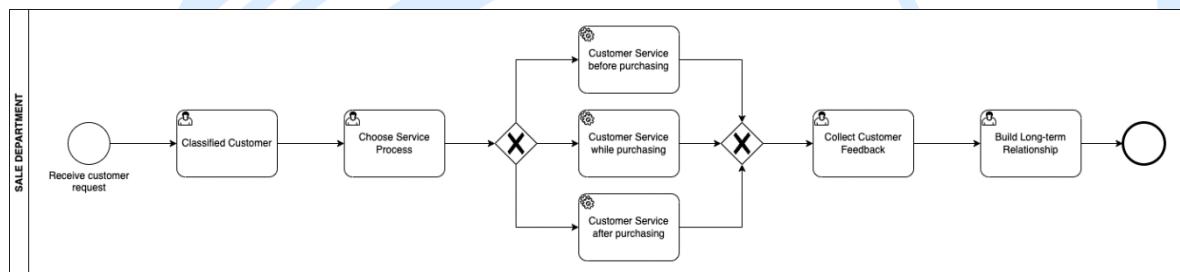
Step 8: Issue delivery receipts, money, or products for unsuccessful deliveries (if any).

Step 9: Sales staff store the delivery receipts.

Step 10: Post-Purchase Customer Care

Monitor and support customers after delivery, resolving issues such as returns or technical support.

### 5.2.8. Customer Service Process



*Hình 5-8 Customer Service Process*

#### Participant Department: Sales Department

##### Specification:

Step 1: Receive Customer Requests

Customer Care staff handle customer inquiries, complaints, or concerns.

Step 2: Customer Segmentation

Segment customers based on the specific characteristics of each group.

Step 3: Select Appropriate Care Processes

Based on customer profiles, the Sales department can select suitable processes to care for customers to provide the best experience.

Step 4: Customer Care

## SYSTEM BUSINESS PROCESS ANALYSIS

The Sales department cares for customers according to the established process.

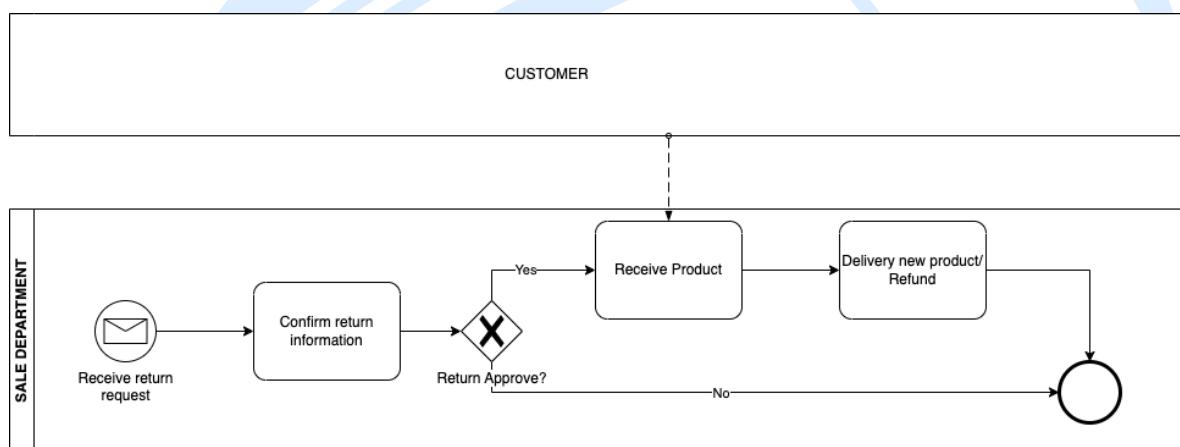
### Step 5: Gather Customer Feedback

Collect customer feedback to improve services in the future.

### Step 6: Build Long-term Relationships

This is the foundation for subsequent customer care steps. A successful customer care process is when customers return for future purchases, become loyal customers, and act as bridges to other potential customers.

#### 5.2.9. Goods Return Process



Hình 5-9 Goods Return Process

**Participant Department:** Sales Department

**Specification:**

#### Step 1: Receive Return Request

Receive return requests from customers via phone, email, chat, or in person.

#### Step 2: Confirm Return Information

Verify customer and product information for the return, including product condition and reason for return.

#### Step 3: Approve and Process Return Request

Inspect the product upon return from the customer. Confirm if the product meets the conditions for return according to company policy.

If the request is not approved -> end the process.

If the request is approved -> proceed to step 4.

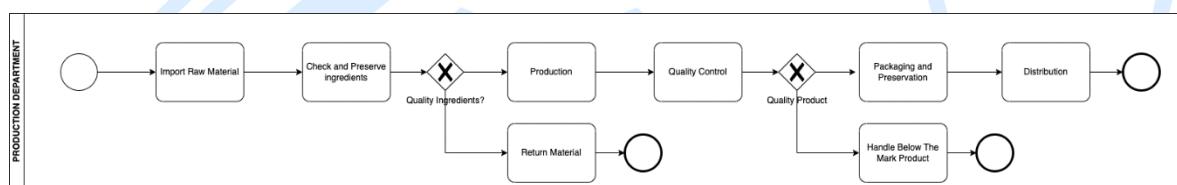
**Step 4: Receive Product from Customer.**

**Step 5: Send Replacement Product or Refund**

Send a replacement product to the customer or issue a refund depending on the request. Ensure that the customer receives the replacement product or refund in the shortest time possible.

### **PRODUCTION DEPARTMENT**

#### **5.2.10. Production Process**



*Hình 5-10 Production Process*

#### **Participant Department: Production Department.**

##### **Specification:**

###### **Step 1: Raw Material Import**

Choose reputable suppliers with international certifications such as USDA Organic, EU Organic, etc. Then, place orders and sign contracts based on the production plan.

###### **Step 2: Inspection and Storage of Raw Materials**

Upon delivery of the raw materials, thorough quality checks are conducted to ensure compliance with organic standards and production requirements.

Store the raw materials under appropriate conditions to maintain quality and freshness.

If the product does not meet quality standards -> return it to the supplier, ending the process.

If the product meets quality standards -> proceed to step 3.

### Step 3: Production

Execute production according to the approved process, ensuring compliance with organic production principles.

Utilize traditional processing methods or advanced technologies suitable for organic products.

### Step 4: Quality Control

Conduct regular and spot checks throughout the production process.

If the product does not meet standards -> handle non-compliant products.

If the product meets standards -> proceed to step 5.

### Step 5: Packaging and Preservation

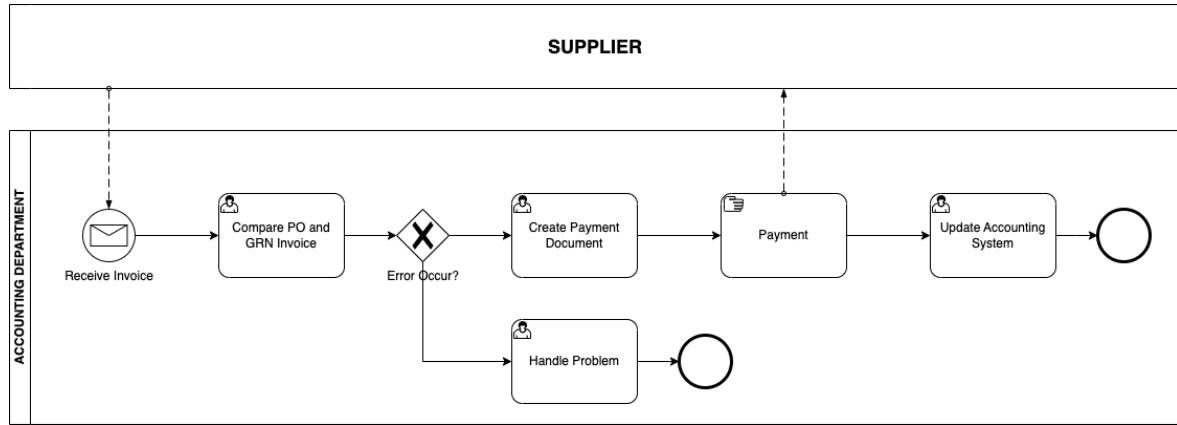
Clearly and accurately label product information, including ingredients, origin, expiration date, usage instructions, and organic logos.

### Step 6: Distribution

Transport products to consumers quickly and safely. Monitor the distribution process to ensure the best possible product preservation.

### FINANCE DEPARTMENT

#### 5.2.11. Debt Payment to Supplier Process



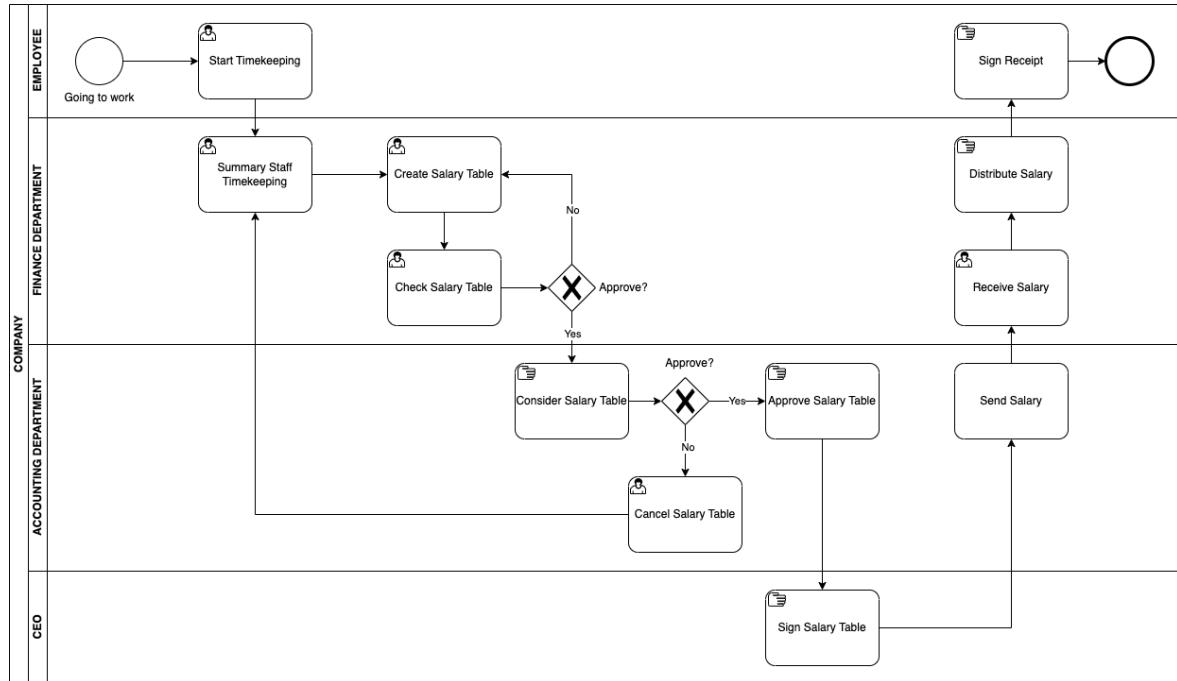
Hình 5-11 Debt Payment to Supplier Process

**Participant Department:** Finance Process, Supplier.

#### Specification:

After receiving the invoice from the supplier, the accounting department will verify the accuracy and validity of the payment invoice. They will compare the invoice with the purchase contract, ensuring that the information matches. If any discrepancies arise, they will address and resolve them. If there are no errors, they will prepare the payment documents and proceed with the payment to the supplier according to the agreed terms. Finally, the accounting department will update the payment information in the accounting system.

### 5.2.12. Employee Salary Calculation Process



Hình 5-12 Employee Salary Calculation Process

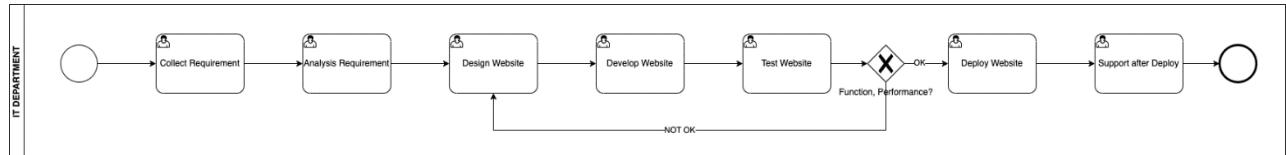
**Participant Department:** Finance Department, Accounting Department, CEO, Employee

#### Specification:

Employees will clock in using the time clock. On payday, the accountant will compile the time records into a timesheet, which will then be sent to the chief accountant for review. If there are any errors, it will be sent back to the accountant to create a new sheet. If no errors are found, the timesheet will be sent to the finance officer for review and approval. If not approved, the accountant will be asked to redo the sheet; if approved, the finance officer will forward it to the director. The director will sign the payroll and send the salary payment decision to the finance officer. The finance officer will then disburse the funds to the chief accountant, and the accounting department will proceed with salary payments to the employees. When employees receive their salaries, they will sign the receipt, concluding the process.

### IT DEPARTMENT

#### 5.2.13. Develop Website Process



**Participant Department:** IT Department, Other Department

#### Specification:

##### Step 1: Requirements analysis

Collect and analyze requirements from customers or other departments.

##### Step 2: Design

Design the architecture and interface of the website.

##### Step 3: Development

Programming and developing website features.

##### Step 4: Testing

Check and fix website errors.

##### Step 5: Deployment

Putting the website into operation.

##### Step 6: Post-deployment support

Provides support and warranty during the early post-deployment phase.

#### 5.2.14. Website Maintenance Process



**Participant Department:** IT Department

#### Specification:

##### Step 1: Monitoring

Monitor the website's performance to detect issues timely.

##### Step 2: Regular Maintenance

Perform regular maintenance tasks like software updates and data backups.

### Step 3: **Incident Handling**

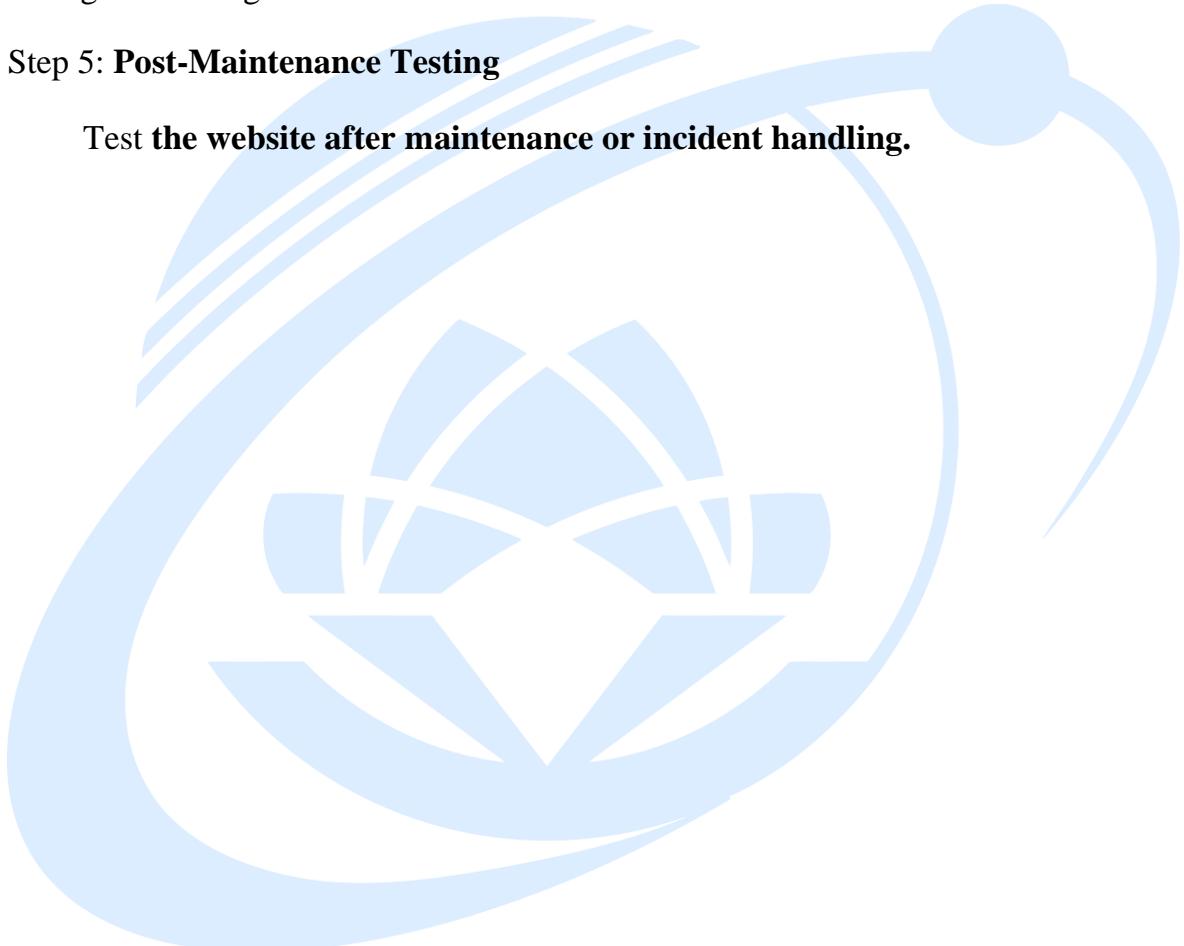
Handle any incidents that occur during operation.

### Step 4: **Improvement and Upgrades**

Implement improvements and upgrades as requested by clients or identified during monitoring.

### Step 5: **Post-Maintenance Testing**

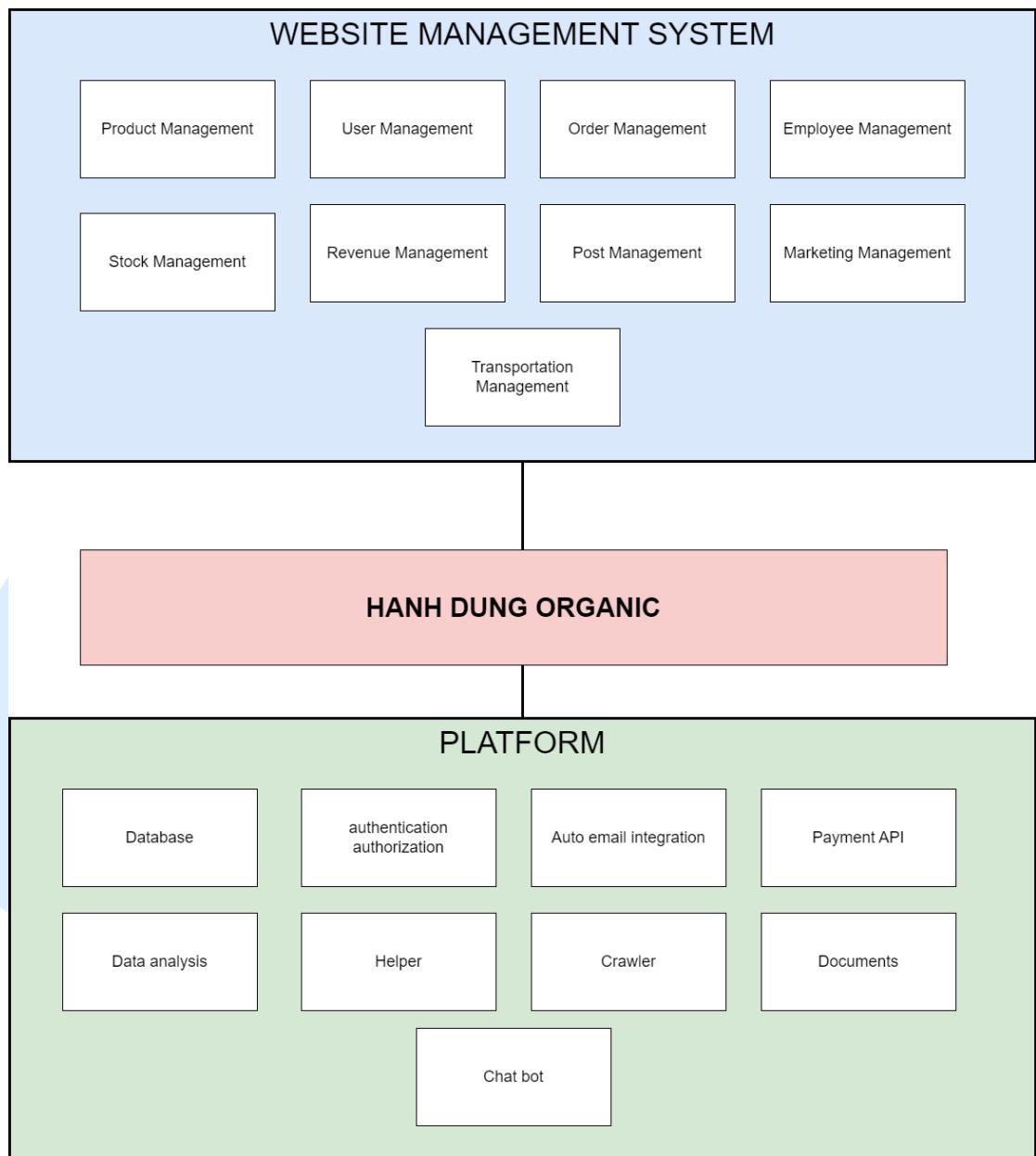
Test the website after maintenance or incident handling.



# 6 ANALYSIS AND DESIGN

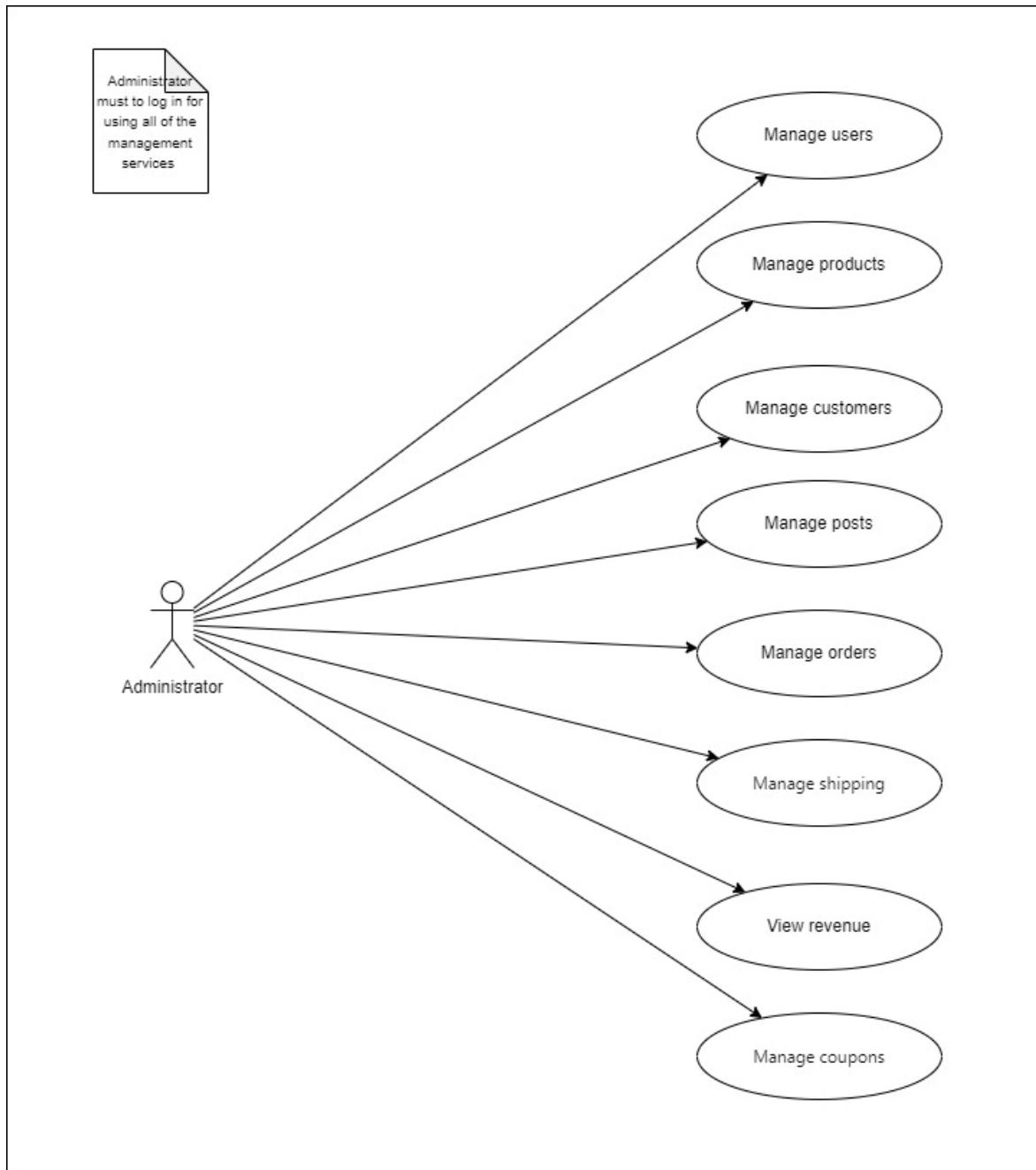
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## Overview Architecture Diagram



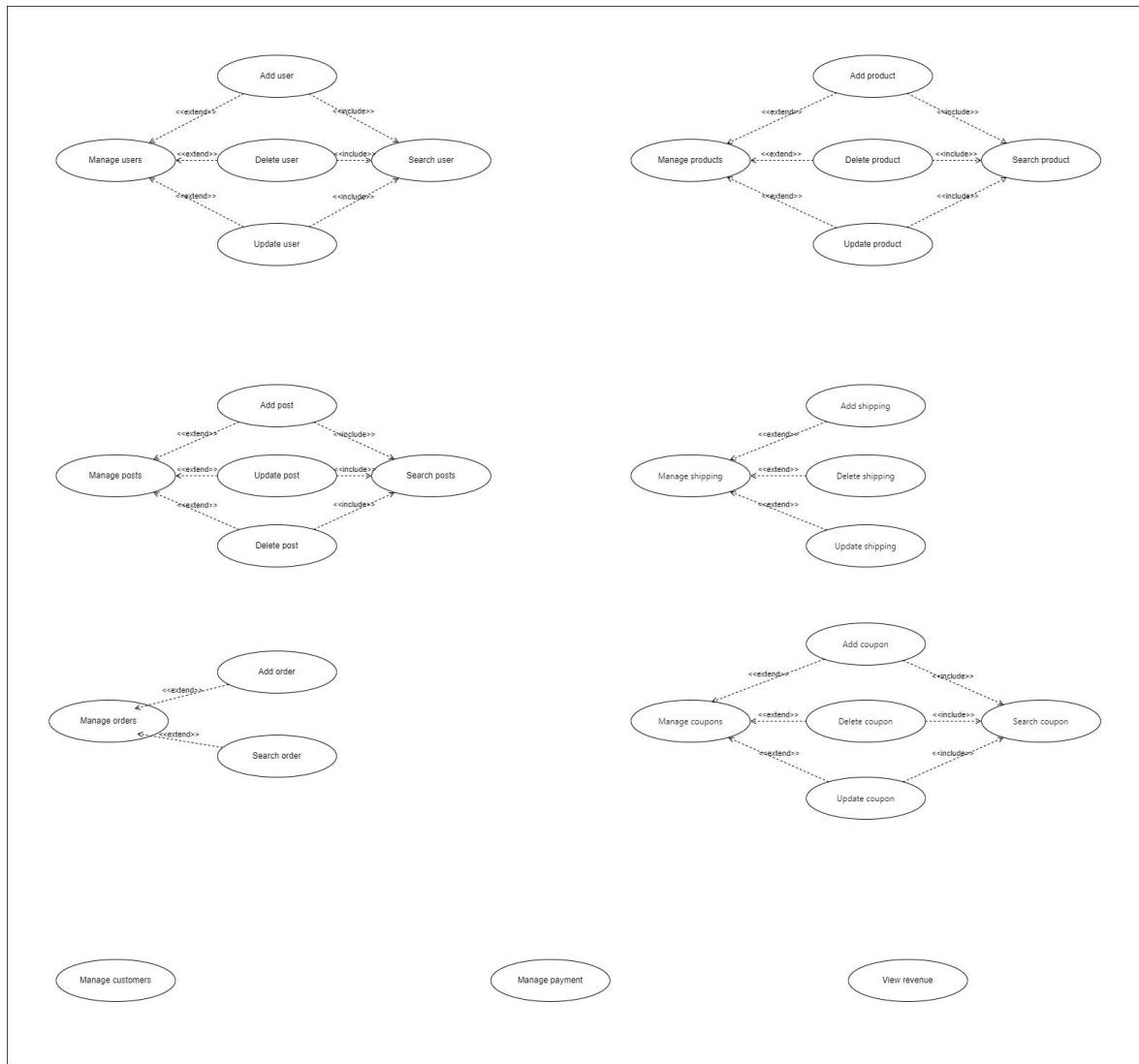
Hình 6-1 Architecture Diagram

## Usecase Diagram

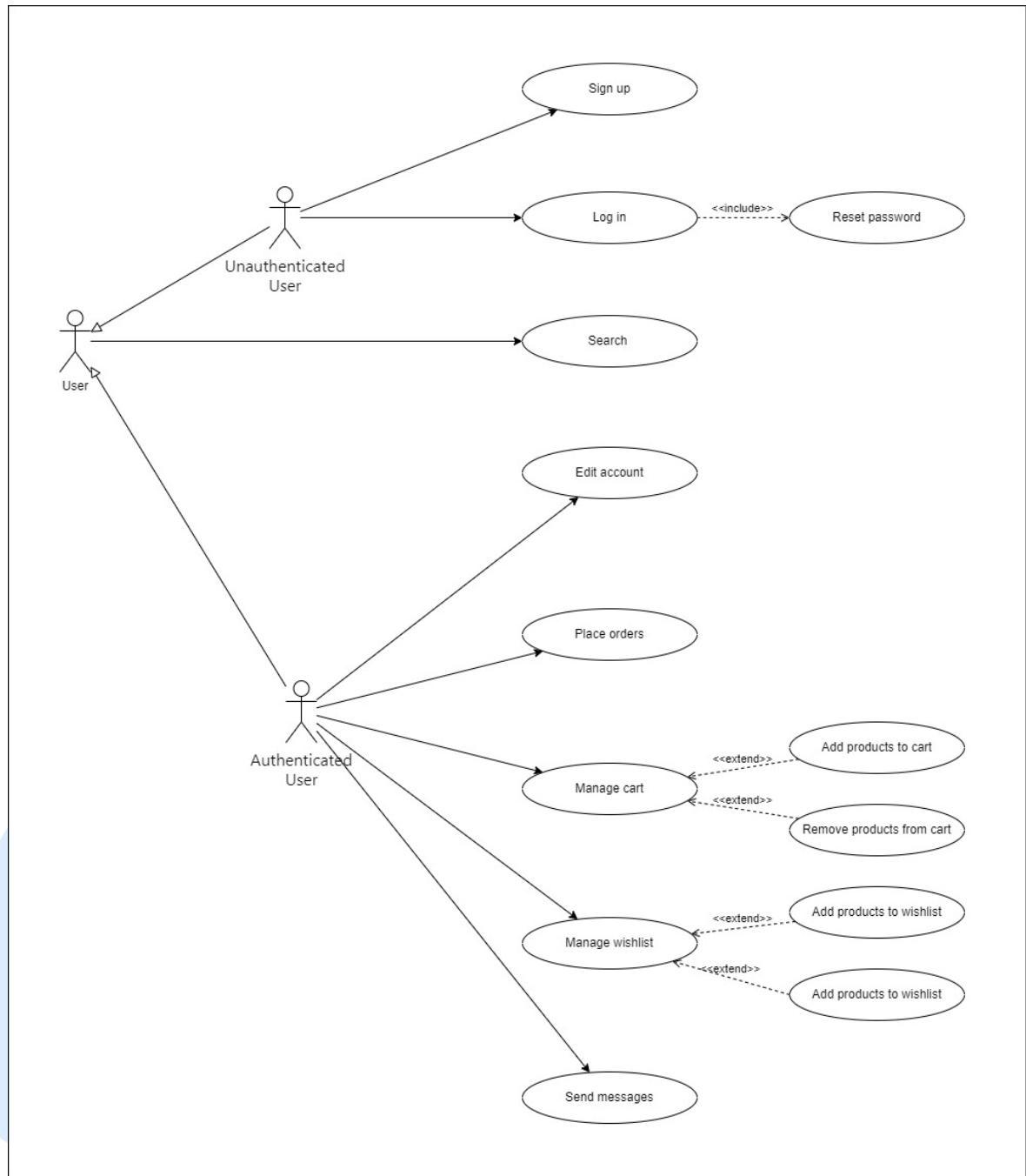


Hình 6-2 Overview Use case diagram

## ANALYSIS AND DESIGN



Hình 6-3 Detail overview Use case



Hình 6-4 Sub use case

### 6.1.1. List of actors

Index	Actor	Meaning
1	Administrator	People who manage the system.

<b>2</b>	User	Customer who use partial system's services
<b>3</b>	Authenticated user	Customer who logged in to system and available to use all the system's services
<b>4</b>	Unauthenticated user	Customer who must log in or sign up to use all the system's services

*Bảng 6-1 List of actors*

### 6.1.2. List of use cases

Role	Usecase	Meaning
<b>Administrator's role</b>	Manage users	Add users/ Authorize user permissions/ Search users
	Manage products	Add/ Edit/ Delete/ Search products
	Manage customers	Add/Edit/Delete products
	Manage orders	Track orders/ Update orders
	Manage posts	Add/ Edit/ Delete/ Search post
	Manage shipping	Add/ Update/ Delete shipping
	View revenue	View revenue
	Manage coupons	Add/ Update/ Delete/ Search coupons
<b>User's role</b>	Sign up	Sign up for membership

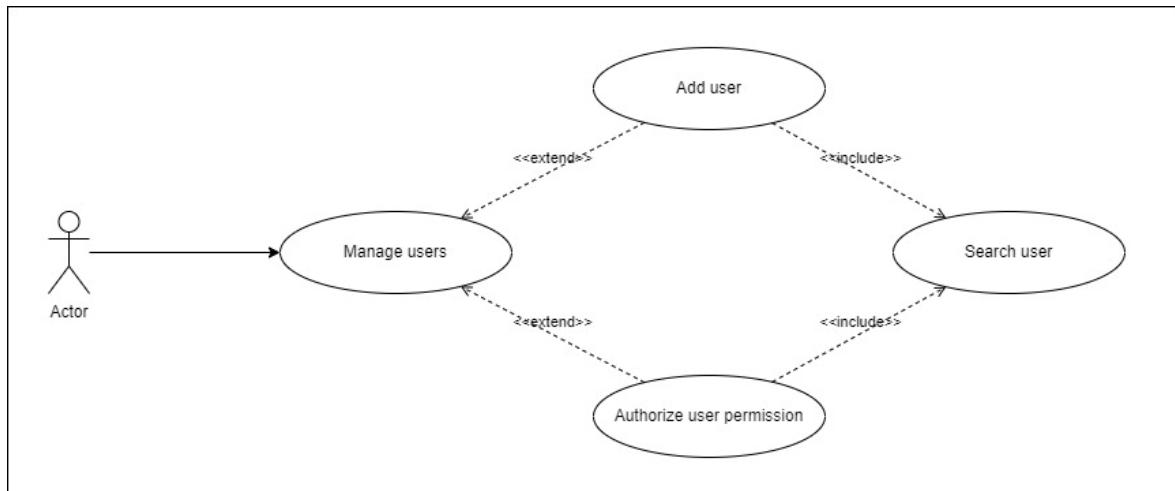
	Log in	Log in for using services. If user does not remember password, user can reset password.
	Edit account	Change name/ address/ password
	Place orders	Checkout and track orders
	Manage carts	Add product to cart/ Remove product from cart
	Manage wishlist	Add product to wishlist/ Remove product from wishlist
	Send messages	Send message to contact the shop for any questions
	Search	Search everything related to the website to meet the requirements

Bảng 6-2 List of use cases

### 6.1.3. Use case's specific description and Activity Diagram

#### 6.1.3.1. Administrator' role

##### 6.1.3.1.1. Manage Users



Hình 6-5 Use case "Manage users"

Usecase ID	UC01
Usecase Name	Manage users
Description	Allow administrator to add user/ delete user/ update user/ search user
Trigger	Admin clicks on "Users" on the management page.
Pre-condition	The administrator's device must be connected to the Internet. The administrator's status is logged in.
Post-condition	Users information has been successfully inserted into the database. Data on the management page is filtered by keyword.
Basic flow	1. The system displays users management page with a list of users.

	<p>2. Administrator chooses one function: Add user/ Delete user/ Edit user/ Search user</p> <p>- Add user:</p> <p>4. Administrator clicks on “Add new user”</p> <p>5. The system displays add new user section.</p> <p>6. Administrator enters information for the new user and clicks on "Add new user".</p> <p>7. The system verifies the information in the correct format.</p> <p>8. The system processes the request.</p> <p>9. The system authenticates the user information with existing data in the database.</p> <p>10. The system stores the information of the new user in the database.</p> <p>11. The system displays a successful addition message and reloads the users management page.</p> <p>- Delete user:</p> <p>12. Administrator selects the user to delete and chooses “Delete”</p> <p>13. The system displays a delete section.</p> <p>14. Administrator clicks on “Confirm deletion”.</p> <p>15. The system processes the request.</p> <p>16. The system authenticates the information with existing data in the database.</p> <p>17. The system deletes the data.</p>
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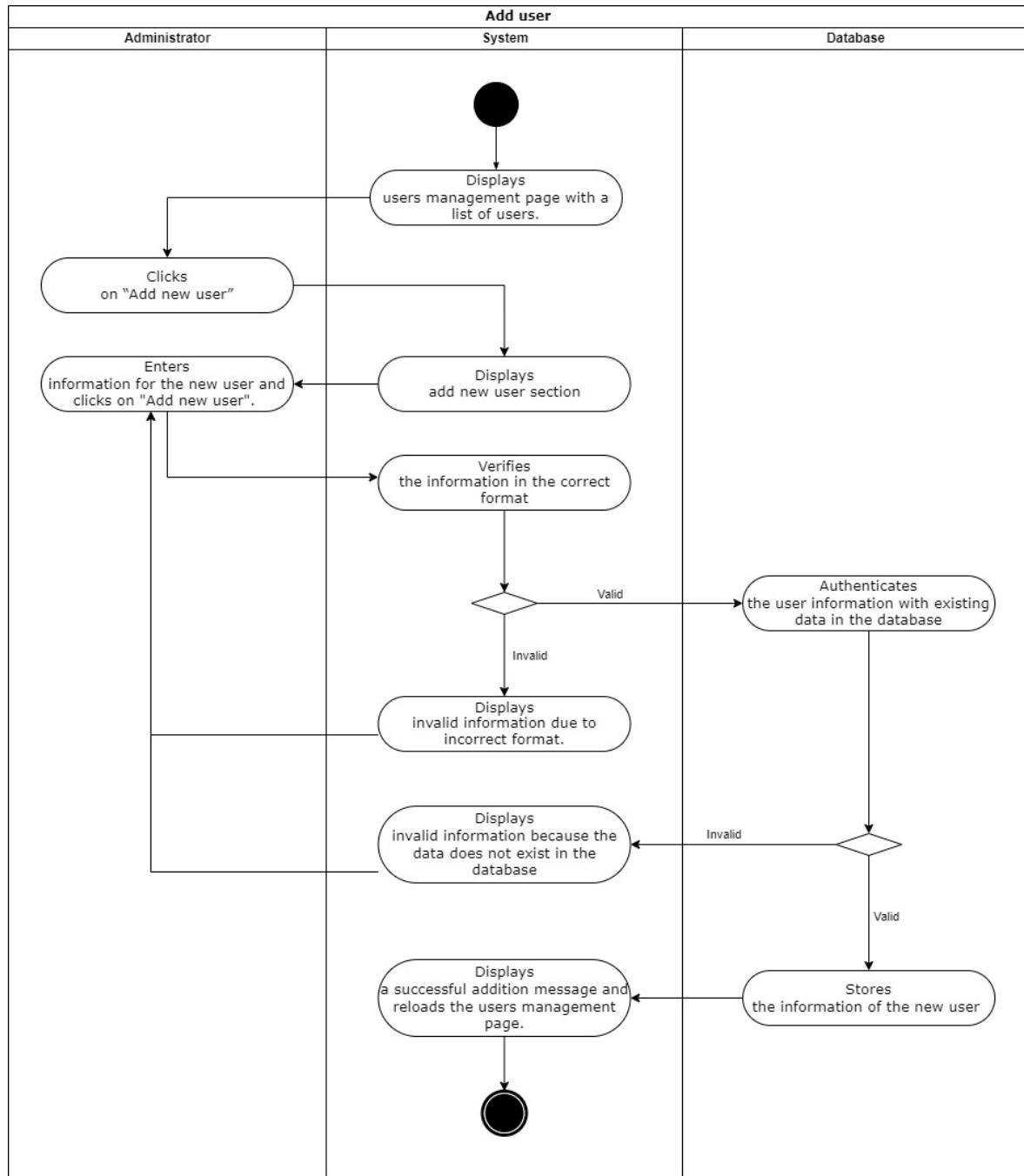
	<p>18. Administrator displays a successful deletion message and reloads the users management page.</p> <p>- Update user:</p> <p>19. Administrator select the user to update and chooses "Edit".</p> <p>20. The system displays update section.</p> <p>21. Administrator edits information and clicks on "Edit".</p> <p>22. The system processes the request.</p> <p>23. The system verifies the information in the correct format.</p> <p>24. The system authenticates the user information with existing data in the database.</p> <p>25. The system stores the information in the database.</p> <p>26. The system displays a successful update message and reloads the users management page.</p> <p>- Search user:</p> <p>27. Administrator chooses "Search users" and enters keywords.</p> <p>28. The system processes the search request.</p> <p>29. The system queries data related to the keywords.</p> <p>30. The system filters data on the users management page.</p>
<b>Alternative flow</b>	<p>7a. The system displays invalid information due to incorrect format. The system shows an error and the use case continues from step 6.</p>

	<p>9a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 6.</p> <p>16a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 12</p> <p>23a. The system displays invalid information due to incorrect format. The system shows an error and the use case continues from step 21.</p> <p>24a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 21.</p>
<b>Exception flow</b>	<p>29b. The system finds no results and displays a no results message. The use case stops.</p>

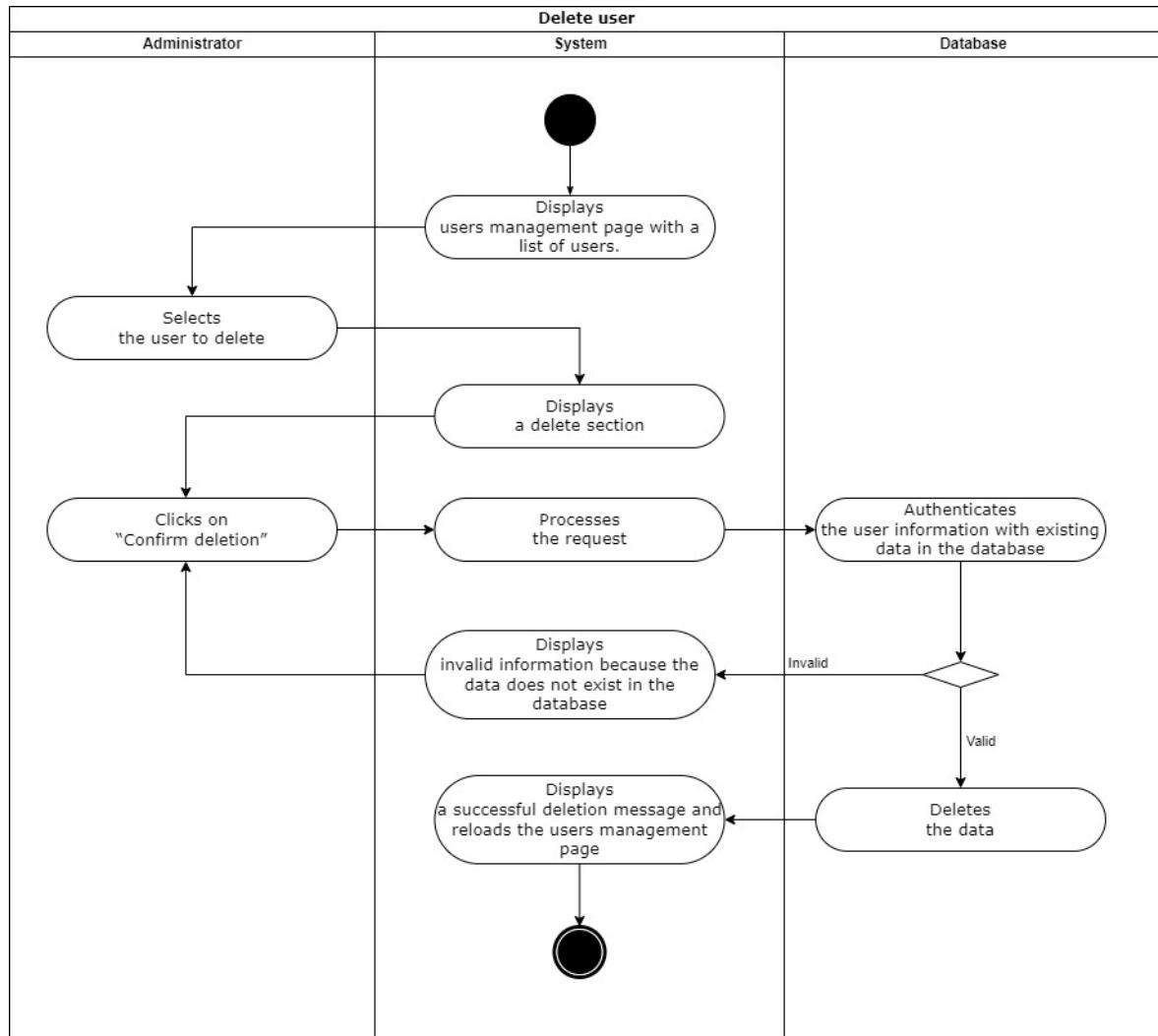
Bảng 6-3 Specific description about Use case UC01 "Manage users"

## ANALYSIS AND DESIGN

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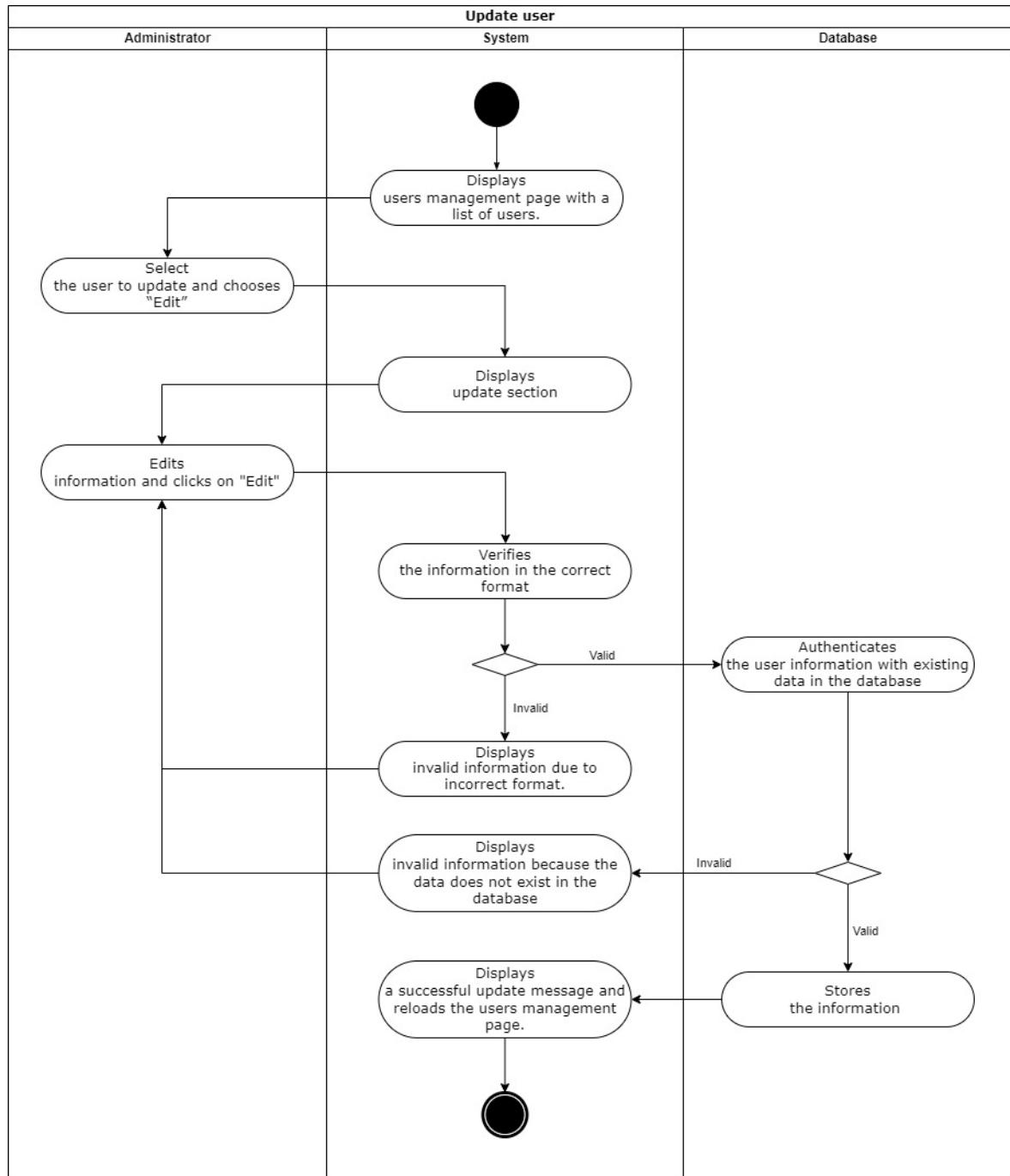
Hình 6-6 Activity diagram "Add user"



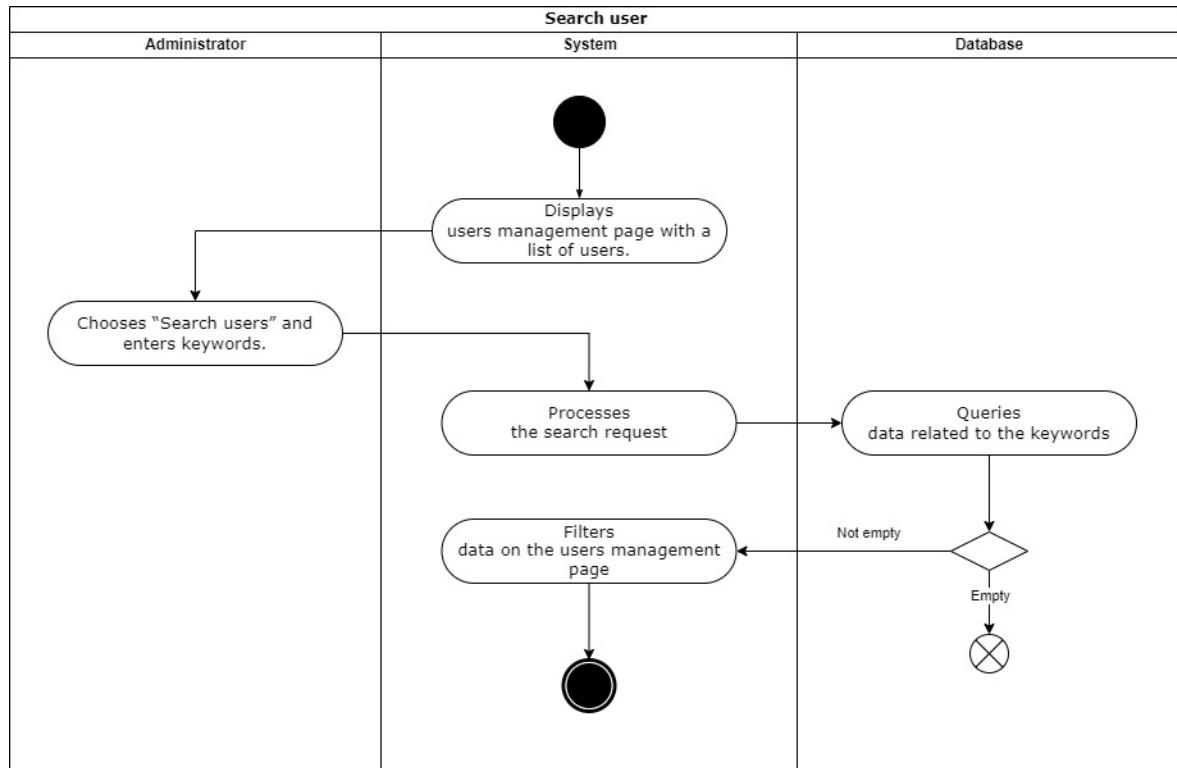
Hình 6-7 Activity Diagram for "Delete user"

## ANALYSIS AND DESIGN

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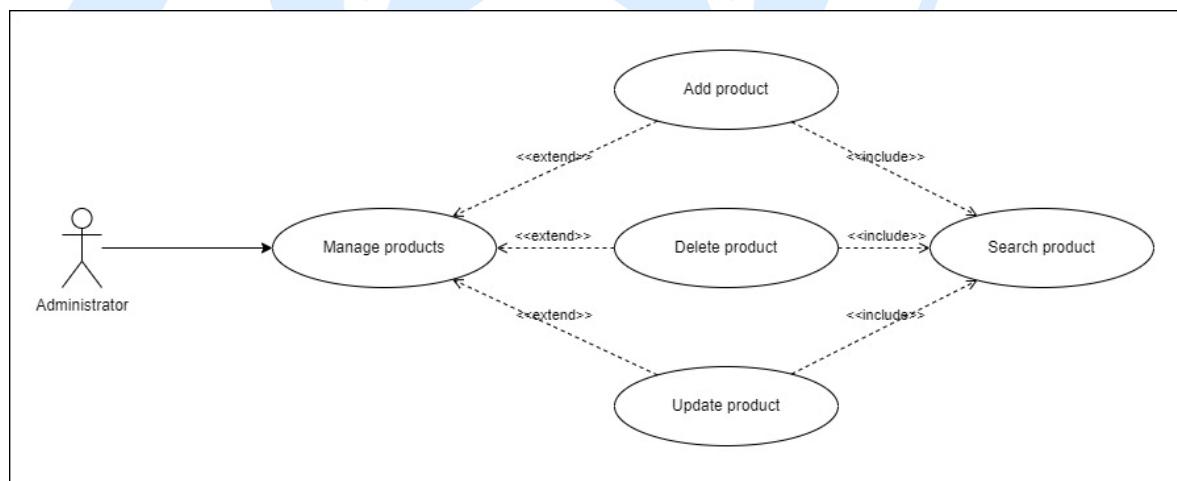


Hình 6-8 Activity Diagram for "Update user"



Hình 6-9 Activity Diagram for "Search user"

#### 6.1.3.1.2. Manage products



Hình 6-10 Use case UC01 "Manage products"

Usecase ID

UC02

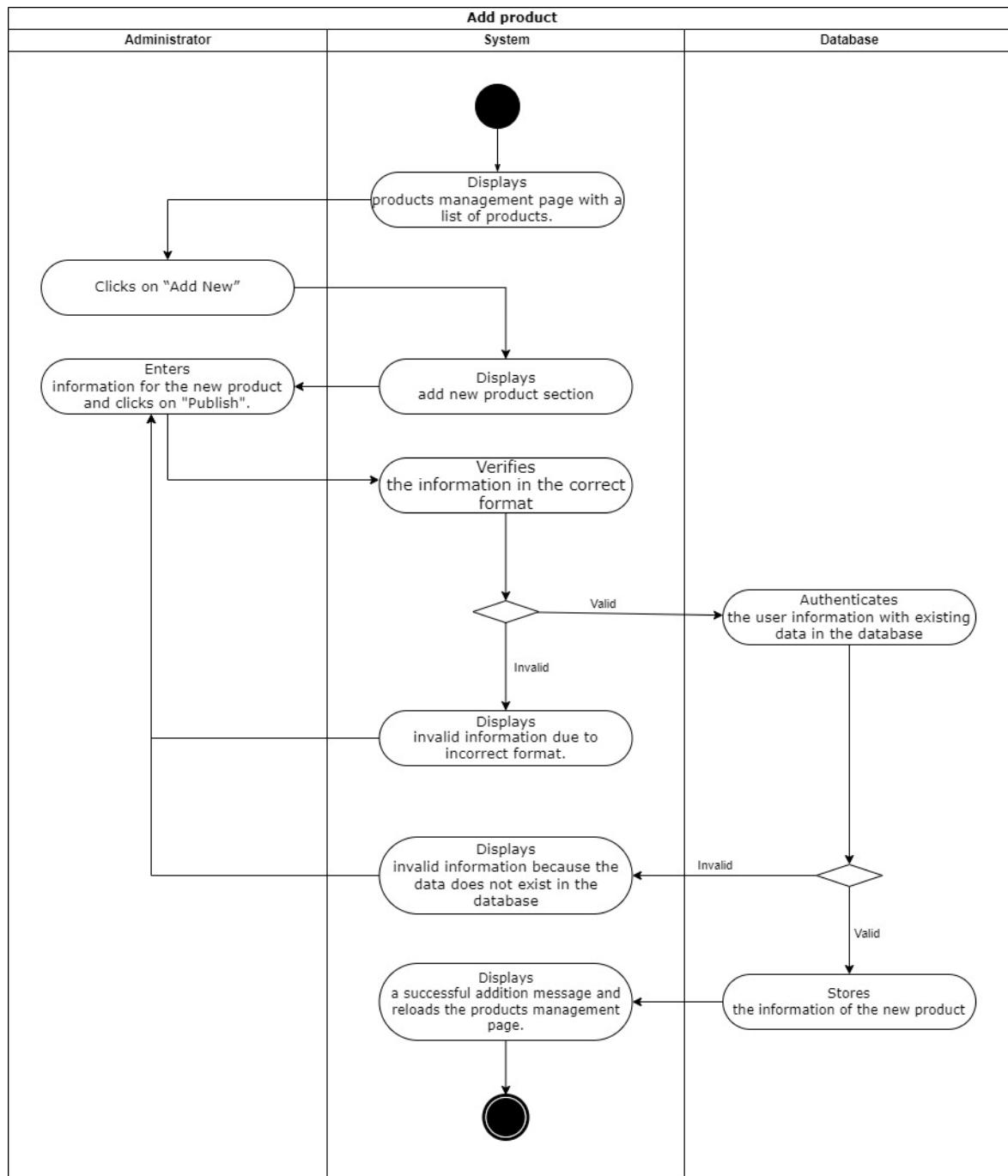
<b>Usecase Name</b>	Manage products
<b>Description</b>	Allow administrator to add product/ delete product/ update product/ search product
<b>Trigger</b>	Admin clicks on "Products" on the management page.
<b>Pre-condition</b>	The administrator's device must be connected to the Internet. The administrator's status is logged in.
<b>Post-condition</b>	Project information has been successfully inserted into the database. Data on the management page is filtered by keyword.
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays products management page with a list of products.</li> <li>2. Administrator chooses one function: Add product/ Delete product/ Edit product/ Search product</li> <li>- Add product:</li> <li>4. Administrator clicks on “Add New”</li> <li>5. The system displays add new product section.</li> <li>6. Administrator enters information for the new product and clicks on "Publish".</li> <li>7. The system verifies the information in the correct format.</li> <li>8. The system processes the request.</li> <li>9. The system authenticates the product information with existing data in the database.</li> </ol>

	<p>10. The system stores the information of the new product in the database.</p> <p>11. The system displays a successful addition message and reloads the products management page.</p> <p>- Delete product:</p> <p>12. Administrator selects the product to delete and chooses "Bin"</p> <p>13. The system processes the request.</p> <p>14. The system authenticates the information with existing data in the database.</p> <p>15. The system deletes the data.</p> <p>16. Administrator displays a successful deletion message and reloads the products management page.</p> <p>- Update user:</p> <p>17. Administrator select the product to update and chooses "Edit".</p> <p>18. The system displays update section.</p> <p>19. Administrator edits information and clicks on "Edit".</p> <p>20. The system verifies the information in the correct format.</p> <p>21. The system processes the request.</p> <p>22. The system authenticates the product information with existing data in the database.</p> <p>23. The system stores the information in the database.</p>
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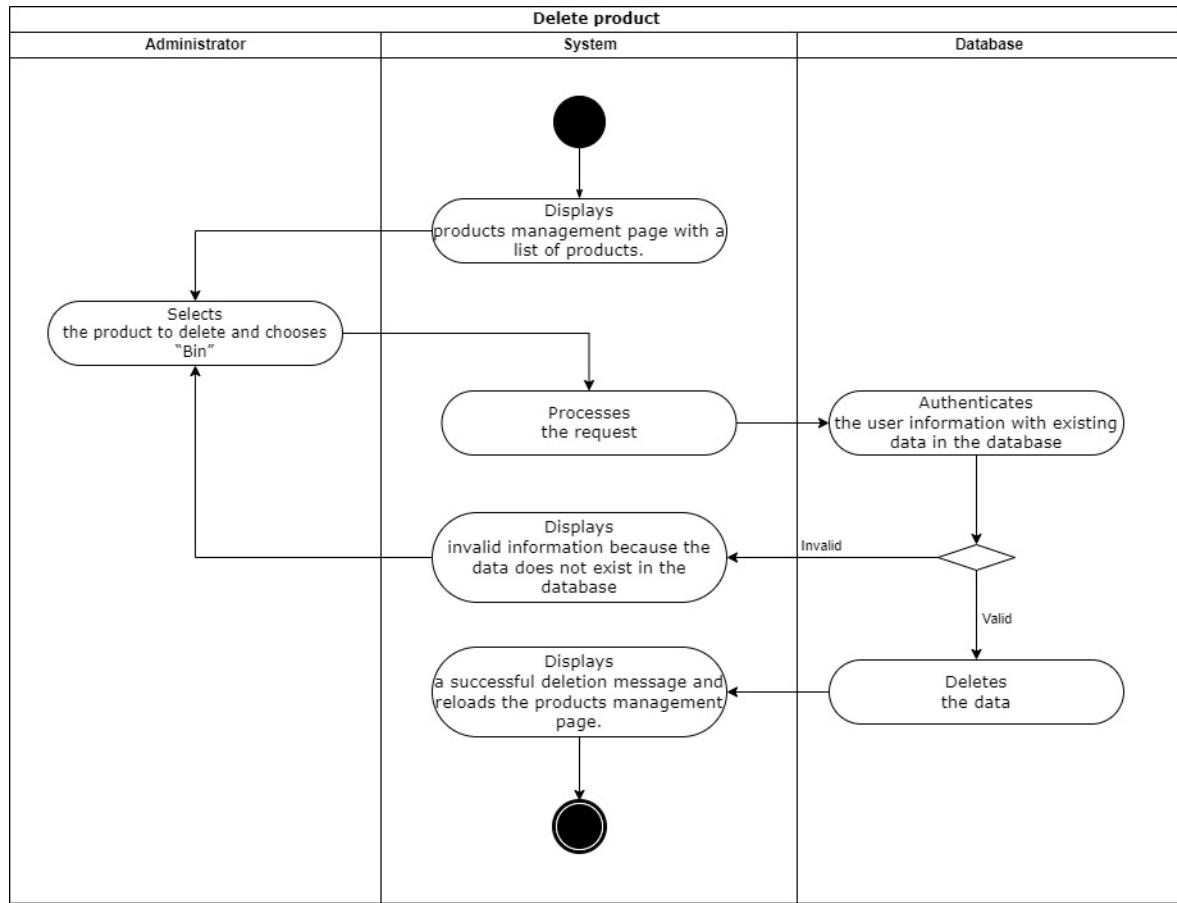
	<p>24. The system displays a successful update message and reloads the products management page.</p> <p>- Search user:</p> <p>25. Administrator chooses “Search products” and enters keywords.</p> <p>26. The system processes the search request.</p> <p>27. The system queries data related to the keywords.</p> <p>28. The system filters data on the products management page.</p>
<b>Alternative flow</b>	<p>7a. The system displays invalid information due to incorrect format. The system shows an error and the use case continues from step 6.</p> <p>9a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 6.</p> <p>14a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 12</p> <p>20a. The system displays invalid information due to incorrect format. The system shows an error and the use case continues from step 19.</p> <p>22a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 19.</p>

<b>Exception flow</b>	29b. The system finds no results and displays a no results message. The use case stops.
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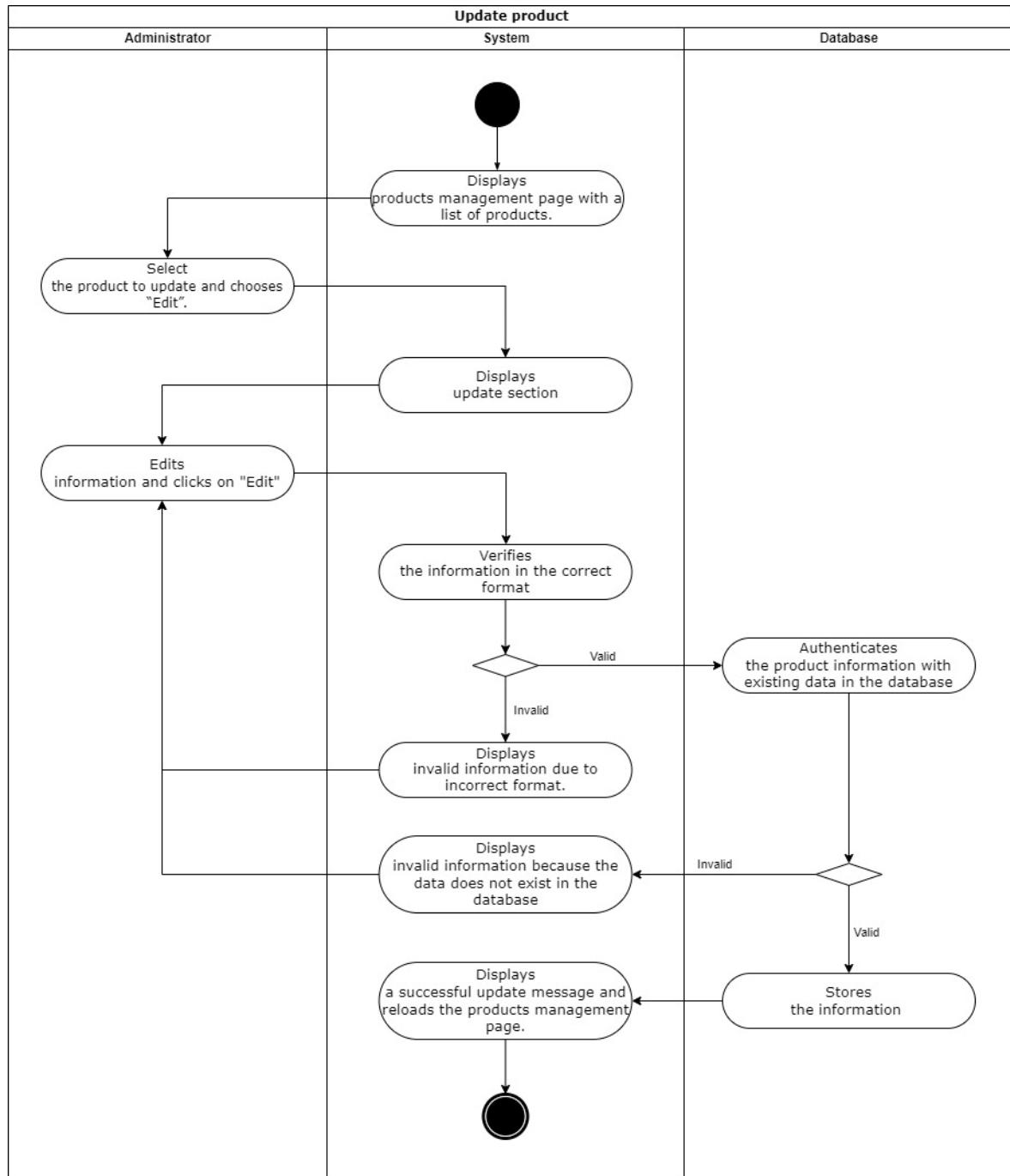
Bảng 6-4 Specific description about Use case UC02 "Manage products"



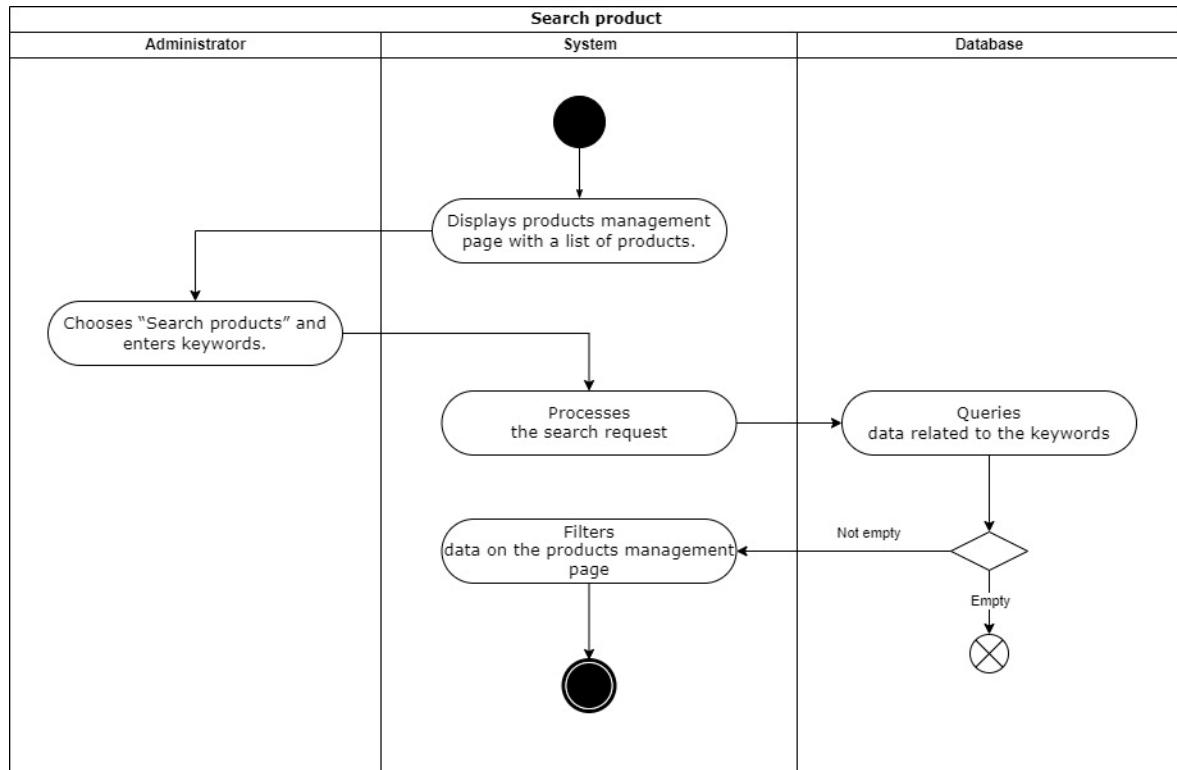
Hình 6-11 Activity Diagram "Add product"



Hình 6-12 Activity Diagram "Delete product"

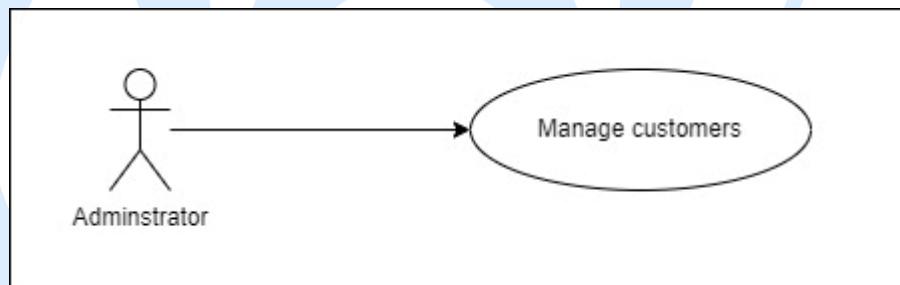


Hình 6-13 Activity Diagram "Update product"



Hình 6-14 Activity Diagram "Search product"

#### 6.1.3.1.3. Manage customers

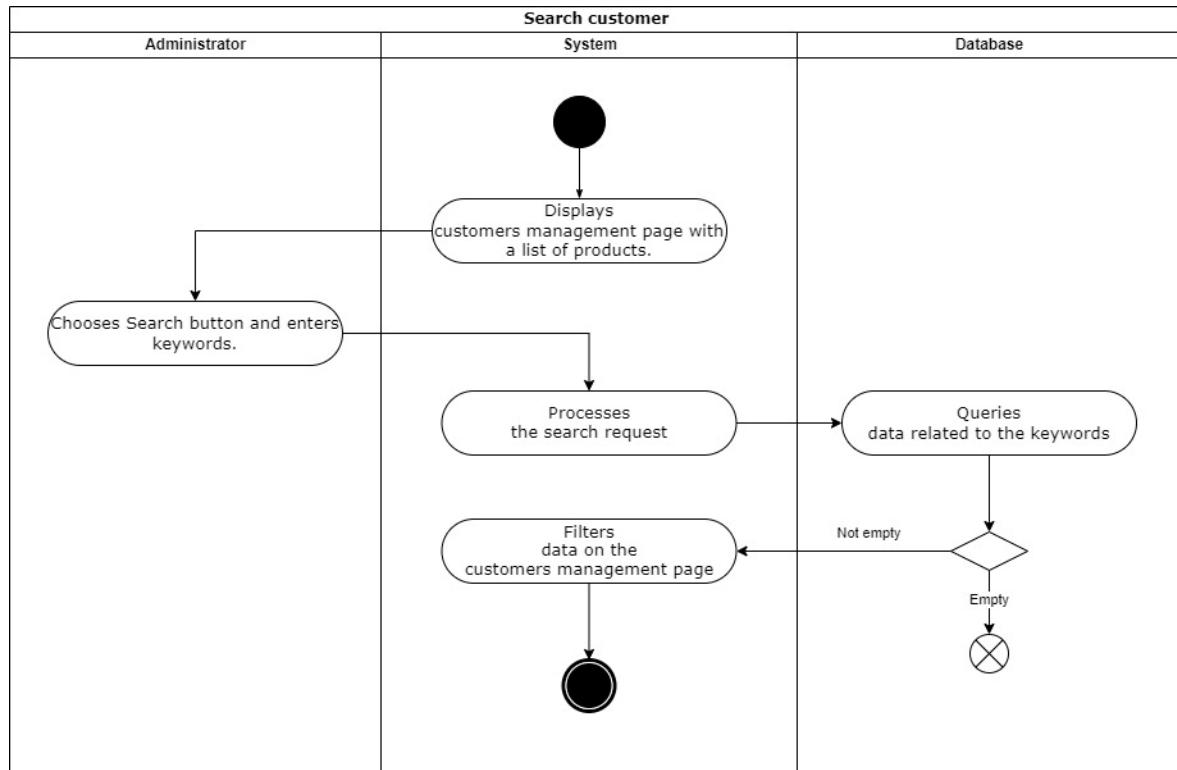


Hình 6-15 Use case "Manage customers"

Usecase ID	UC03
Usecase Name	Manage customers
Description	Allow administrator to search customer

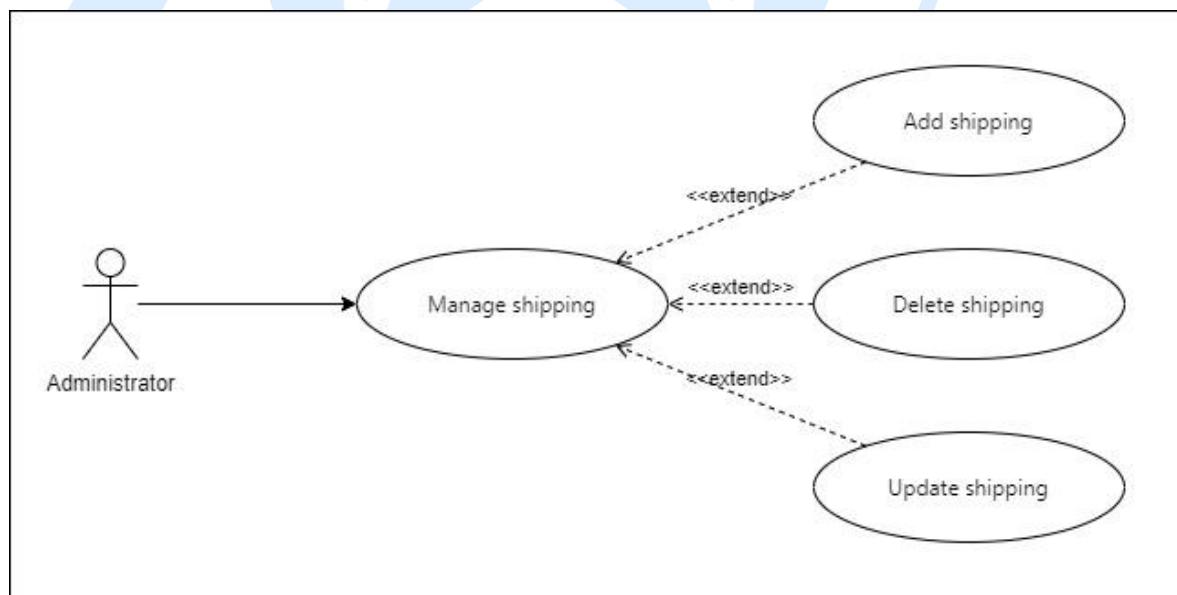
<b>Trigger</b>	Admin clicks on "Customers" on the management page.
<b>Pre-condition</b>	The administrator's device must be connected to the Internet. The administrator's status is logged in.
<b>Post-condition</b>	Data on the management page is filtered by keyword.
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays customers management page with a list of customers.</li> <li>2. Administrator chooses Search button and enters keywords.</li> <li>3. The system processes the search request.</li> <li>4. The system queries data related to the keywords.</li> <li>5. The system filters data on the customer management page.</li> </ol>
<b>Alternative flow</b>	
<b>Exception flow</b>	4b. The system finds no results and displays a no results message. The use case stops.

Bảng 6-5 Specific description about Use case UC03 "Managa customers"



Hình 6-16 Activity Diagram "Search customer"

#### 6.1.3.1.4. Manage shipping



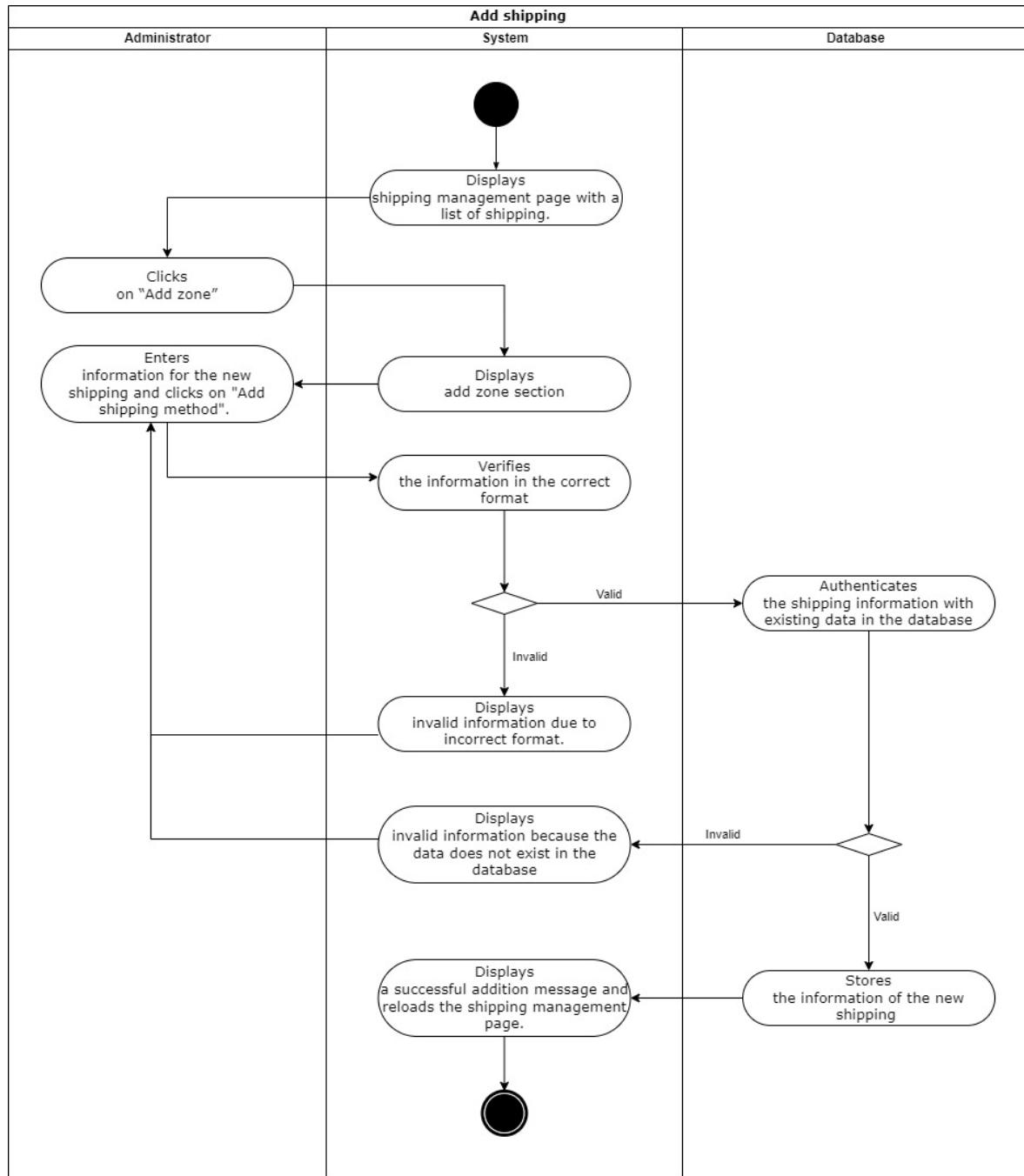
Hình 6-17 Use case "Manage shipping"

Usecase ID	UC04
<b>Usecase Name</b>	Manage shipping
<b>Description</b>	Allow administrator to add shipping/ shipping user/ update shipping
<b>Trigger</b>	Admin clicks on Woocommerce -> Settings -> Shipping on the management page.
<b>Pre-condition</b>	The administrator's device must be connected to the Internet. The administrator's status is logged in.
<b>Post-condition</b>	Shipping information has been successfully inserted into the database.
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays shipping management page with a list of shipping.</li> <li>2. Administrator chooses one function: Add shipping / Delete shipping / Edit shipping</li> <li>- Add shipping:</li> <li>4. Administrator clicks on "Add zone"</li> <li>5. The system displays add zone section.</li> <li>6. Administrator enters information for the new zone and clicks on "Add shipping method".</li> <li>7. The system verifies the information in the correct format.</li> <li>8. The system processes the request.</li> </ol>

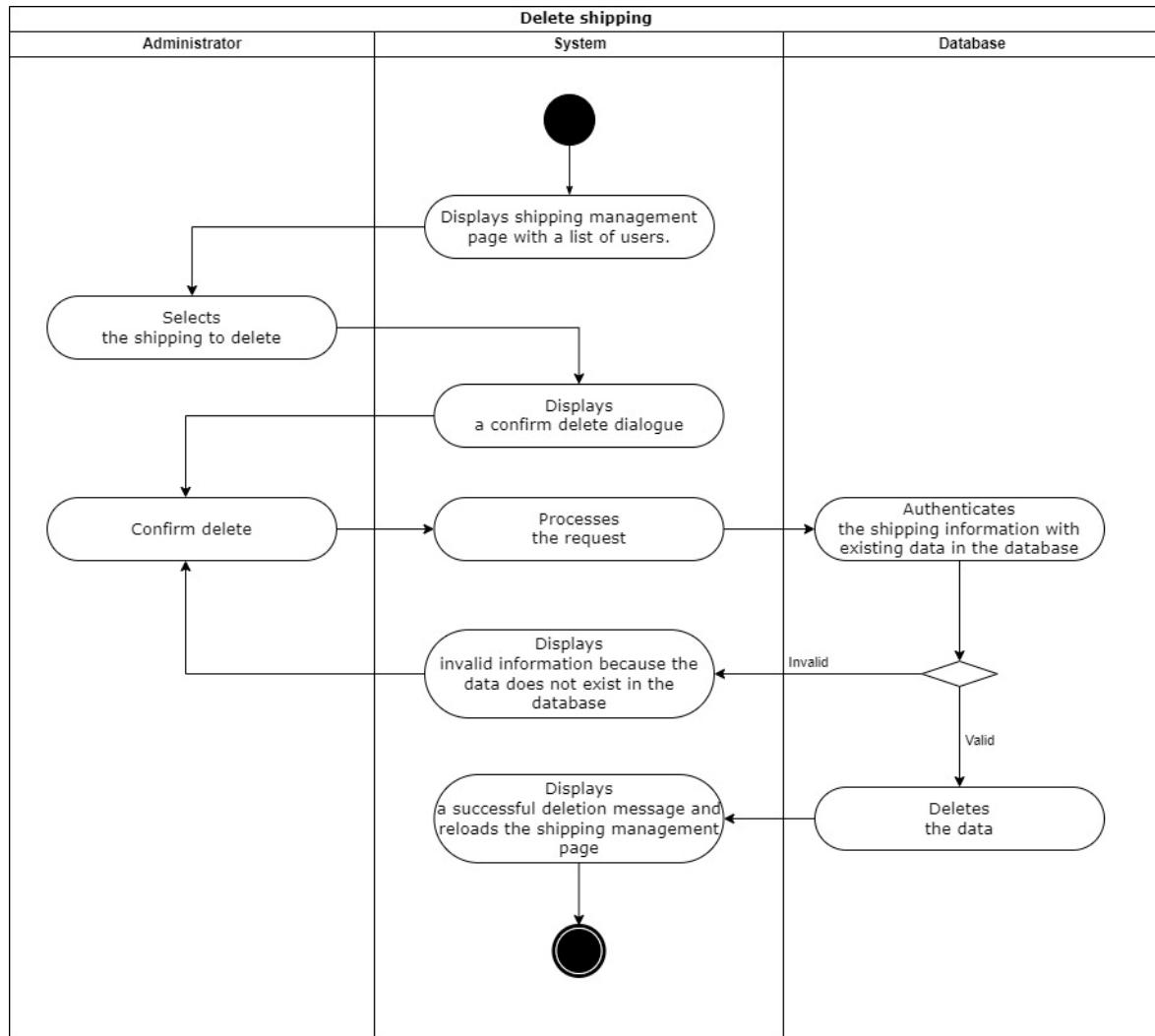
	<p>9. The system authenticates the shipping information with existing data in the database.</p> <p>10. The system stores the information of the new shipping in the database.</p> <p>11. The system displays a successful addition message and reloads the shipping management page.</p> <p>- Delete shipping:</p> <p>12. Administrator selects the shipping to delete and chooses “Delete”</p> <p>13. The system displays a confirm delete dialogue</p> <p>14. Administrator confirms deletion</p> <p>15. The system processes the request.</p> <p>16. The system authenticates the information with existing data in the database.</p> <p>17. The system deletes the data.</p> <p>18. Administrator displays a successful deletion message and reloads the shipping management page.</p> <p>- Update user:</p> <p>19. Administrator select the shipping to update and chooses “Edit”.</p> <p>20. The system displays update section.</p> <p>21. Administrator edits information and clicks on "Edit".</p> <p>22. The system verifies the information in the correct format.</p>
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	<p>23. The system processes the request.</p> <p>24. The system authenticates the shipping information with existing data in the database.</p> <p>25. The system stores the information in the database.</p> <p>26. The system displays a successful update message and reloads the shipping management page.</p>
<b>Alternative flow</b>	<p>7a. The system displays invalid information due to incorrect format. The system shows an error and the use case continues from step 6.</p> <p>9a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 6.</p> <p>16a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 12</p> <p>23a. The system displays invalid information due to incorrect format. The system shows an error and the use case continues from step 21.</p> <p>24a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 21.</p>
<b>Exception flow</b>	Administrator cancels the deletion request. Usecase stops.

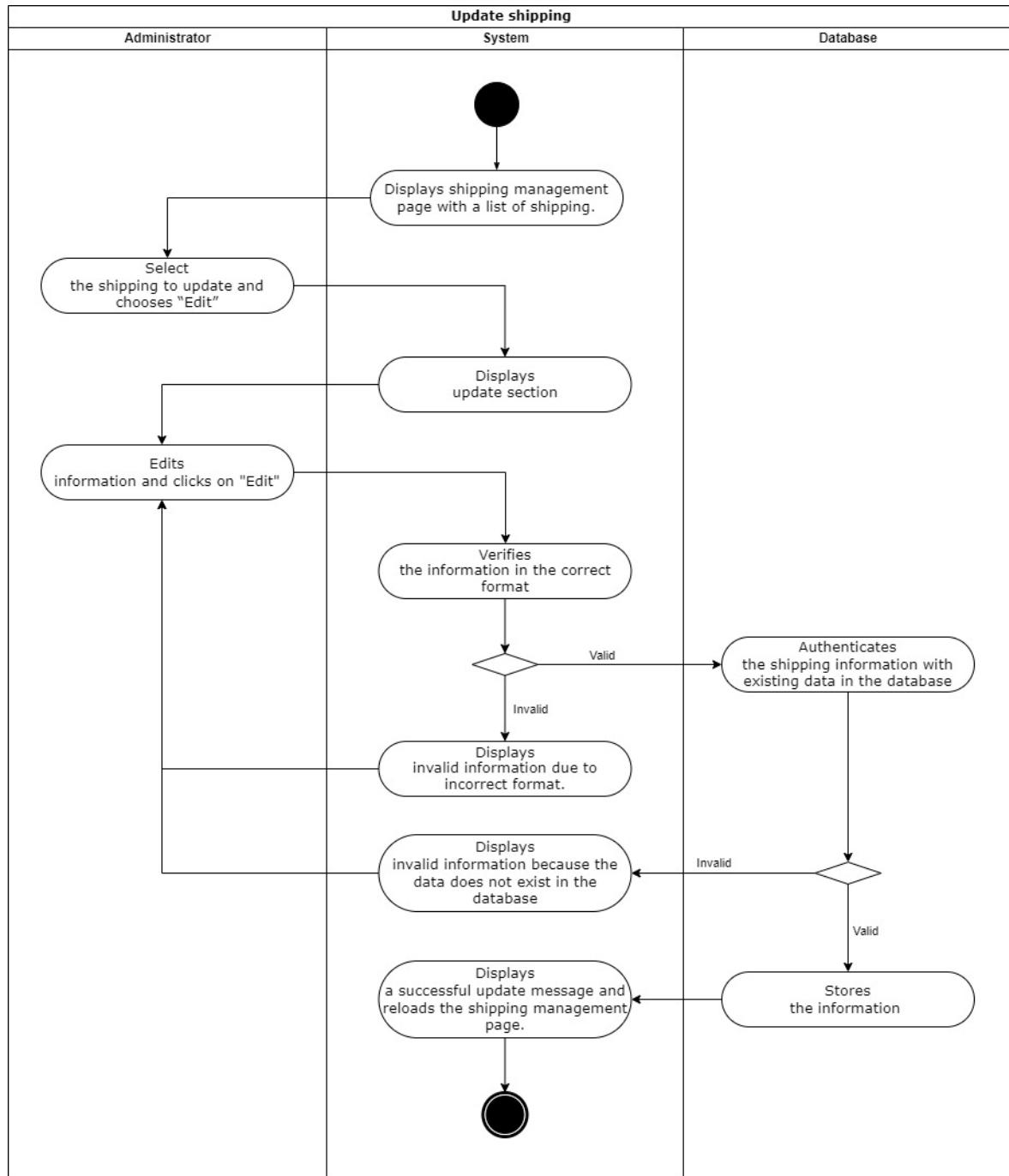
Bảng 6-6 Specific decription about Use case UC04 "Managa shipping"



Hình 6-18 Activity Diagram "Add shipping"

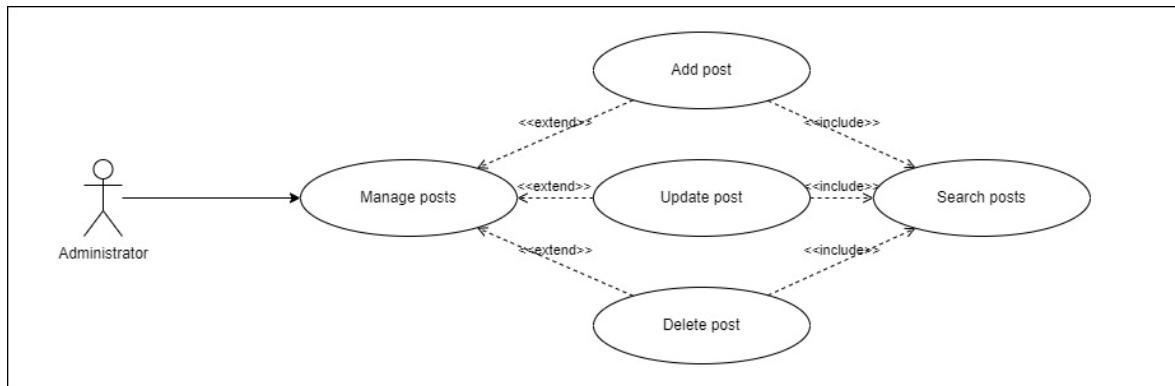


Hình 6-19 Activity Diagram "Delete shipping"



Hình 6-20 Activity Diagram "Update shipping"

#### 6.1.3.1.5. Manage posts



Hình 6-21 Use case "Manage posts"

Usecase ID	UC05
Usecase Name	Manage posts
Description	Allow administrator to add post/ delete post/ update post/ search post
Trigger	Admin clicks on "Posts" on the management page.
Pre-condition	<p>The administrator's device must be connected to the Internet.</p> <p>The administrator's status is logged in.</p>
Post-condition	<p>Posts information has been successfully inserted into the database.</p> <p>Data on the management page is filtered by keyword.</p>
Basic flow	<ol style="list-style-type: none"> <li>1. The system displays posts management page with a list of posts.</li> <li>2. Administrator chooses one function: Add post/ Delete post / Edit post/ Search post</li> </ol>

	<p>- Add post:</p> <p>4. Administrator clicks on “Add a New Post”</p> <p>5. The system displays add new post section.</p> <p>6. Administrator enters information for the new post and clicks on "Publish".</p> <p>7. The system verifies the information in the correct format.</p> <p>8. The system processes the request.</p> <p>9. The system authenticates the post information with existing data in the database.</p> <p>10. The system stores the information of the new post in the database.</p> <p>11. The system displays a successful addition message and reloads the posts management page.</p> <p>- Delete post:</p> <p>12. Administrator selects the post to delete and chooses “Delete”</p> <p>13. The system processes the request.</p> <p>14. The system authenticates the information with existing data in the database.</p> <p>15. The system deletes the data.</p> <p>16. Administrator displays a successful deletion message and reloads the posts management page.</p> <p>- Update post:</p>
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	<p>17. Administrator select the post to update and chooses "Edit".</p> <p>18. The system displays update section.</p> <p>19. Administrator edits information and clicks on "Update".</p> <p>20. The system verifies the information in the correct format.</p> <p>21. The system processes the request.</p> <p>22. The system authenticates the post information with existing data in the database.</p> <p>23. The system stores the information in the database.</p> <p>24. The system displays a successful update message and reloads the posts management page.</p> <p>- Search post:</p> <p>25. Administrator chooses "Search posts" and enters keywords.</p> <p>26. The system processes the search request.</p> <p>27. The system queries data related to the keywords.</p> <p>28. The system filters data on the posts management page.</p>
<b>Alternative flow</b>	<p>7a. The system displays invalid information due to incorrect format. The system shows an error and the use case continues from step 6.</p> <p>9a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 6.</p>

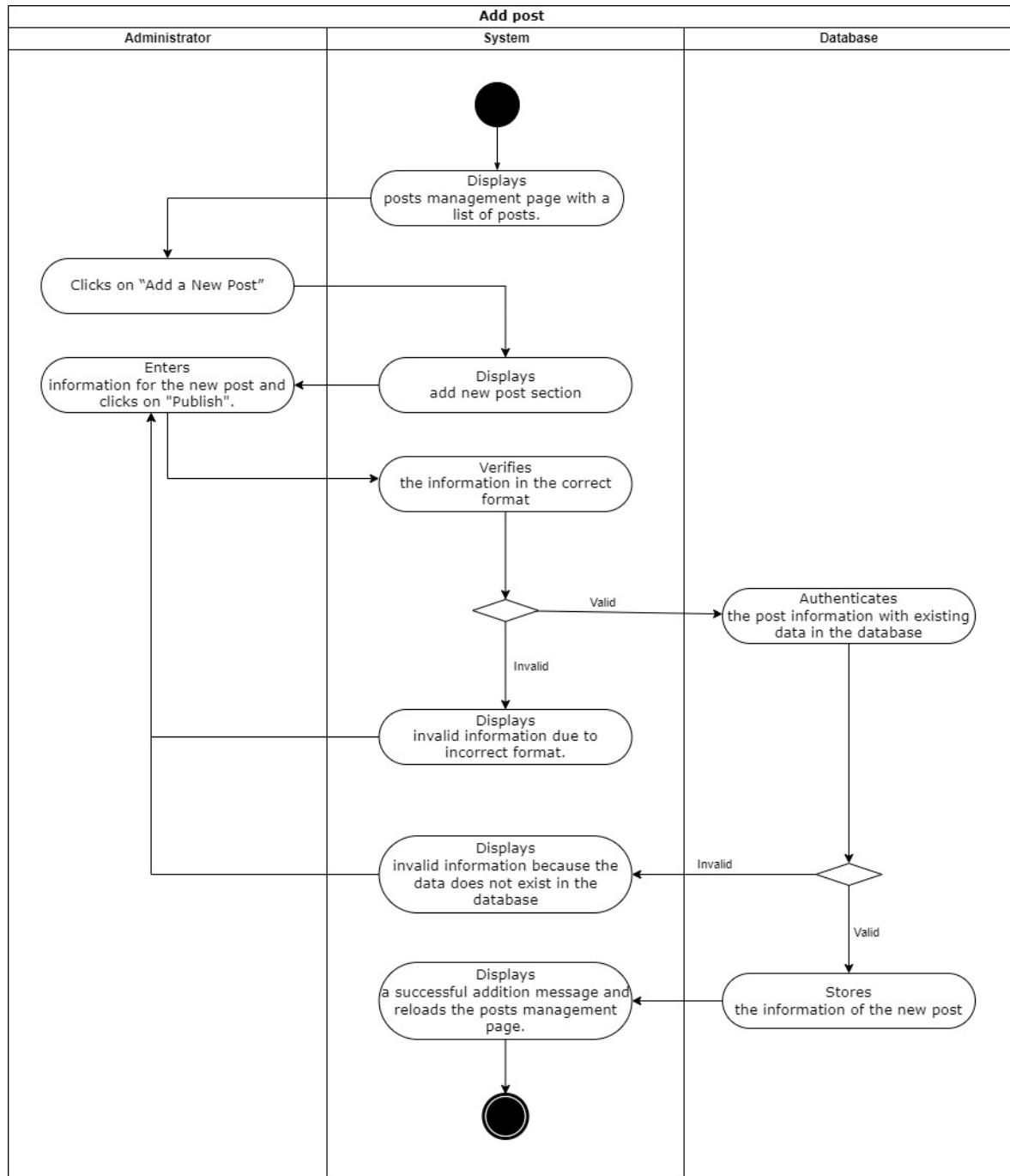
	<p>14a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 12</p> <p>20a. The system displays invalid information due to incorrect format. The system shows an error and the use case continues from step 19.</p> <p>22a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 19.</p>
<b>Exception flow</b>	<p>27b. The system finds no results and displays a no results message. The use case stops.</p>

Bảng 6-7 Specific description about Use case UC05 "Manage posts"

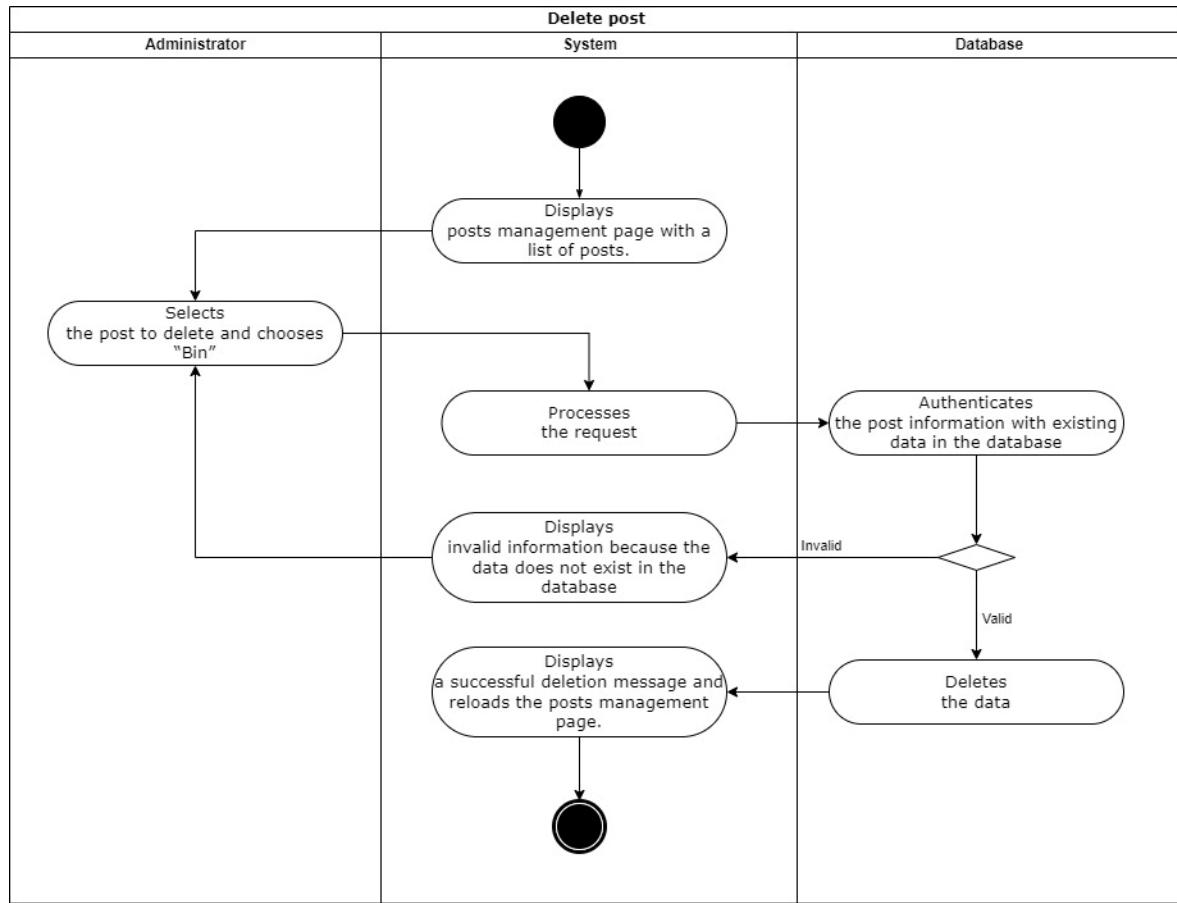


## ANALYSIS AND DESIGN

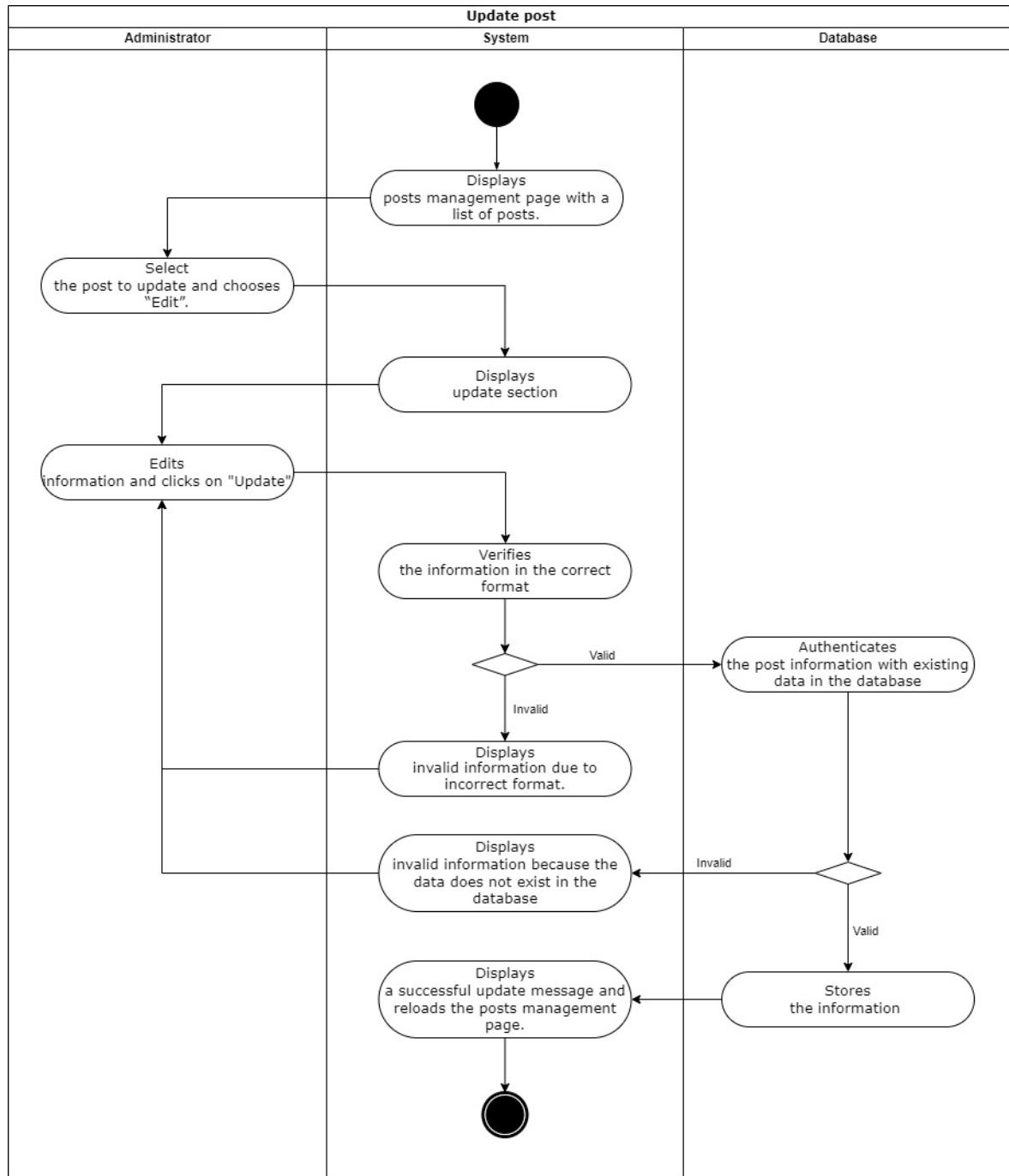
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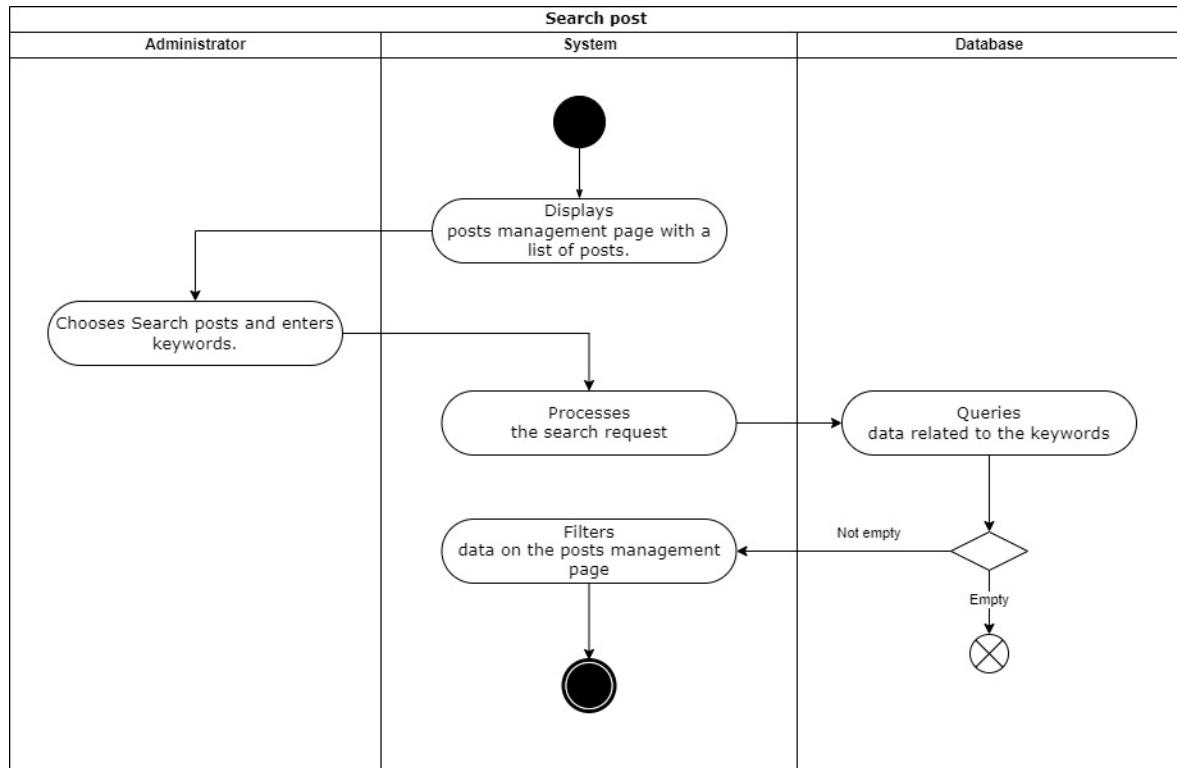
Hình 6-22 Activity Diagram "Add post"



Hình 6-23 Activity Diagram "Delete post"

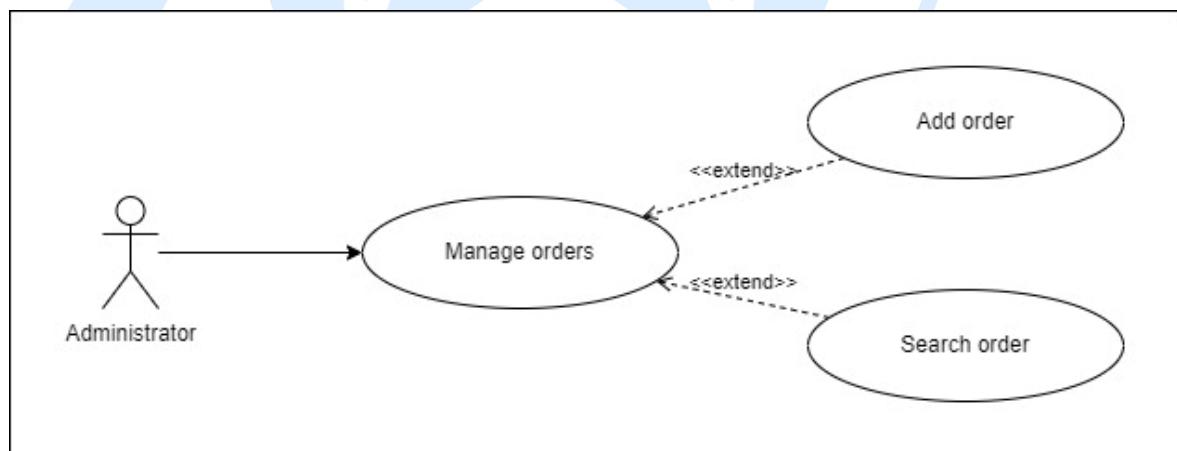


Hình 6-24 Activity Diagram "Update post"



Hình 6-25 Activity Diagram "Search post"

#### 6.1.3.1.6. Manage orders



Hình 6-26 Use case "Manage orders"

<b>Usecase ID</b>	UC06
<b>Usecase Name</b>	Manage orders

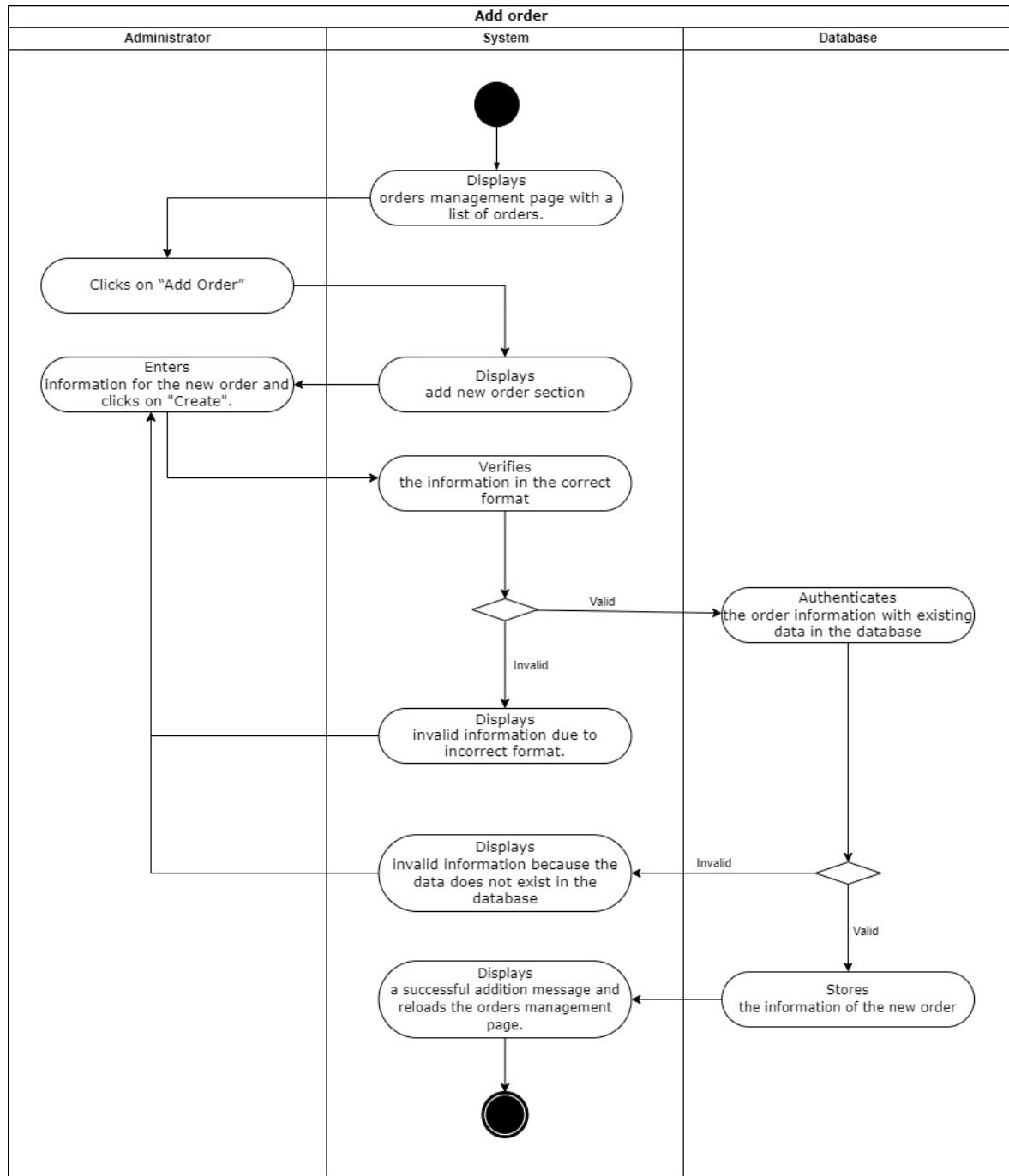
<b>Description</b>	Allow administrator to add order/ search order
<b>Trigger</b>	Admin clicks on "Orders" on the management page.
<b>Pre-condition</b>	The administrator's device must be connected to the Internet. The administrator's status is logged in.
<b>Post-condition</b>	Orders information has been successfully inserted into the database. Data on the management page is filtered by keyword.
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays orders management page with a list of orders.</li> <li>2. Administrator chooses one function: Add order/ Search order - Add order:</li> <li>4. Administrator clicks on “Add order”</li> <li>5. The system displays add order section.</li> <li>6. Administrator enters information for the new order and clicks on "Create".</li> <li>7. The system verifies the information in the correct format.</li> <li>8. The system processes the request.</li> <li>9. The system authenticates the order information with existing data in the database.</li> <li>10. The system stores the information of the new order in the database.</li> </ol>

	<p>11. The system displays a successful addition message and reloads the orders management page.</p> <p>- Search order:</p> <p>12. Administrator chooses “Search orders” and enters keywords.</p> <p>13. The system processes the search request.</p> <p>14. The system queries data related to the keywords.</p> <p>15. The system filters data on the orders management page.</p>
<b>Alternative flow</b>	<p>7a. The system displays invalid information due to incorrect format. The system shows an error and the use case continues from step 6.</p> <p>9a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 6.</p>
<b>Exception flow</b>	<p>14b. The system finds no results and displays a no results message. The use case stops.</p>

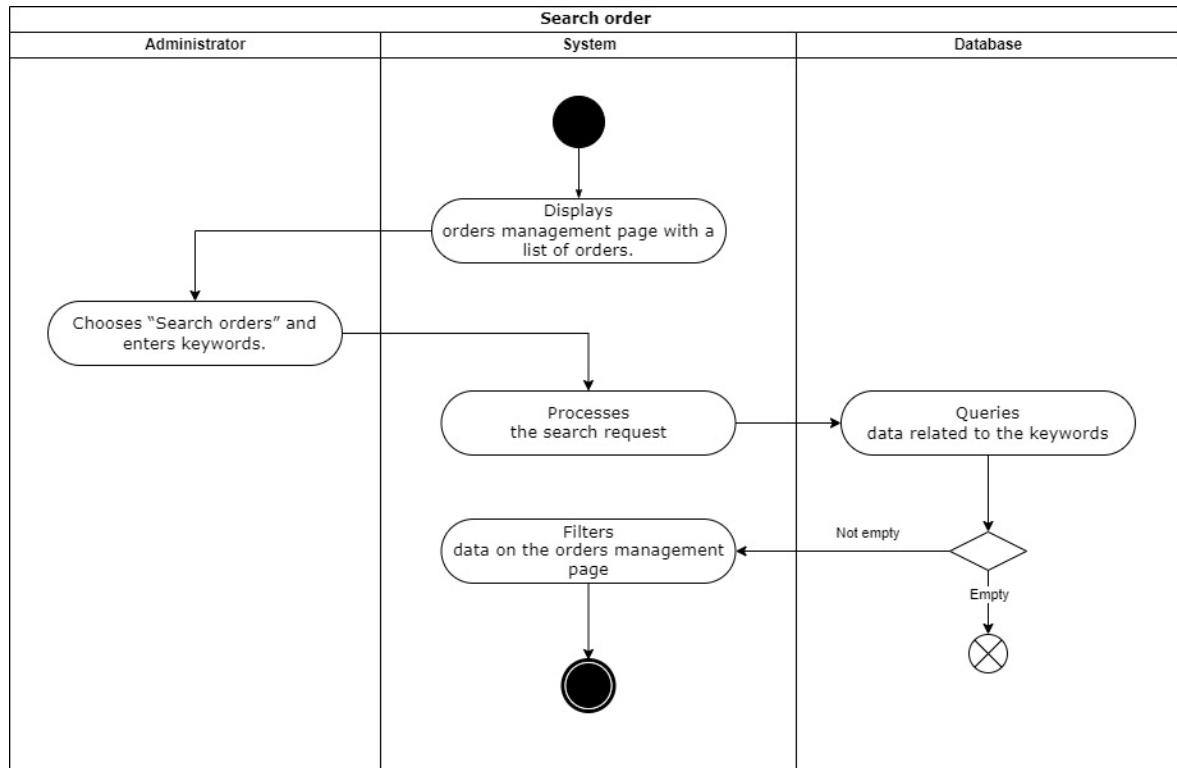
Bảng 6-8 Specific description about Use case UC06 "Managa orders"

## ANALYSIS AND DESIGN

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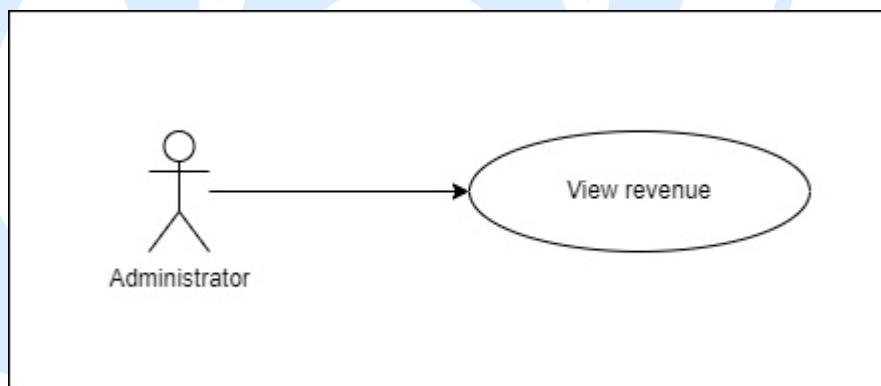


Hình 6-27 Activity diagram "Add order"



Hình 6-28 Activity diagram "Search order"

#### 6.1.3.1.7. View revenue

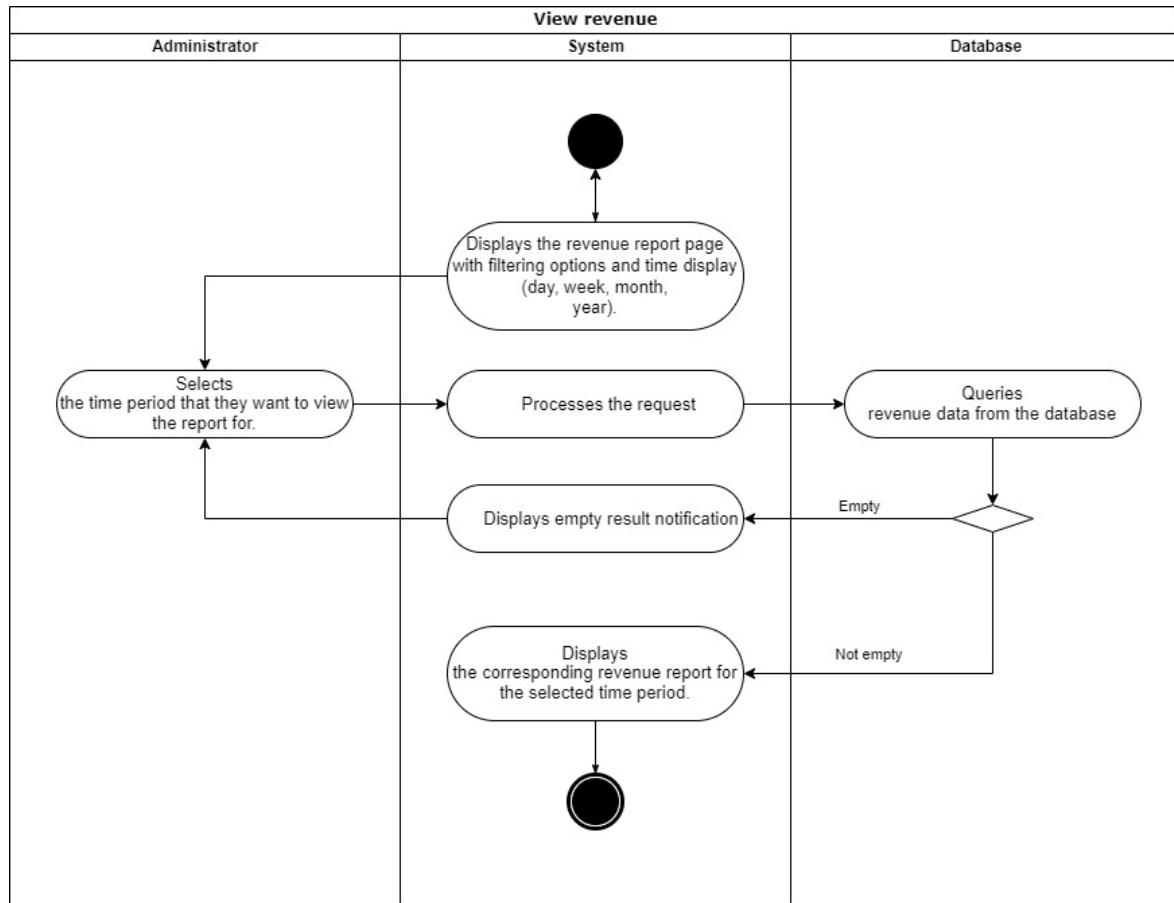


Hình 6-29 Use case "View revenue"

<b>Usecase ID</b>	UC07
<b>Usecase Name</b>	View revenue

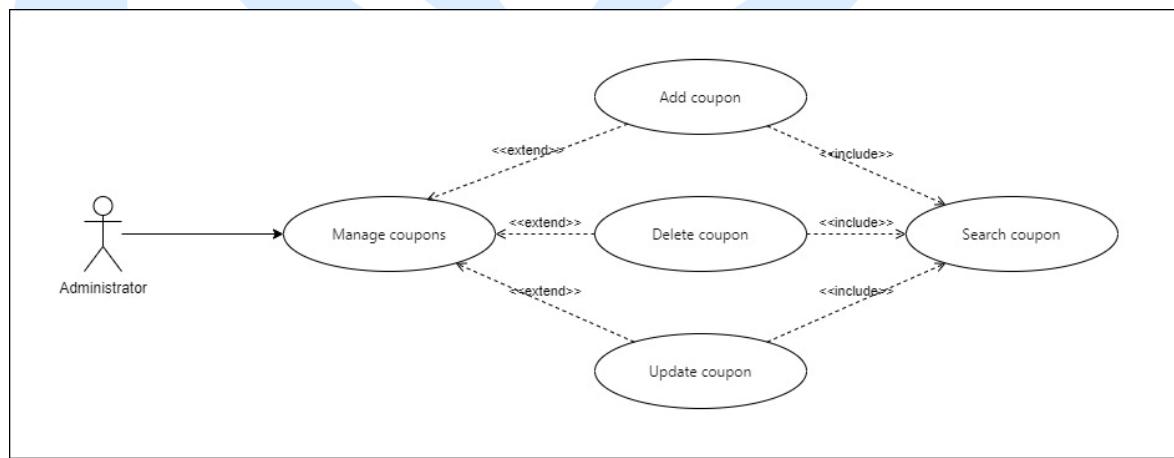
<b>Description</b>	Allow administrator to view revenue statistics, including metrics on total revenue, daily, weekly, monthly, and yearly revenue, revenue by product category,...
<b>Trigger</b>	Admin clicks on Analytics -> Revenue on the management page.
<b>Pre-condition</b>	The administrator's device must be connected to the Internet. The administrator's status is logged in.
<b>Post-condition</b>	The administrator can view detailed revenue reports. Revenue data can be exported to files (CSV, Excel, PDF).
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays the revenue report page with filtering options and time display (day, week, month, year).</li> <li>2. The administrator selects the time period that they want to view the report for.</li> <li>3. The system processes the request</li> <li>4. The system queries revenue data from the database.</li> <li>5. The system displays the corresponding revenue report for the selected time period.</li> </ol>
<b>Alternative flow</b>	
<b>Exception flow</b>	4b. System displays empty result notification. Use-case stops

Bảng 6-9 Specific description about Use case UC07 "View revenue"



Hình 6-30 Activity diagram "View revenue"

#### 6.1.3.1.8. Manage coupons



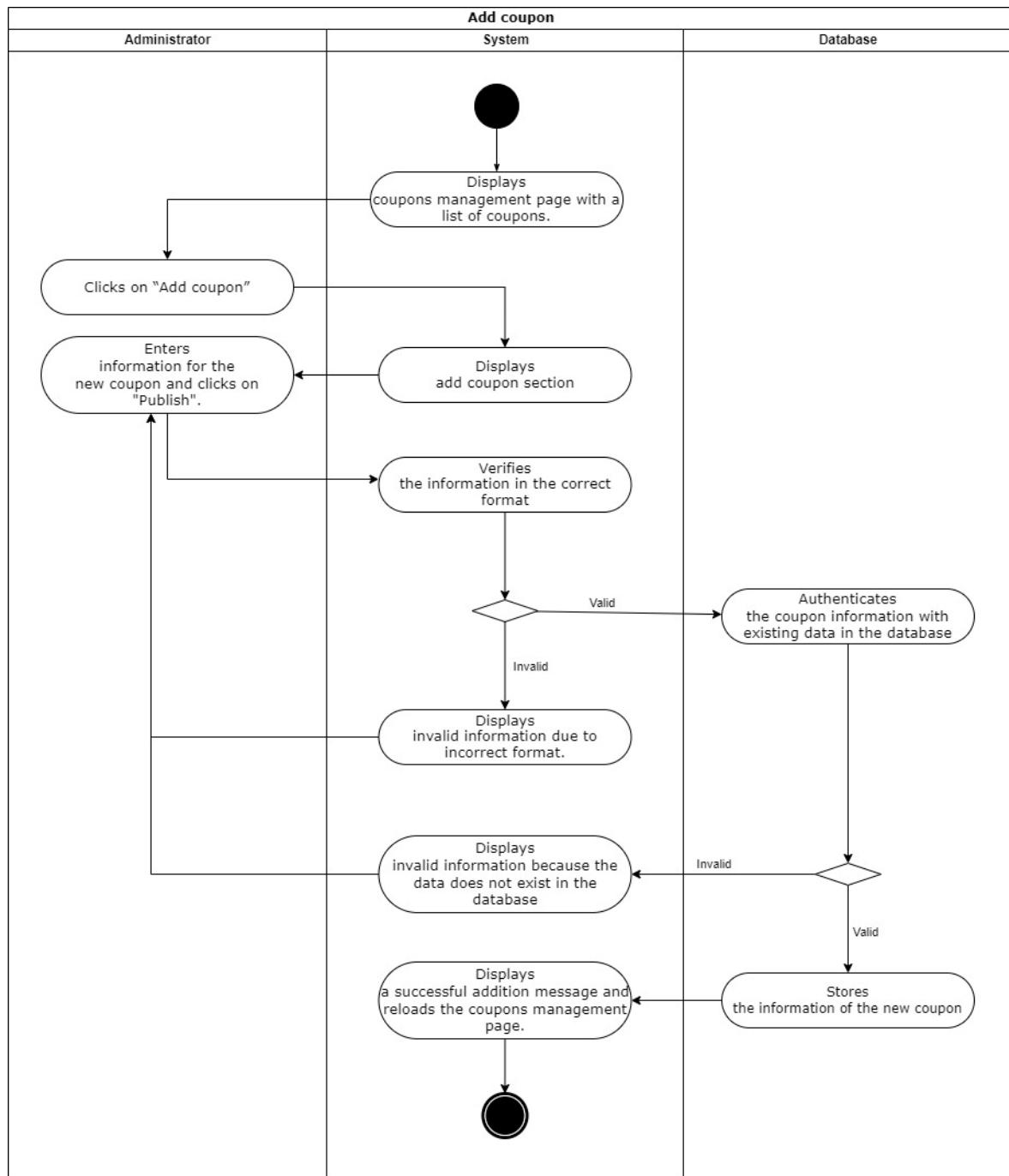
Hình 6-31 Use case "Manage coupons"

Usecase ID	UC08
<b>Usecase Name</b>	Manage coupons
<b>Description</b>	Allow administrator to add coupon/ delete coupon/ update coupon/ search coupon
<b>Trigger</b>	Admin clicks on Marketing -> Coupons on the management page.
<b>Pre-condition</b>	The administrator's device must be connected to the Internet. The administrator's status is logged in.
<b>Post-condition</b>	Coupons information have been successfully inserted into the database. Data on the management page is filtered by keyword.
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays coupons management page with a list of coupons.</li> <li>2. Administrator chooses one function: Add coupon/ Delete coupon/ Edit coupon/ Search coupon</li> <li>- Add coupon:</li> <li>4. Administrator clicks on “Add coupon”</li> <li>5. The system displays add new coupon section.</li> <li>6. Administrator enters information for the new coupon and clicks on "Publish".</li> <li>7. The system verifies the information in the correct format.</li> <li>8. The system processes the request.</li> </ol>

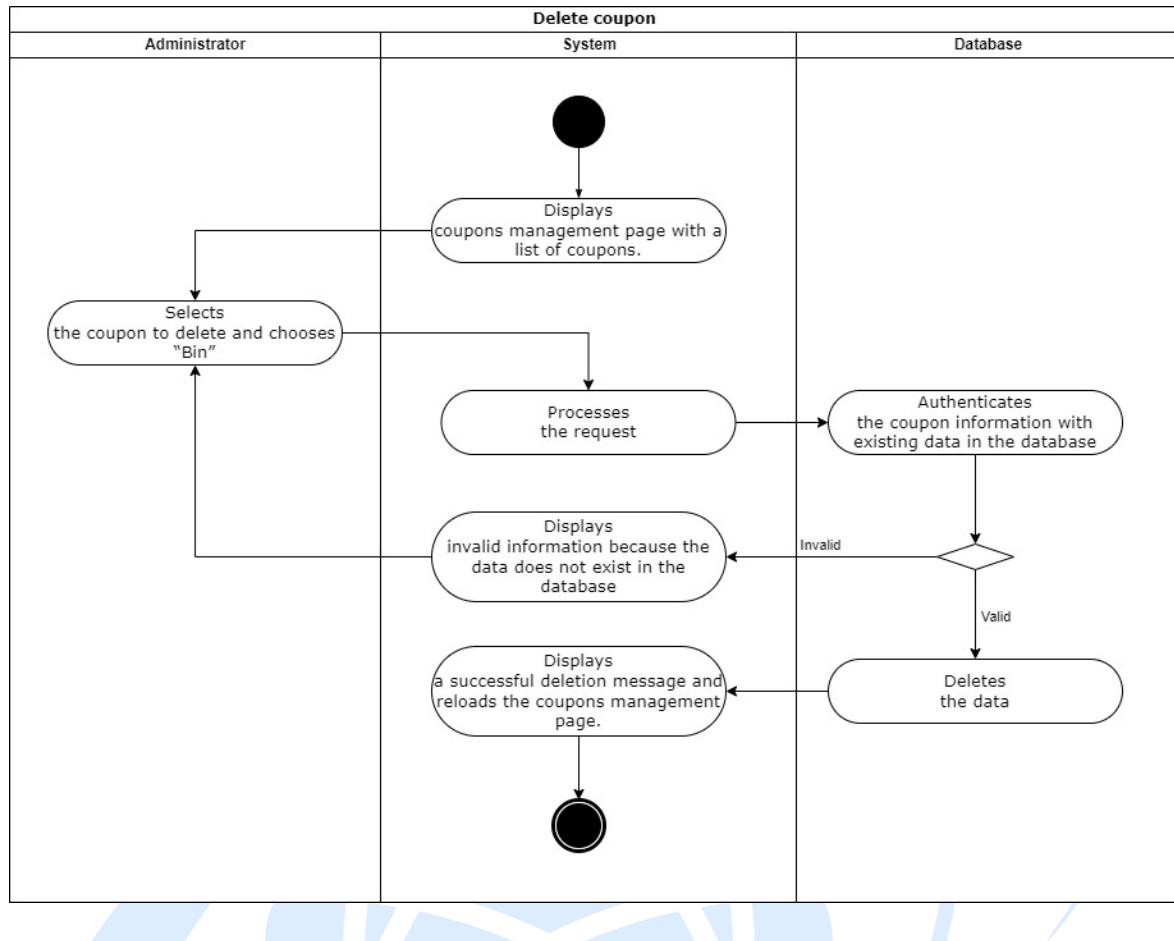
	<p>9. The system authenticates the coupon information with existing data in the database.</p> <p>10. The system stores the information of the new coupon in the database.</p> <p>11. The system displays a successful addition message and reloads the coupons management page.</p> <p>- Delete coupon:</p> <p>12. Administrator selects the coupon to delete and chooses “Bin”</p> <p>13. The system processes the request.</p> <p>14. The system authenticates the information with existing data in the database.</p> <p>15. The system deletes the data.</p> <p>16. Administrator displays a successful deletion message and reloads the coupons management page.</p> <p>- Update coupon:</p> <p>17. Administrator select the user to update and chooses “Edit”.</p> <p>18. The system displays update section.</p> <p>19. Administrator edits information and clicks on "Update".</p> <p>20. The system verifies the information in the correct format.</p> <p>21. The system processes the request.</p> <p>22. The system authenticates the order information with existing data in the database.</p> <p>23. The system stores the information in the database.</p>
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	<p>24. The system displays a successful update message and reloads the coupons management page.</p> <p>- Search user:</p> <p>25. Administrator chooses “Search coupons” and enters keywords.</p> <p>26. The system processes the search request.</p> <p>27. The system queries data related to the keywords.</p> <p>28. The system filters data on the coupons management page.</p>
<b>Alternative flow</b>	<p>7a. The system displays invalid information due to incorrect format. The system shows an error and the use case continues from step 6.</p> <p>9a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 6.</p> <p>14a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 12</p> <p>20a. The system displays invalid information due to incorrect format. The system shows an error and the use case continues from step 19.</p> <p>22a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 19.</p>
<b>Exception flow</b>	<p>27b. The system finds no results and displays a no results message. The use case stops.</p>

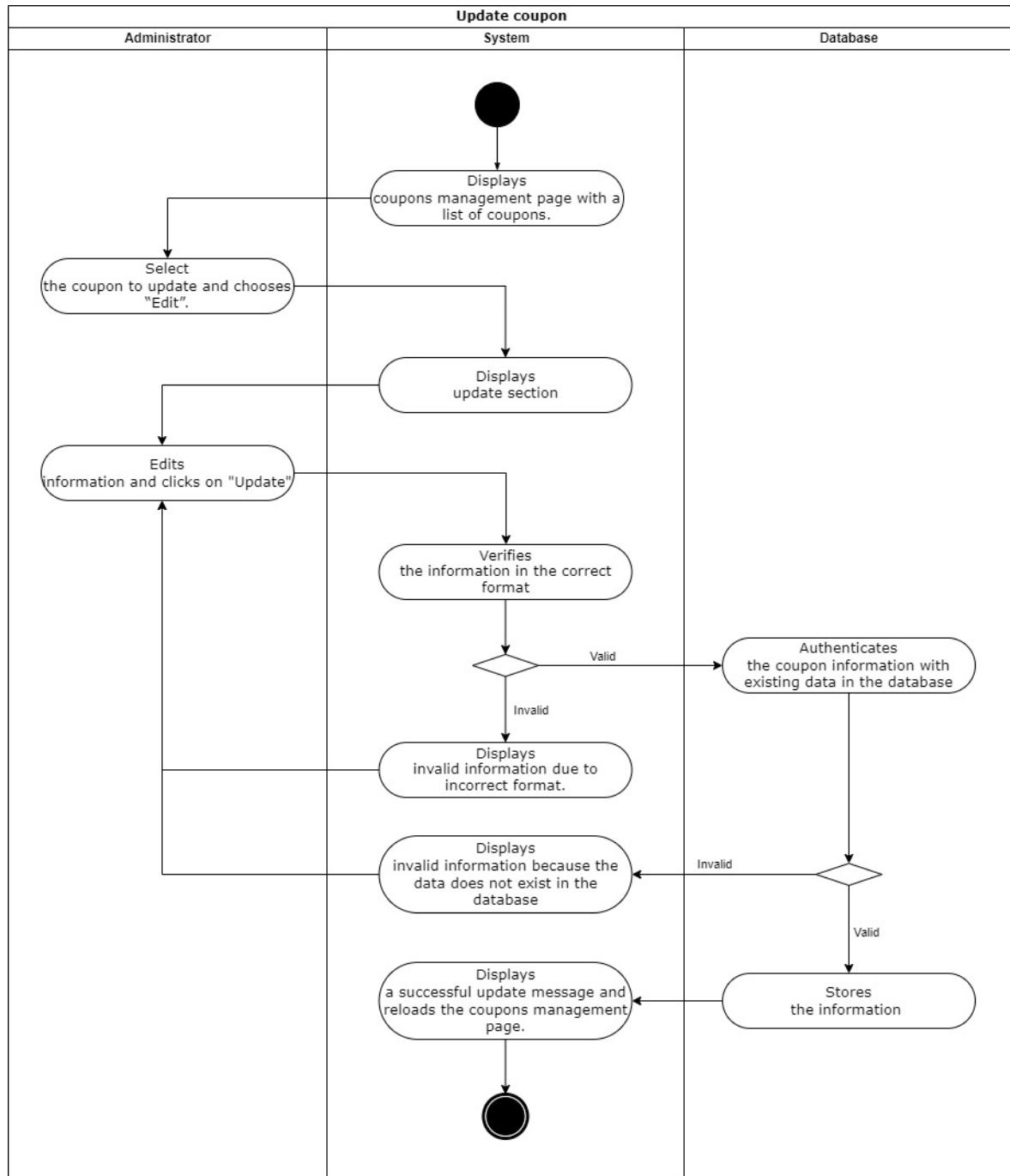
Bảng 6-10 Specific decription about Use case UC08 "Managa coupons"



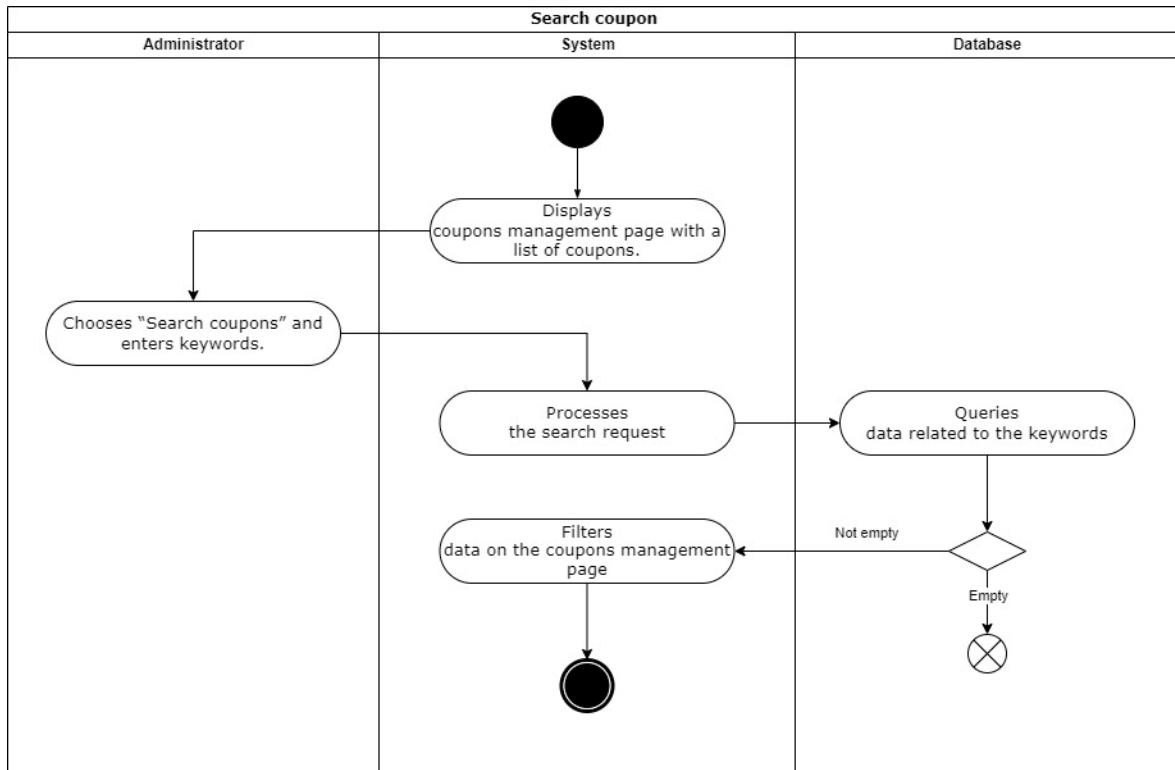
Hình 6-32 Activity diagram "Add coupon"



Hình 6-33 Activity diagram "Delete coupon"



Hình 6-34 Activity diagram "Update coupon"



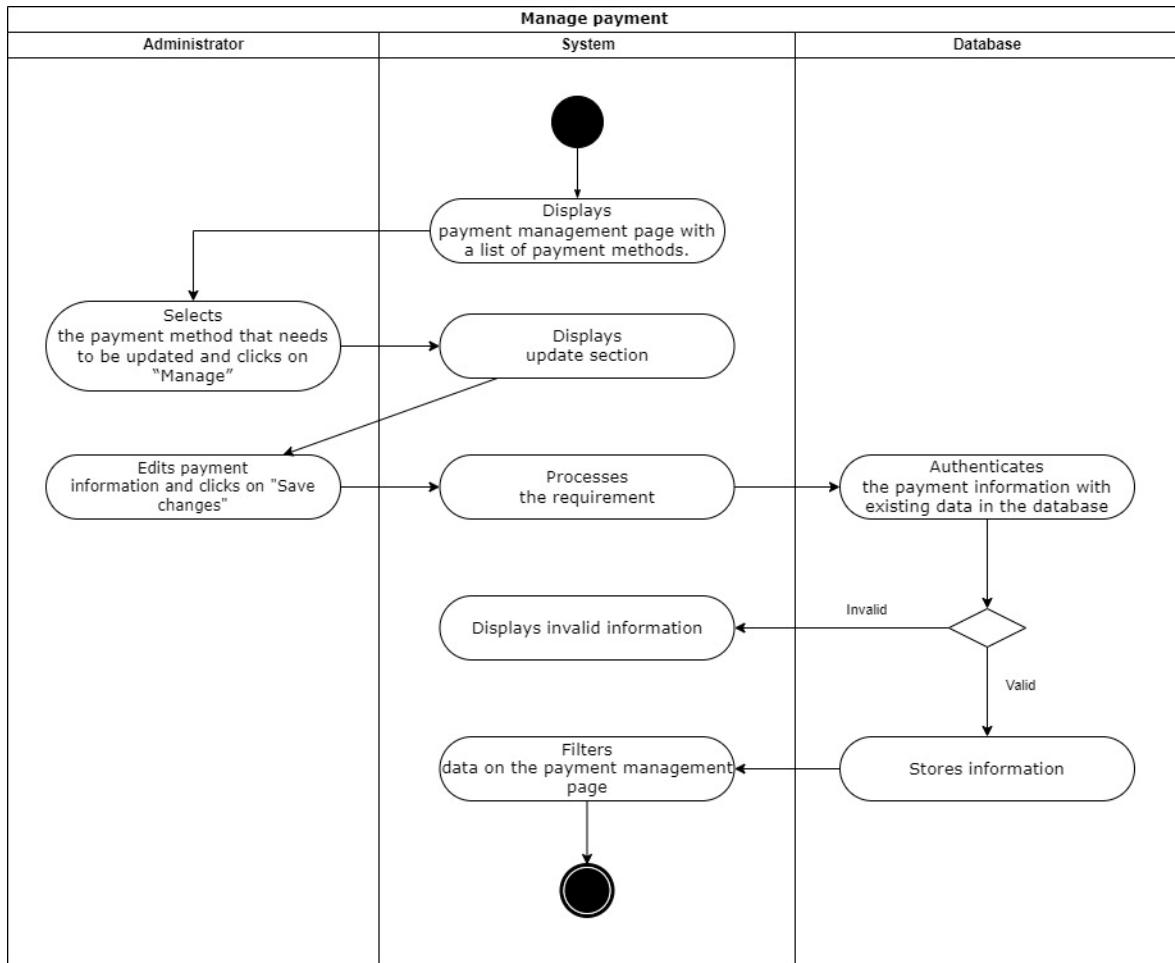
Hình 6-35 Activity diagram "Search coupon"

#### 6.1.3.1.9. Manage payment

Usecase ID	UC09
Usecase Name	Manage payment
Description	Allow administrator to update payment method
Trigger	Admin clicks on WooCommerce -> Settings ->Coupons on the management page.
Pre-condition	The administrator's device must be connected to the Internet. The administrator's status is logged in.

<b>Post-condition</b>	Payment information have been successfully inserted into the database.
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays payment management page with a list of payment methods.</li> <li>2. Administrator selects the payment method that needs to be updated and clicks on “Manage”</li> <li>3. The system displays update section.</li> <li>4. Administrator edits payment information and clicks on "Save changes"</li> <li>5. System processes the requirement.</li> <li>6. The system authenticates the payment information with existing data in the database.</li> <li>7. The system stores the information in the database.</li> <li>8. The system displays a successful update message and reloads the payment management page</li> </ol>
<b>Alternative flow</b>	<ol style="list-style-type: none"> <li value="6">6a. The system displays invalid information because the data does not exist in the database. The system shows an error and the use case continues from step 4.</li> </ol>
<b>Exception flow</b>	

Bảng 6-11 Specific decription about Use case UC09 "Managa payment"



Hình 6-36 Activity diagram "Manage payment"

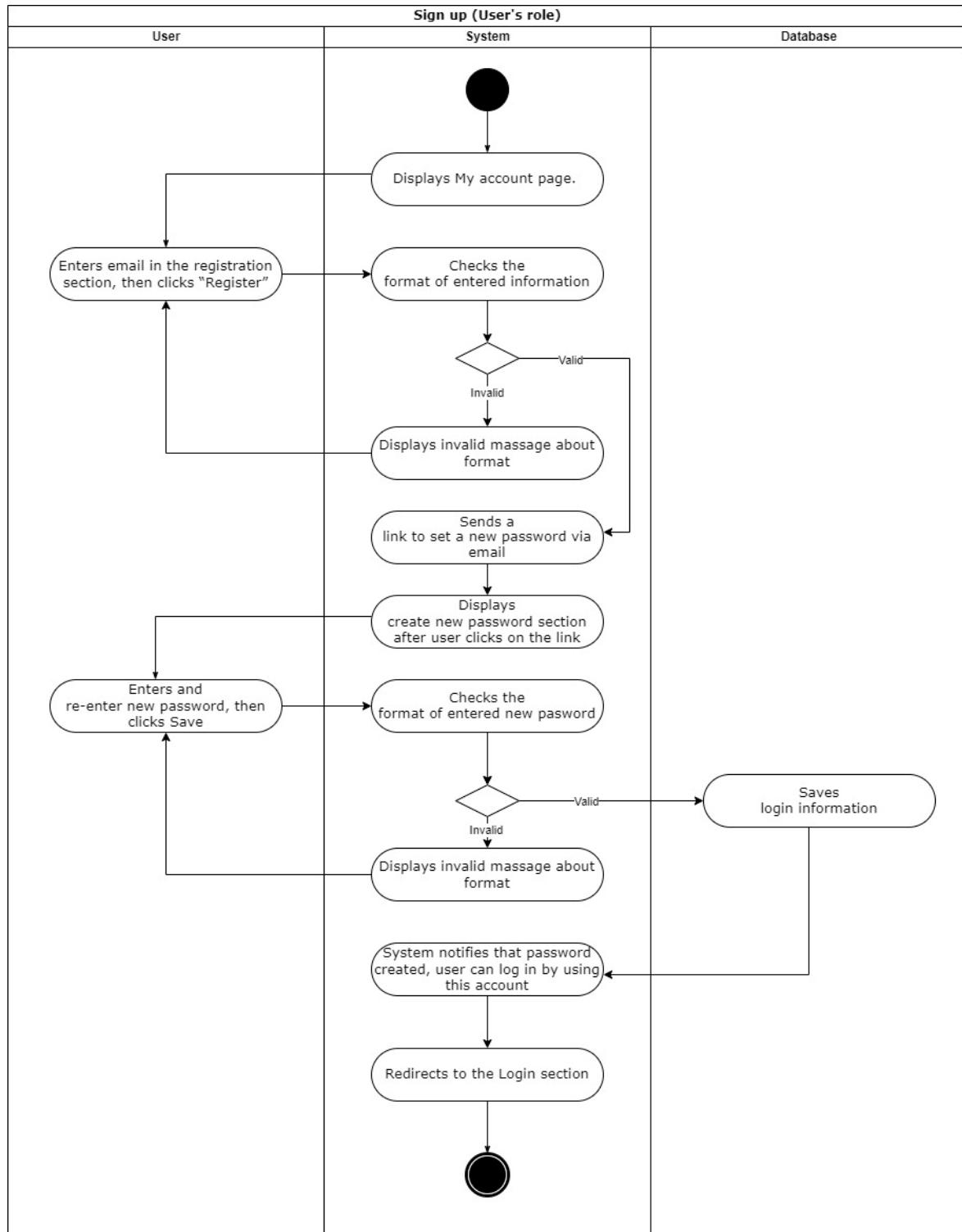
### 6.1.3.2. User's role

#### 6.1.3.2.1. Sign up

Usecase ID	UC09
Usecase Name	Sign up
Description	User creates an account for all system services.
Trigger	Customer clicks on button "Sign up" at interface
Pre-condition	User's device must be connected to the Internet

<b>Post-condition</b>	<ul style="list-style-type: none"> <li>- User gets a notification about sign up successful.</li> <li>- User's account is created and can be used for the next login.</li> </ul>
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays My account page.</li> <li>2. User enters email in the registration section, then user clicks "Register"</li> <li>3. The system checks the format of entered information.</li> <li>4. The system sends a link to set a new password via email.</li> <li>5. The system displays create new password section after user clicks on the link</li> <li>6. User enters and re-enter new password, then clicks Save</li> <li>7. The system checks the format of entered new password.</li> <li>8. The system saves login information to the database.</li> <li>9. The system notifies that password created, user can log in by using this account.</li> <li>10. The system redirects to the Login section.</li> </ol>
<b>Alternative flow</b>	<ol style="list-style-type: none"> <li>3a. System displays invalid message due to wrong format. Use-case continue at step 2.</li> <li>7a. System displays invalid mesage due to wrong format. Use-case continue at step 6.</li> </ol>
<b>Exception flow</b>	

Bảng 6-12 Specific decription about Use case UC09 "User sign up"



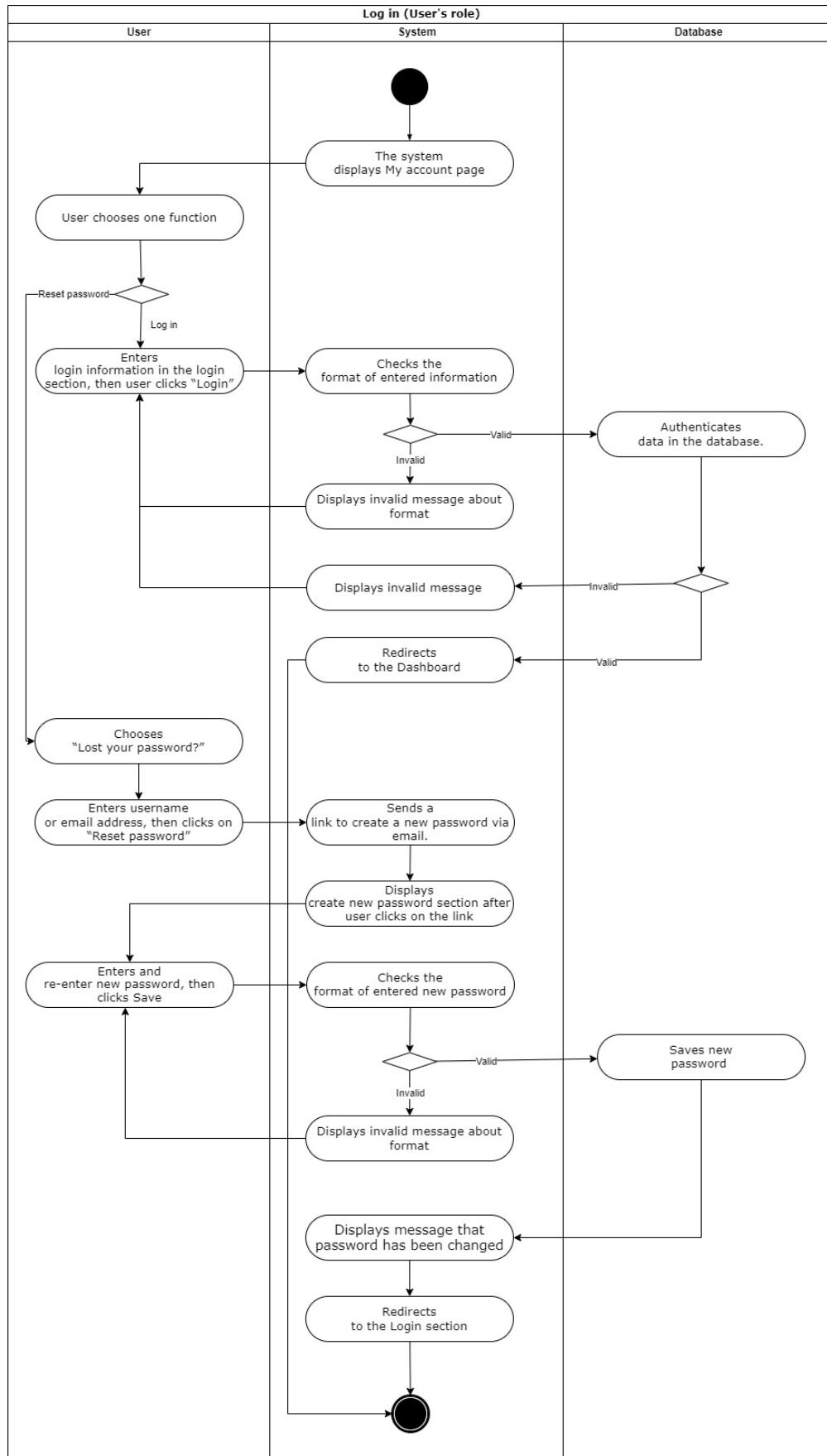
Bảng 6-13 Activity diagram "Sign up(user's role)"

#### 6.1.3.2.2. Login

Usecase ID	UC10
Usecase Name	Log in
Description	User uses exist account to login for using all services.
Trigger	User clicks on button “Login” at interface
Pre-condition	User’s device must be connected to the Internet User’s account exists
Post-condition	The system redirects to Dashboard and can use services of the system
Basic flow	<ol style="list-style-type: none"> <li>1. The system displays My account page.</li> <li>- Log in:</li> <li>2. User enters login information in the login section, then user clicks “Login”</li> <li>3. The system checks the format of entered information.</li> <li>5. The system authenticates data in the database.</li> <li>6. The system redirects to the Dashboard.</li> <li>- Reset password:</li> <li>7. User chooses “Lost your password?”</li> <li>8. User enters username or email address, then clicks on “Reset password”</li> <li>9. The system sends a link to create a new password via email.</li> </ol>

	10. The system displays create new password section after user clicks on the link  11. User enters and re-enter new password, then clicks Save  12. The system checks the format of entered new password.  13. The system saves new password to the database.  14. The system notifies that password has been changed, user can log in by using this password.  14. The system redirects to the Login section.
<b>Alternative flow</b>	3a. The system displays invalid message due to wrong format. Use-case continue at step 2.  5a. System display invalid message due to no existed account been signed with customers' entered email. Use-case continue at step 2.  12a. The system displays invalid message due to wrong format. Use-case continue at step 11.
<b>Exception flow</b>	

Bảng 6-14 Specific description about Use case UC10 "User log in"

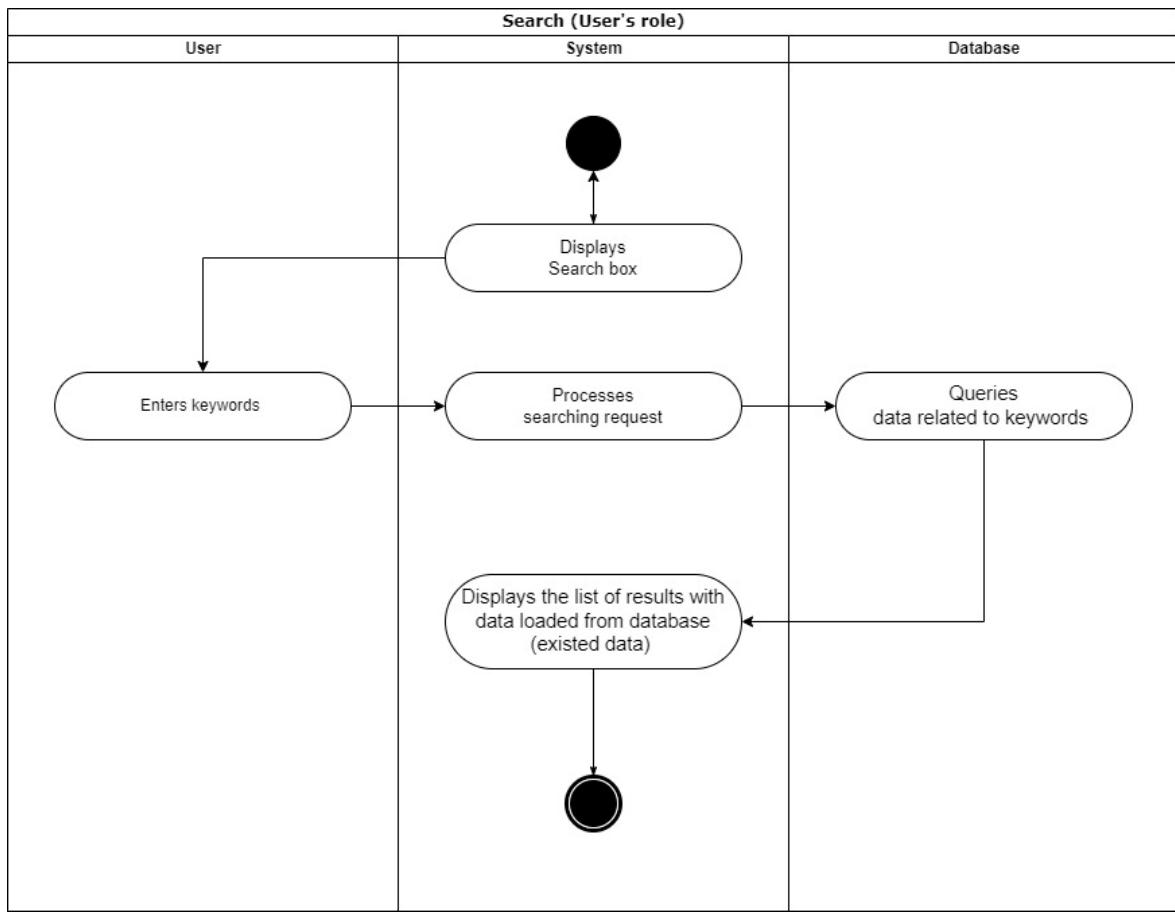


Hình 6-37 Activity diagram "Log in(user's role)"

#### 6.1.3.2.3. Search

Usecase ID	UC11
Usecase Name	Search (User's role)
Description	Users can search for anything related
Trigger	User clicks on search icon with the magnifying glass on the dashboard
Pre-condition	User's device must be connected to the Internet User's account exists The user's account status is logged in
Post-condition	Data is successfully inserted to database. Data at home page is filtered by keywords
Basic flow	<ol style="list-style-type: none"> <li>1. System displays Search box</li> <li>2. User enters keywords</li> <li>3. System processes searching request</li> <li>4. System queries data related to keywords</li> <li>5. The system displays the list of results with data loaded from database (existing data)</li> </ol>
Alternative flow	
Exception flow	5b. The system displays empty result because there is no data existing related to the keywords. Use-case stops.

Bảng 6-15 Specific description about Use case UC11 "Search(user's role)"



Hình 6-38 Activity diagram "Search(user's role)"

#### 6.1.3.2.4. Manage cart

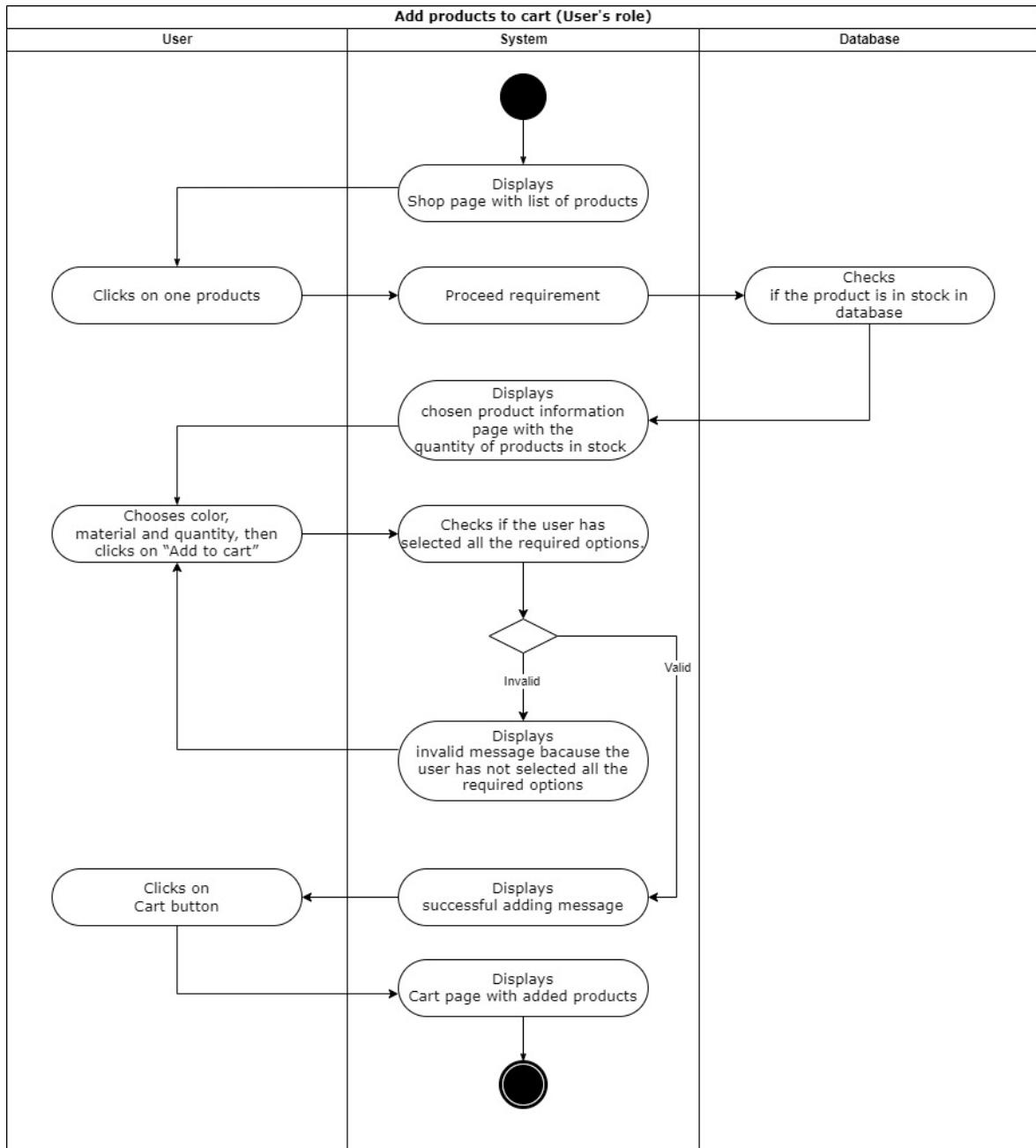
Usecase ID	UC12-1
Usecase Name	Add product to cart
Description	User can add products to cart
Trigger	User clicks on button “Shop” at homepage
Pre-condition	User’s device must be connected to the Internet User’s account exists

<b>Post-condition</b>	Adding information is successfully updated in database. New data is updated at cart page
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system get data from database</li> <li>2. The system displays Shop page with list of products</li> <li>3. User clicks on one products</li> <li>4. The system displays chosen product information</li> <li>5. User chooses color, material and quantity, then clicks on “Add to cart”</li> <li>6. The system checks if the user has selected all the required options.</li> <li>7. The system displays successful adding message</li> <li>8. User clicks on Cart button, chooses “View cart”</li> <li>9. The system displays cart page with added products</li> </ol>
<b>Alternative flow</b>	<ol style="list-style-type: none"> <li value="6">6a. The system displays invalid message because the user has not selected all the required options. Usecase continues at step 5</li> </ol>
<b>Exception flow</b>	

Bảng 6-16 Specific description about Use case UC12-1 "Add product to cart(user's role)"

## ANALYSIS AND DESIGN

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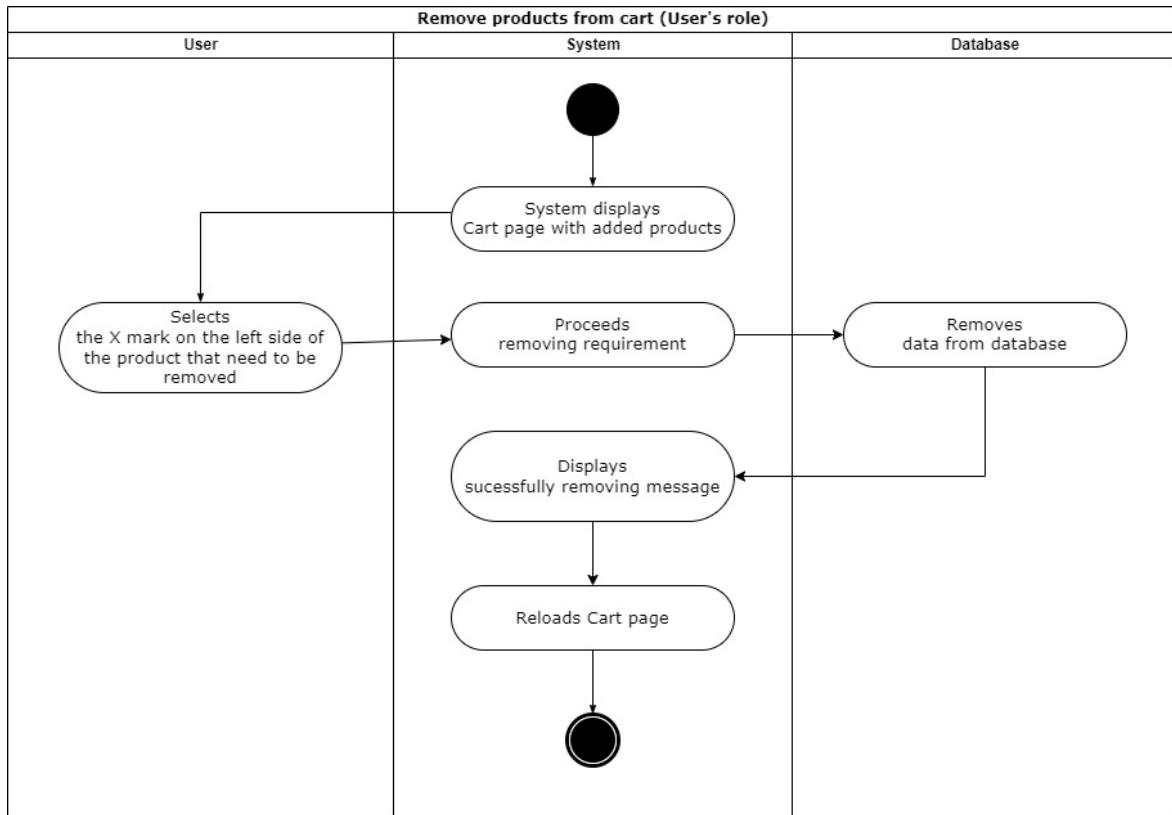


Hình 6-39 Activity diagram "Add product to cart(user's role)"

Usecase ID	UC12-2
Usecase Name	Remove product from cart (User's role)
Description	User can remove products from cart

<b>Trigger</b>	User clicks on button “Cart” at homepage
<b>Pre-condition</b>	User’s device must be connected to the Internet User’s account exists
<b>Post-condition</b>	Removing information is successfully updated in database. New data is updated on cart page
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays Cart page with added products</li> <li>2. User selects the X mark on the left side of the product that need to be removed</li> <li>4. System proceeds removing requirement.</li> <li>5. System removes data from database</li> <li>6. The system displays sucessfully removing message</li> <li>7. The system reloads Cart page</li> </ol>
<b>Alternative flow</b>	
<b>Exception flow</b>	

Bảng 6-17 Specific description about Use case UC12-2 "Remove product form cart(user's role)"



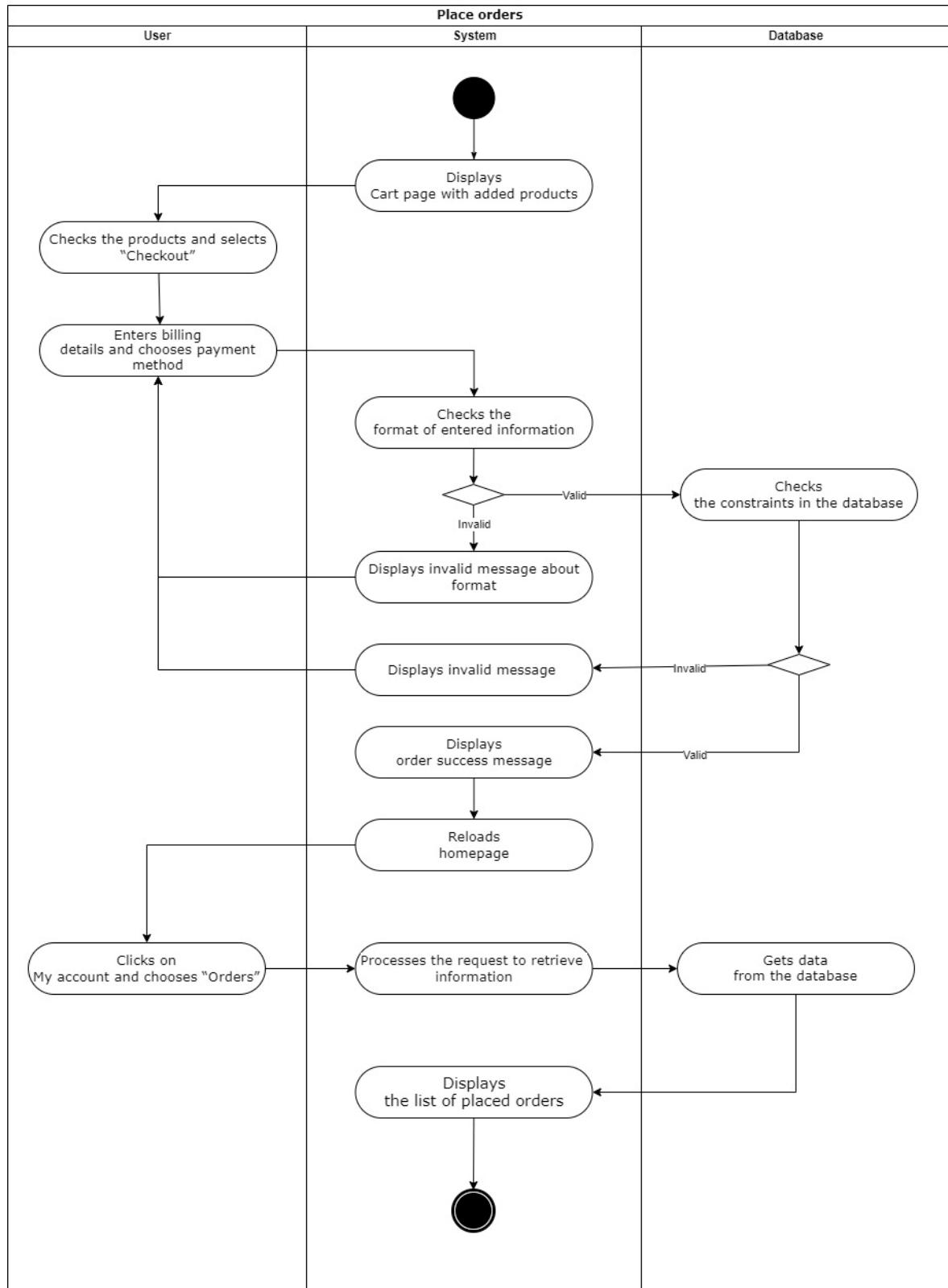
Hình 6-40 Activity diagram "Remove product(s) from cart(user's role)"

#### 6.1.3.2.5. Place orders

Usecase ID	UC13
Usecase Name	Place orders (User's role)
Description	User can proceed to checkout and track orders.
Trigger	User clicks on the button “Cart” on the homepage
Pre-condition	User’s device must be connected to the Internet User’s account exists Use case 04-1 has been executed by the user
Post-condition	Order information successfully inserted into database.

	Data on management page is updated (with new orders)
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays Cart page with added products</li> <li>2. User checks products, then selects “Checkout”</li> <li>4. User enters billing details and chooses payment method</li> <li>5. The system checks the format of entered information</li> <li>6. The system checks the constraints in the database</li> <li>7. The system displays order success message</li> <li>8. The system reloads homepage.</li> <li>9. User clicks on My account and chooses “Orders”</li> <li>10. The system gets data from the database</li> <li>11. The system displays the list of placed orders</li> </ol>
<b>Alternative flow</b>	<ol style="list-style-type: none"> <li>5a. The system displays invalid message due to wrong format. Use-case continues at step 4.</li> <li>6a. The system displays invalid information because constraint appears in the database. Use-case continues at step 4.</li> </ol>
<b>Exception flow</b>	

Bảng 6-18 Specific description about Use case UC13 "Place order(user's role)"



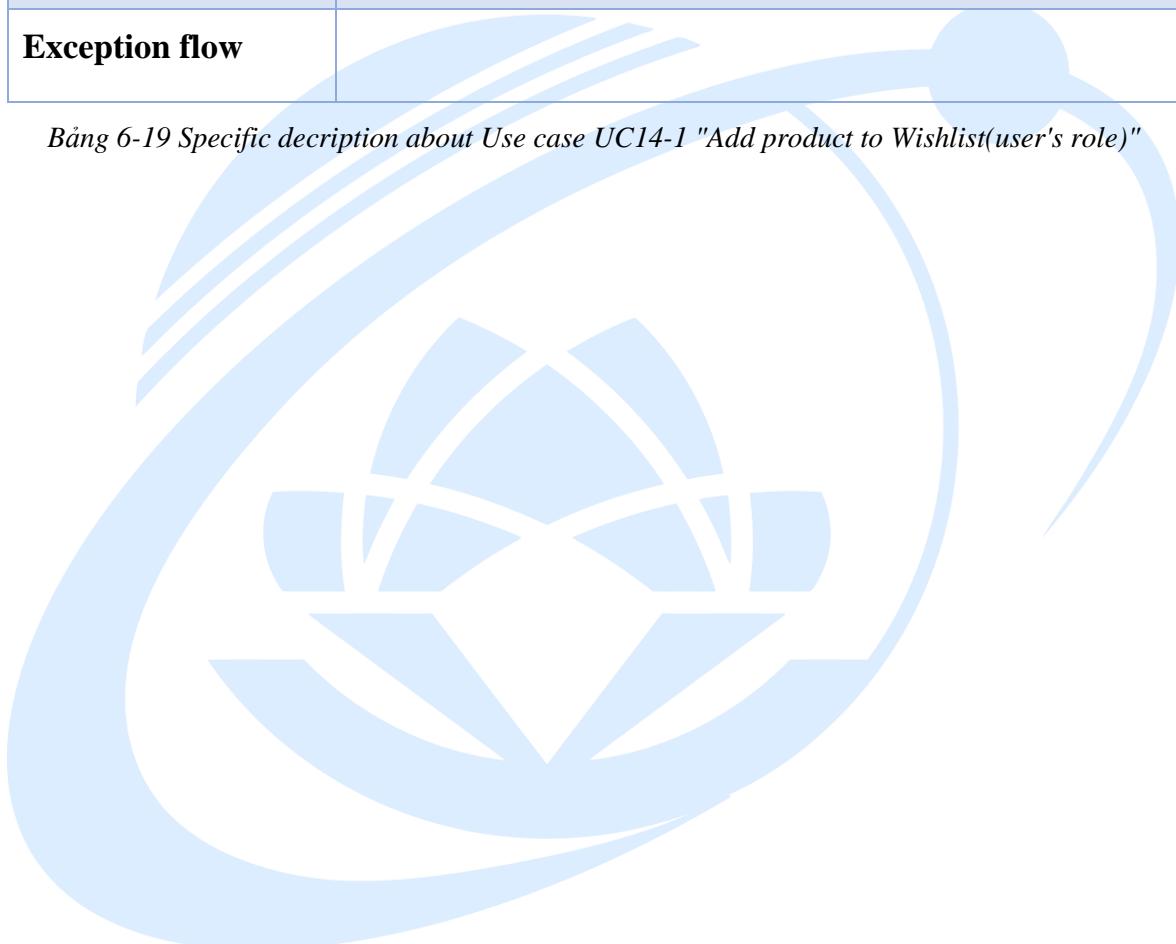
Hình 6-41 Activity diagram "Place order(user's role)"

**6.1.3.2.6. Manage wishlist**

Use case ID	UC14-1
<b>Use case Name</b>	Add product to wishlist (User's role)
<b>Description</b>	Users can add products to their wishlist
<b>Trigger</b>	The user clicks on the button “Shop” on homepage
<b>Pre-condition</b>	User’s device must be connected to the Internet User’s account exists
<b>Post-condition</b>	Adding information is successfully updated in database. New data is updated on the wishlist page
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays a Shop page with a list of products</li> <li>2. User clicks on one product</li> <li>3. The system checks if the product is in stock in the database</li> <li>4. The system displays chosen product information page with the number of products in stock</li> <li>5. The user chooses color, material, and quantity, then clicks on “Add to wishlist”</li> <li>6. The system checks if the user has selected all the required options.</li> <li>7. The system displays successful adding message</li> <li>8. User clicks on “My account” button, chooses “Wishlist”</li> </ol>

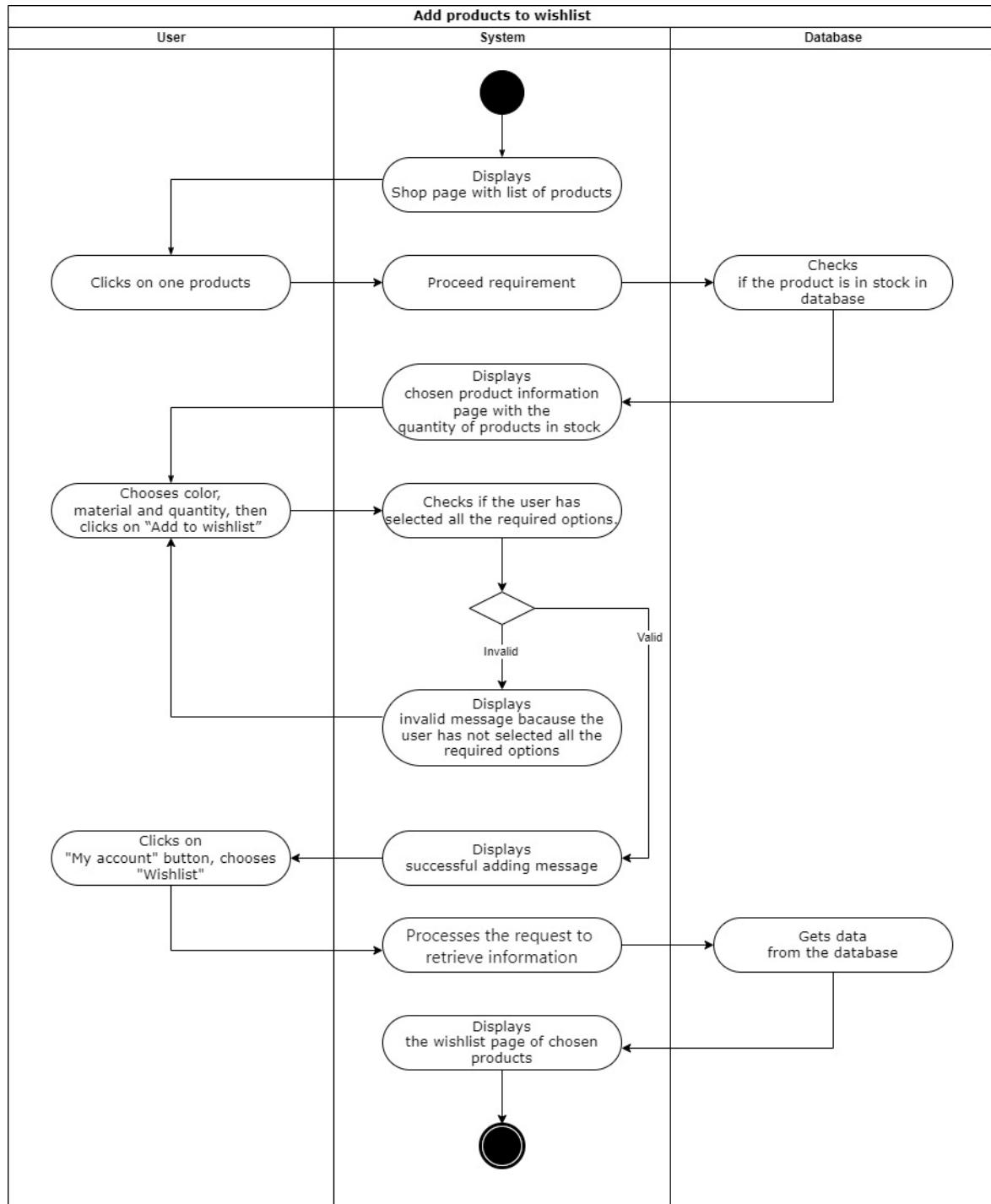
	9. The system gets data from the database  10. The system displays the wishlist page of chosen products
<b>Alternative flow</b>	6a. The system displays invalid message because the user has not selected all the required options. Usecase continues at step 5
<b>Exception flow</b>	

Bảng 6-19 Specific description about Use case UC14-1 "Add product to Wishlist(user's role)"



## ANALYSIS AND DESIGN

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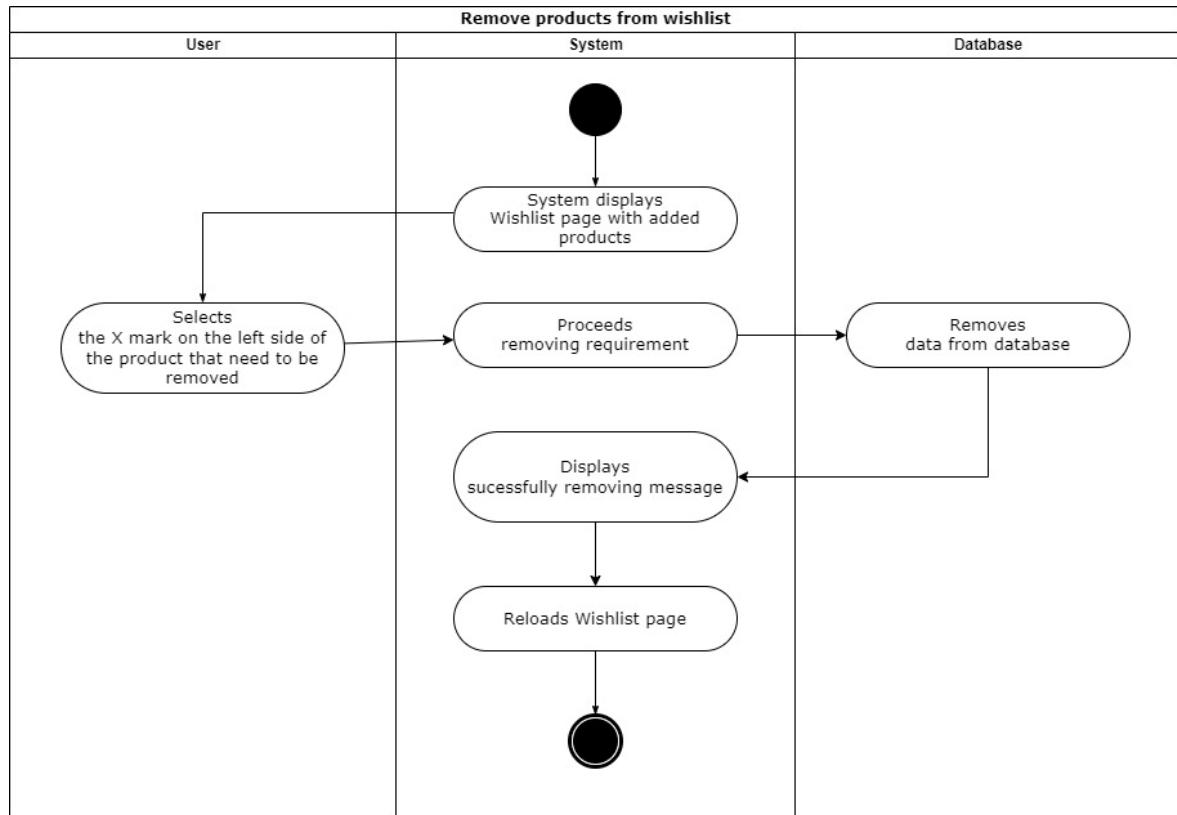


Hình 6-42 Activity diagram "Add product to wishlist"

<b>Usecase ID</b>	UC14-2
<b>Usecase Name</b>	Remove product from wishlist

<b>Description</b>	User can remove products from cart
<b>Trigger</b>	User clicks on button “My account”, then chooses “Wishlist”
<b>Pre-condition</b>	User’s device must be connected to the Internet User’s account exists
<b>Post-condition</b>	Removing information is successfully updated in database. New data is updated at wishlist page
<b>Basic flow</b>	<ol style="list-style-type: none"> <li>1. The system displays Wishlist page with added products</li> <li>2. User selects the X mark on the left side of the product that need to be removed</li> <li>4. System proceeds removing requirement.</li> <li>5. System removes data from database</li> <li>6. The system displays sucessfully removing message</li> <li>7. The system reloads Wishlist page</li> </ol>
<b>Alternative flow</b>	
<b>Exception flow</b>	

Bảng 6-20 Specific description about Use case UC14-2 "Remove product(s) from wishlist"

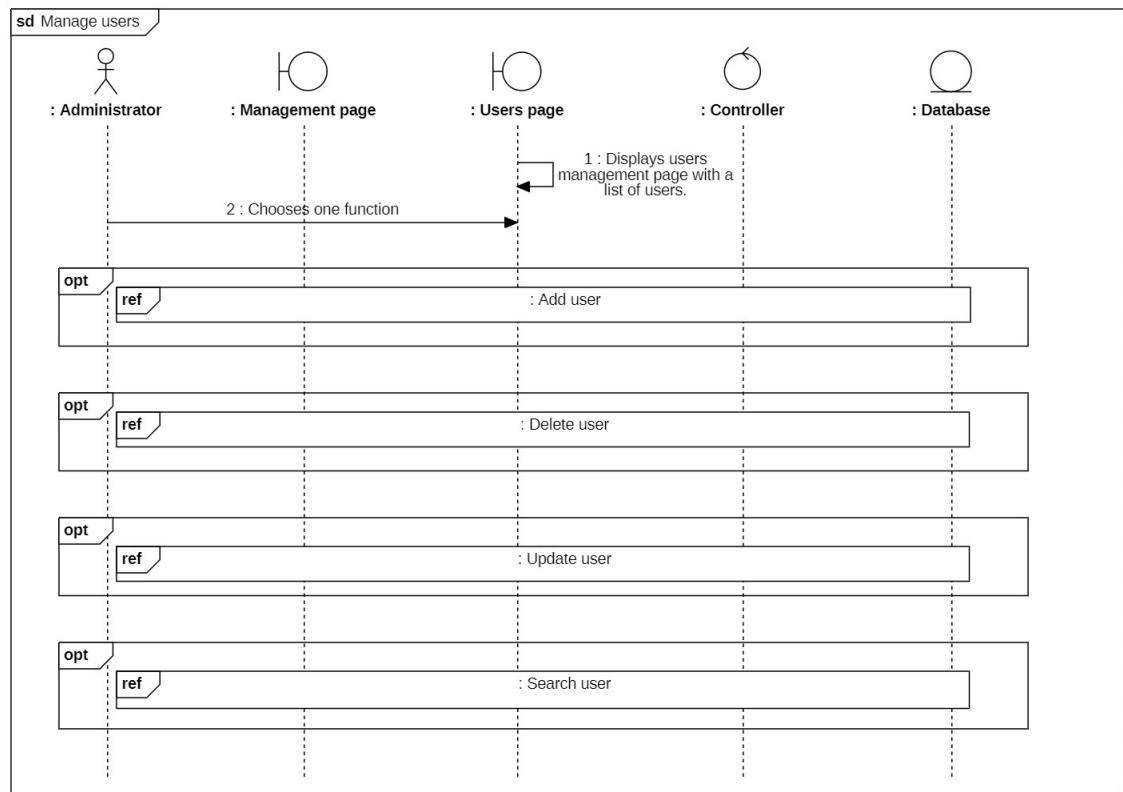


Hình 6-43 Activity diagram "Remove product(s) from wishlist"

## Sequence Diagram

### 6.1.4. Administrator role

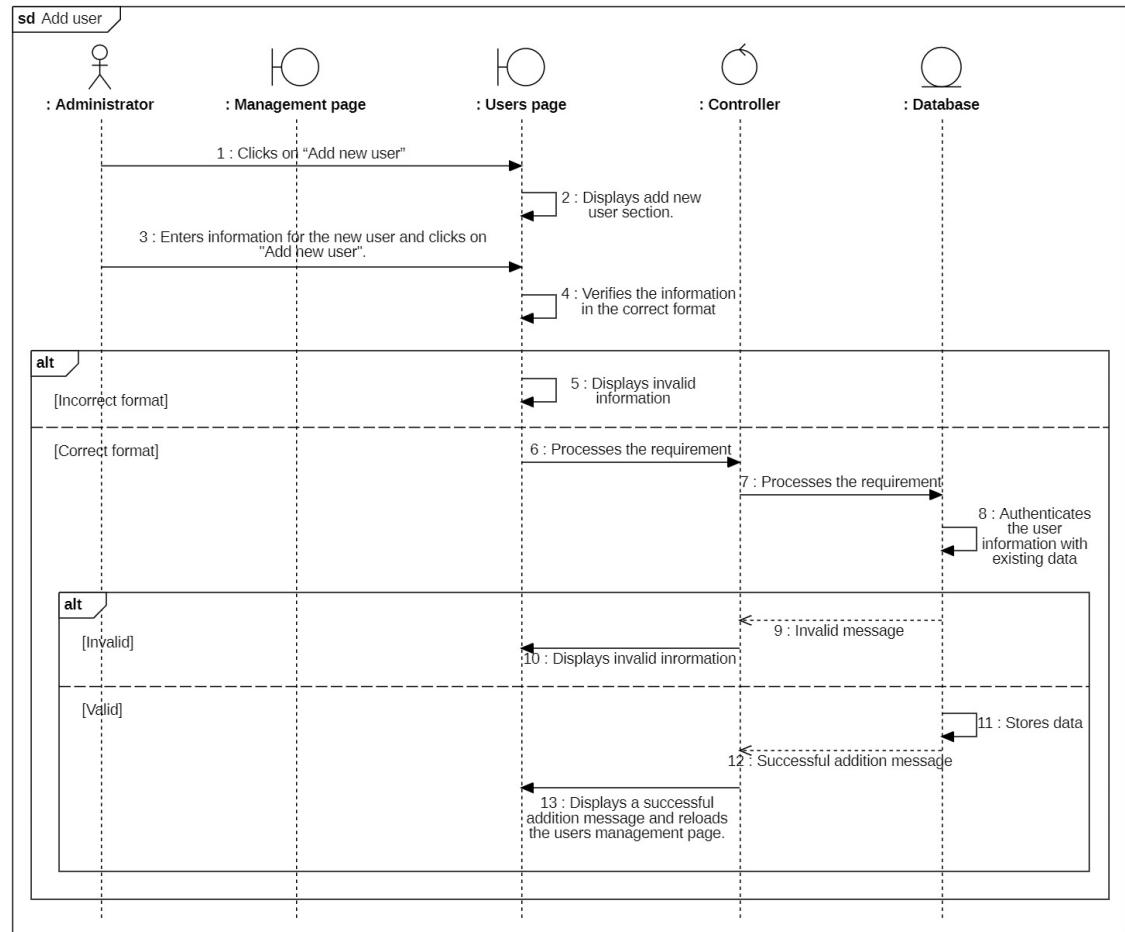
#### 6.1.4.1. Manage user



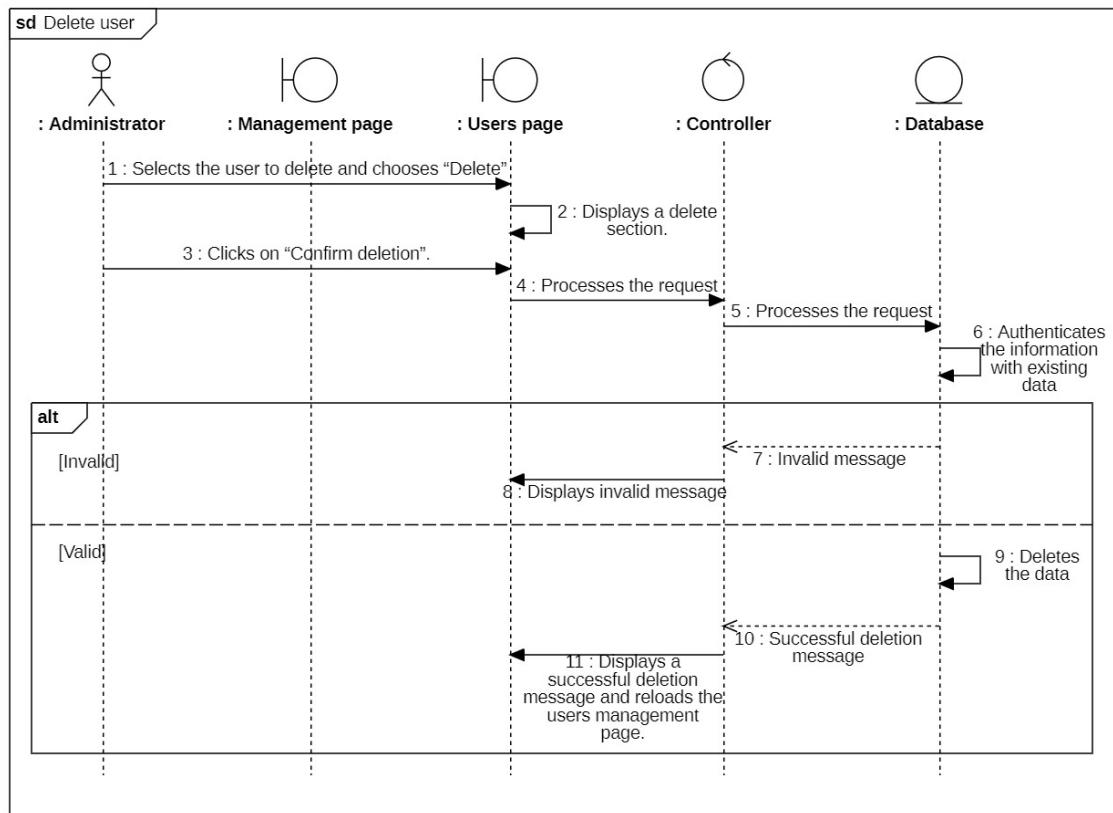
Hình 6-44 Sequence diagram "Manage users"

## ANALYSIS AND DESIGN

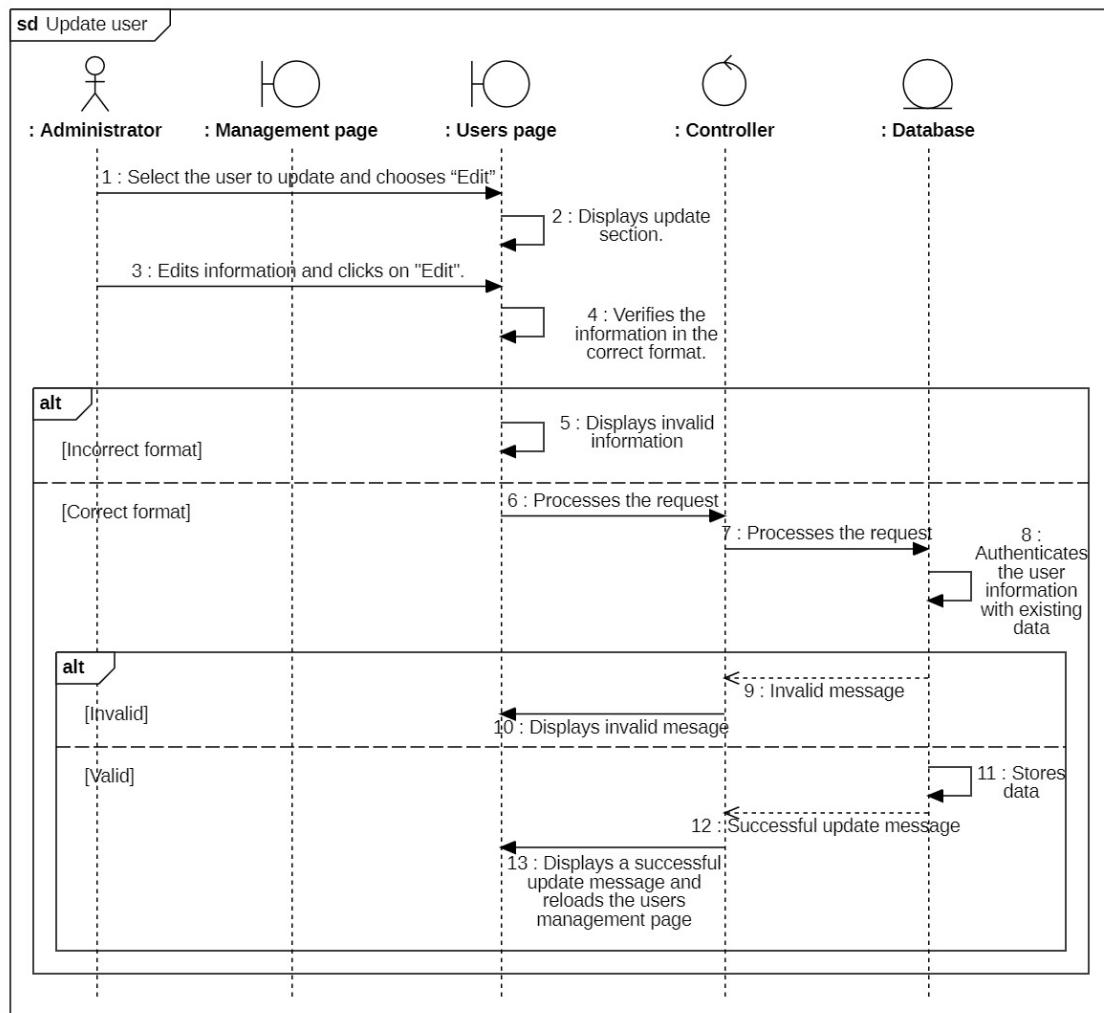
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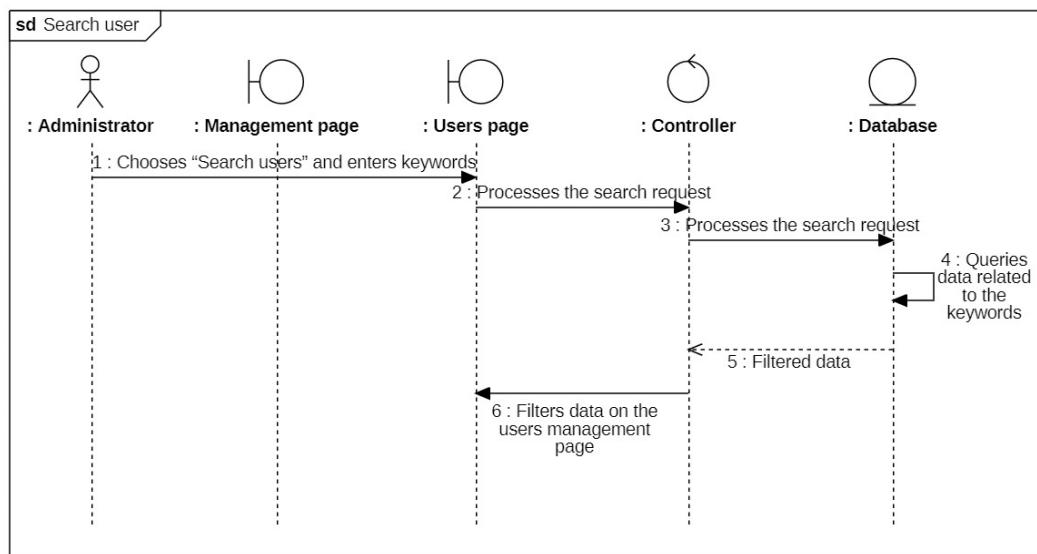
Hình 6-45 Sequence diagram "Add user"



Hình 6-46 Sequence diagram "Delete user"

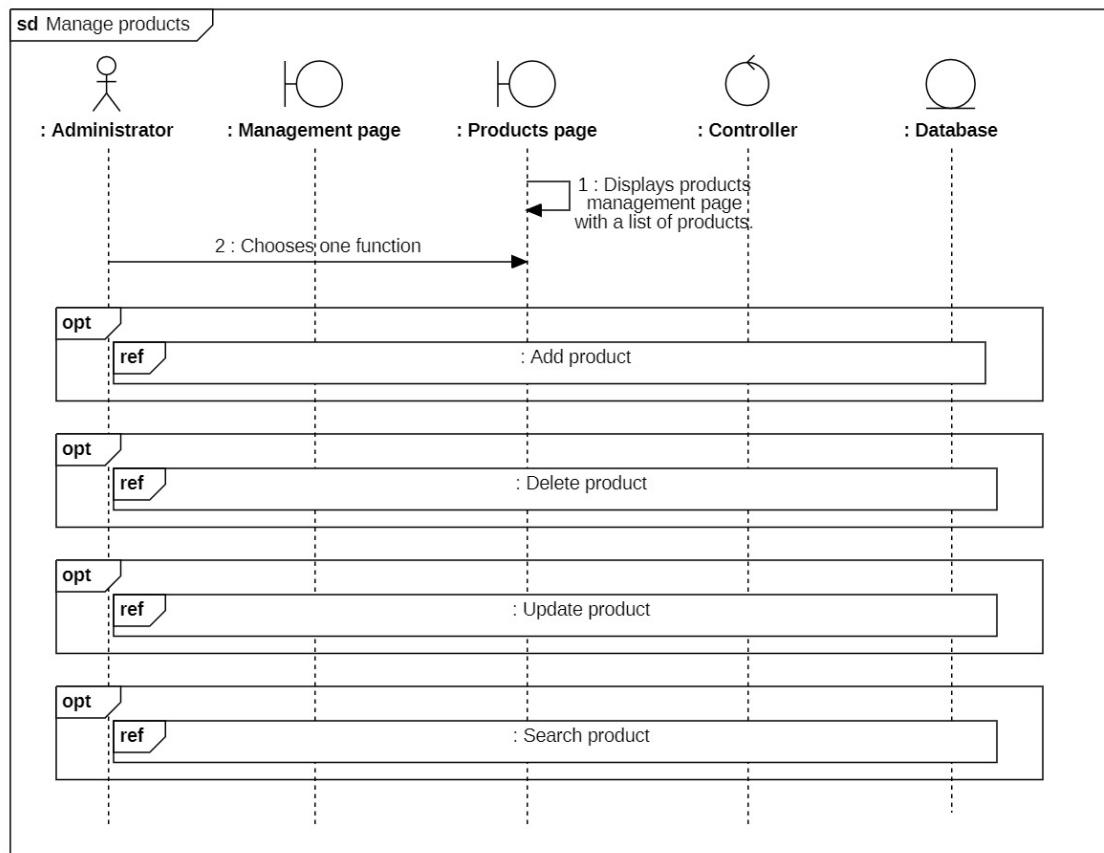


Hình 6-47 Sequence diagram "Update user"

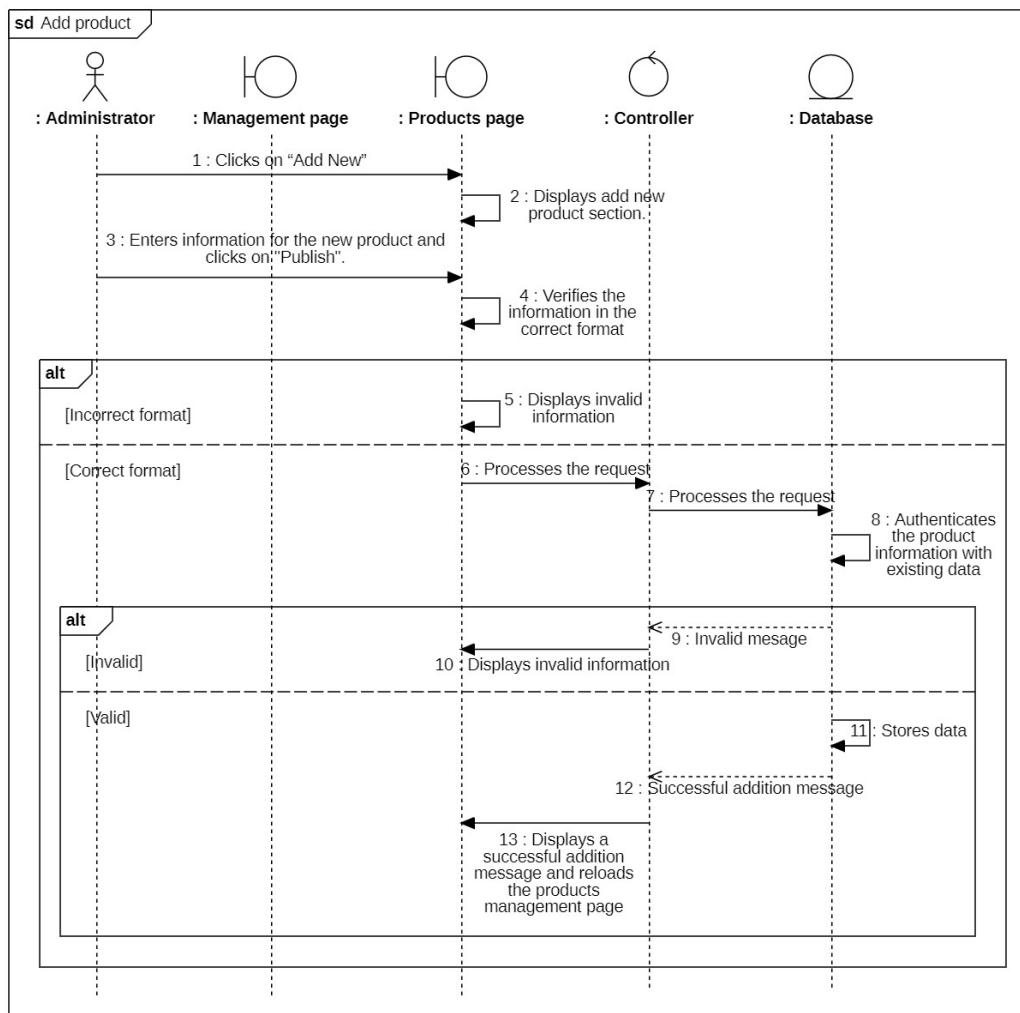


Hình 6-48 Sequence diagram "Search user"

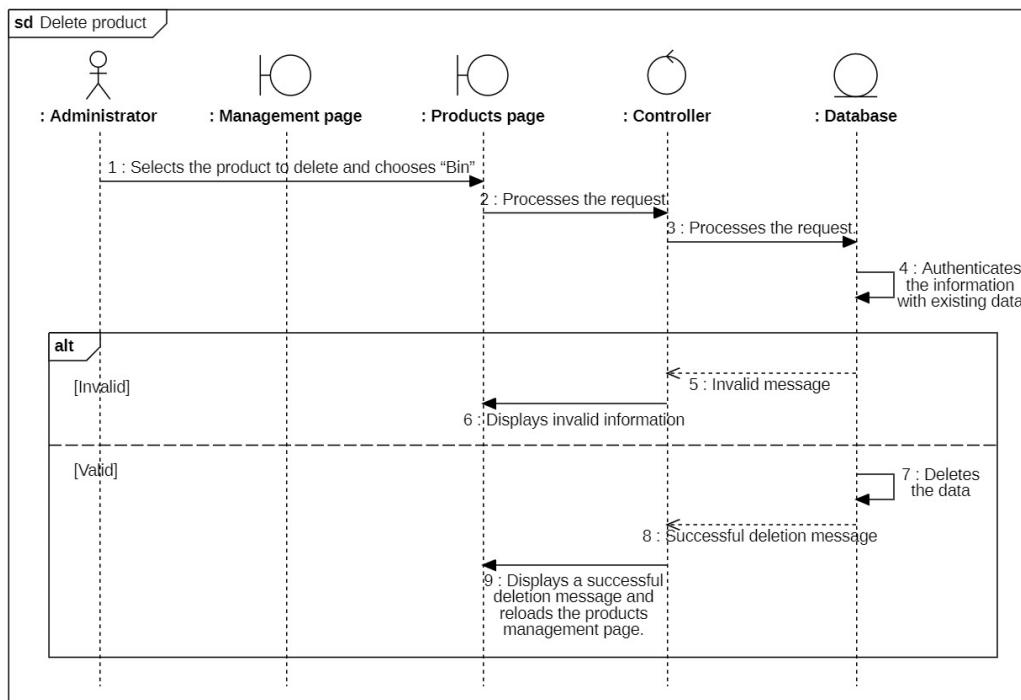
### 6.1.4.2. Manage products



Hình 6-49 Sequence diagram "Manage products"



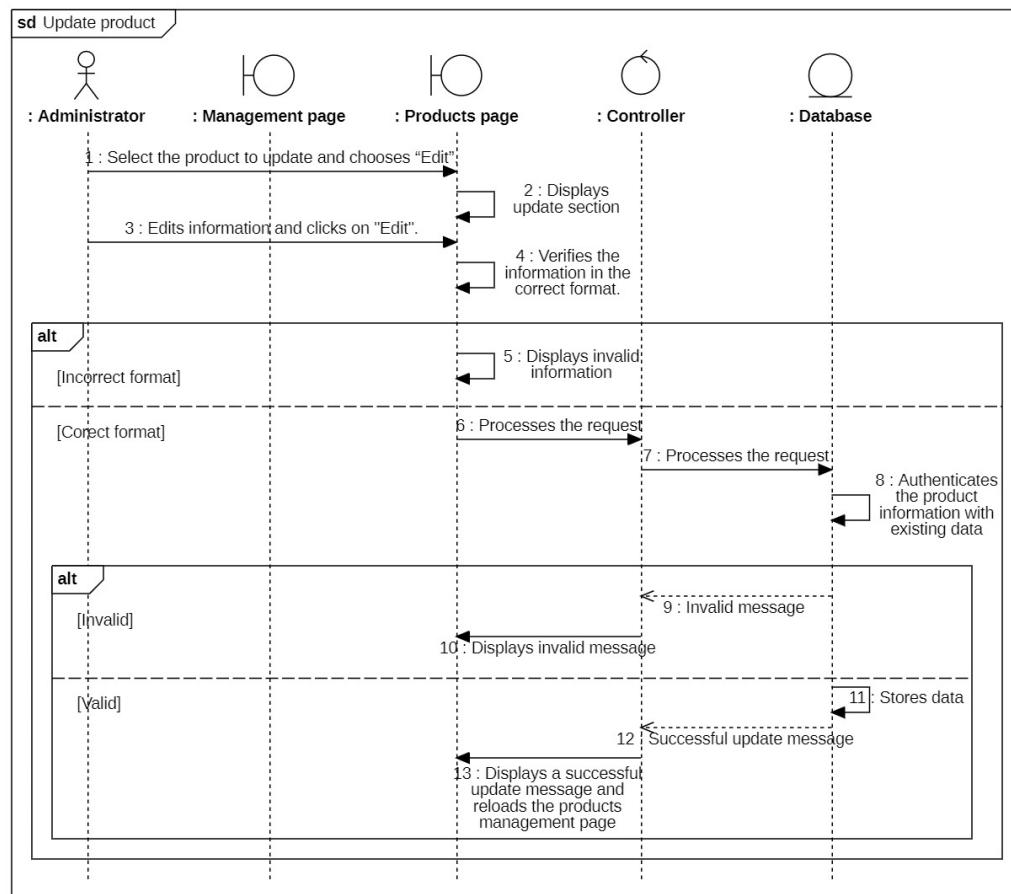
Hình 6-50 Sequence diagram "Add product"



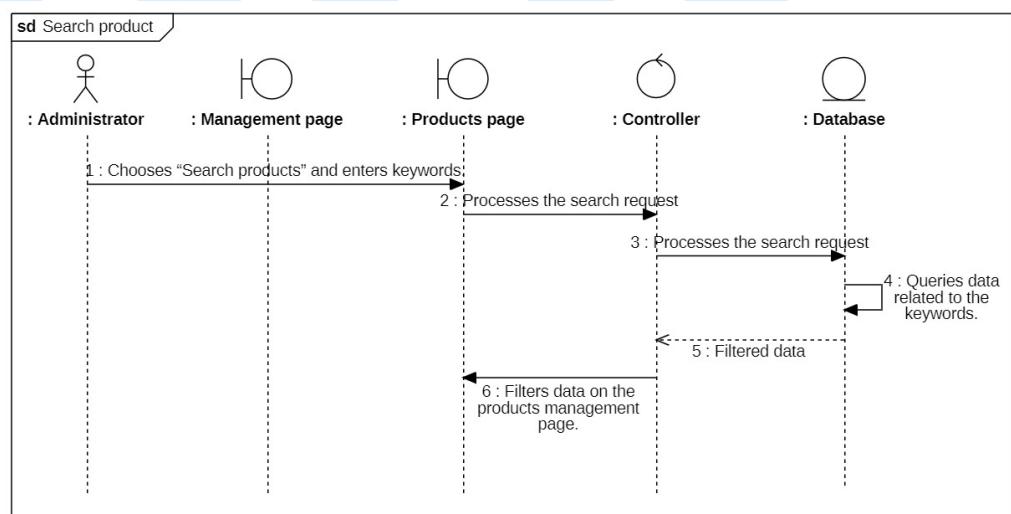
Hình 6-51 Sequence diagram "Delete product"

## ANALYSIS AND DESIGN

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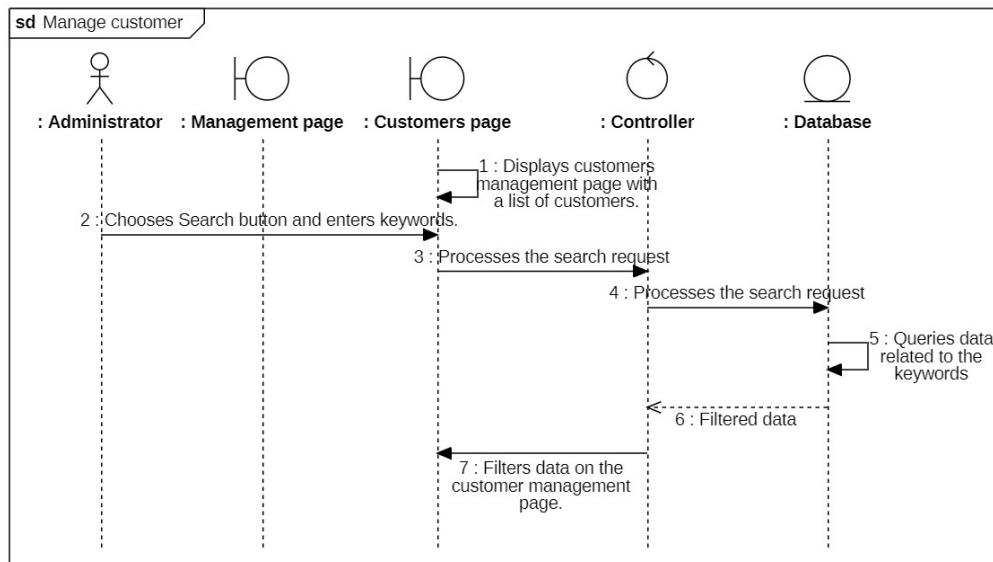


Hình 6-52 Sequence diagram "Update product"



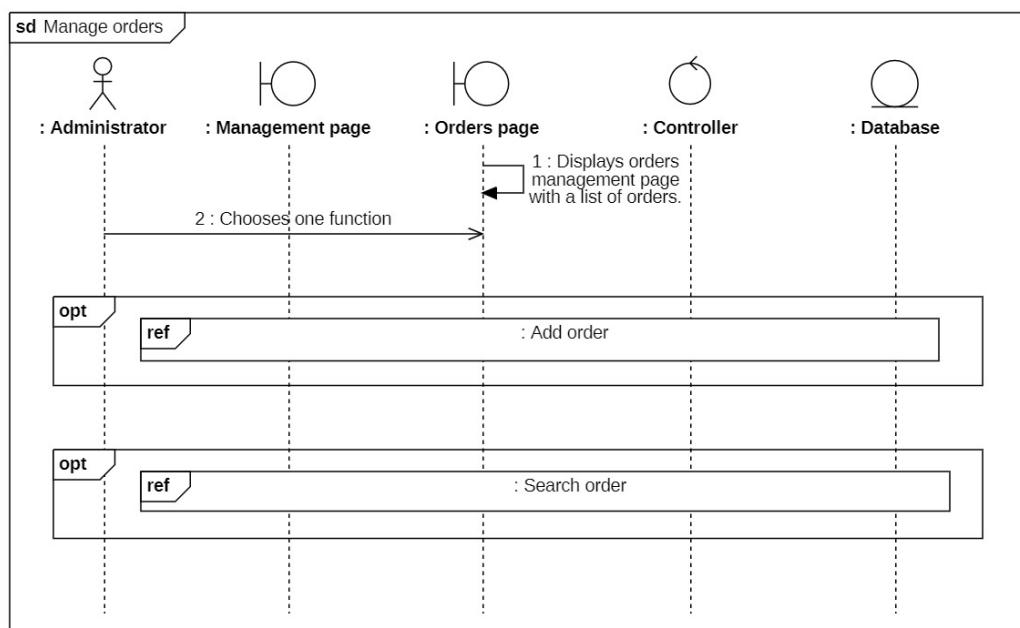
Hình 6-53 Sequence diagram "Search product"

#### 6.1.4.3. Manage customers



Hình 6-54 Sequence diagram "Manage customer"

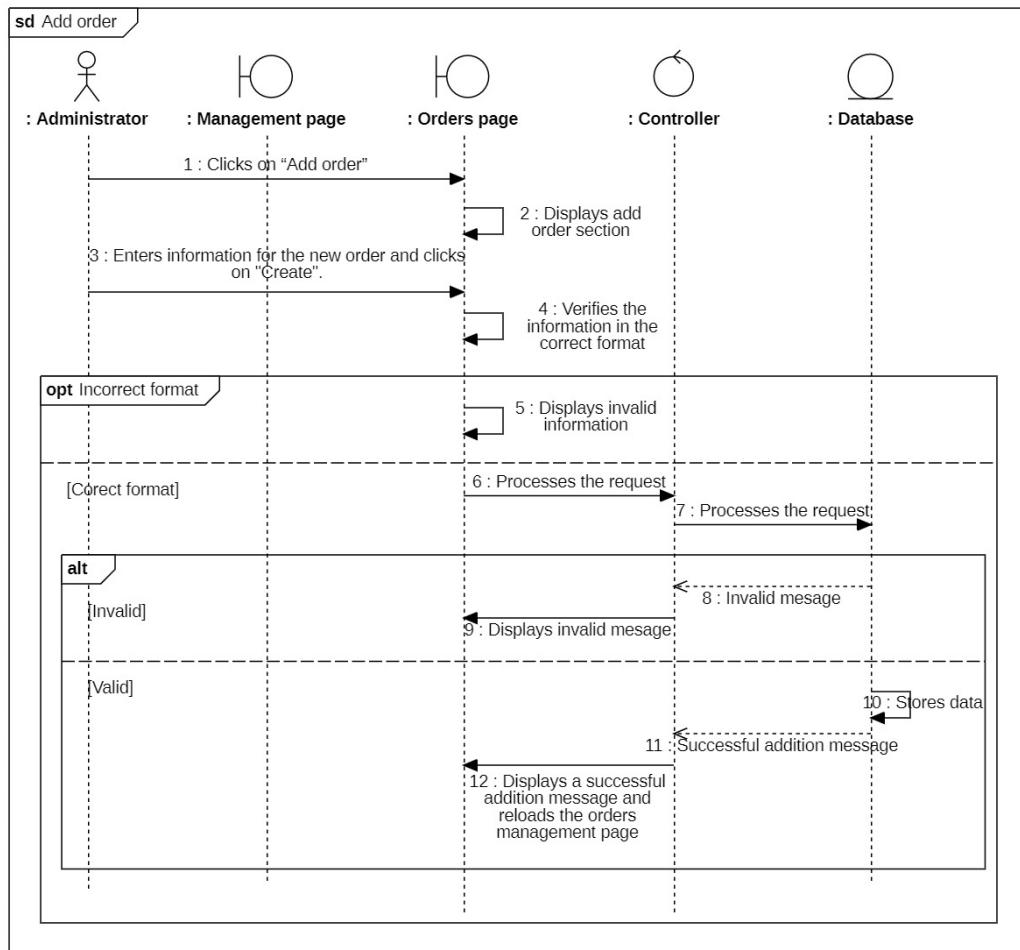
#### 6.1.4.4. Manage orders



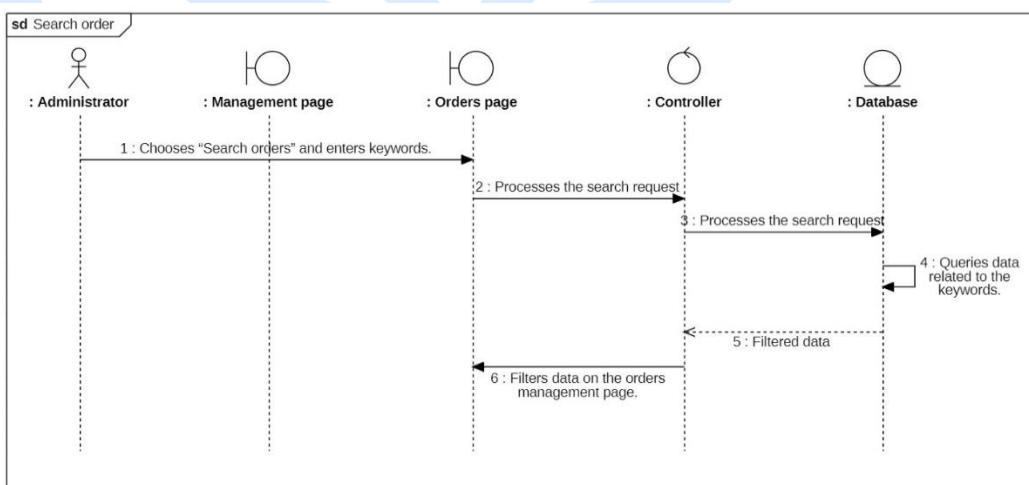
Hình 6-55 Sequence diagram "Manage orders"

## ANALYSIS AND DESIGN

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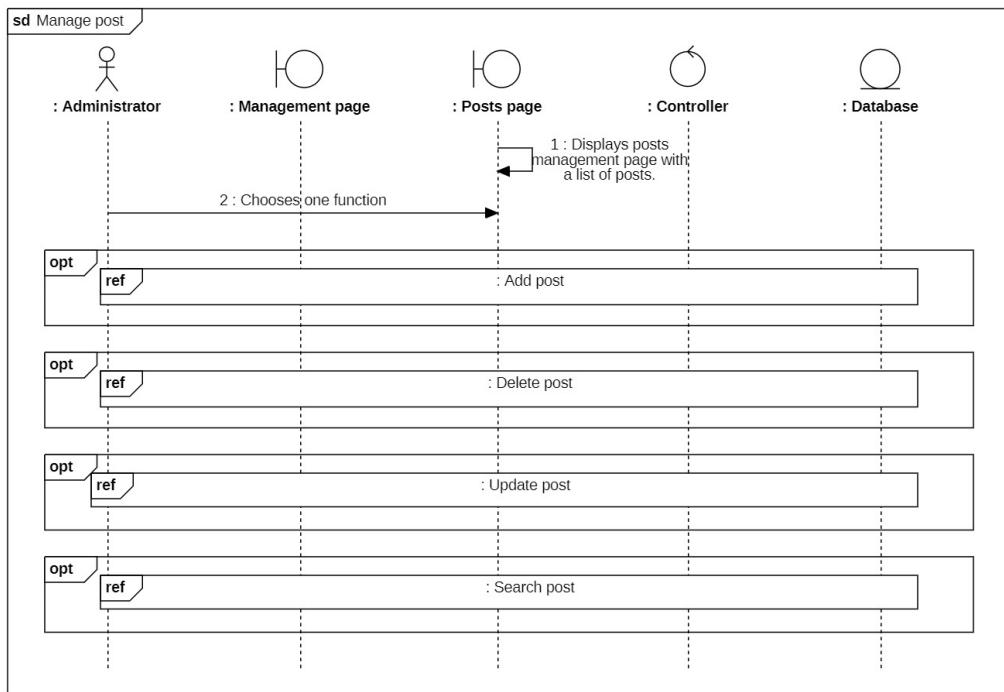


Hình 6-56 Sequence diagram "Add order"

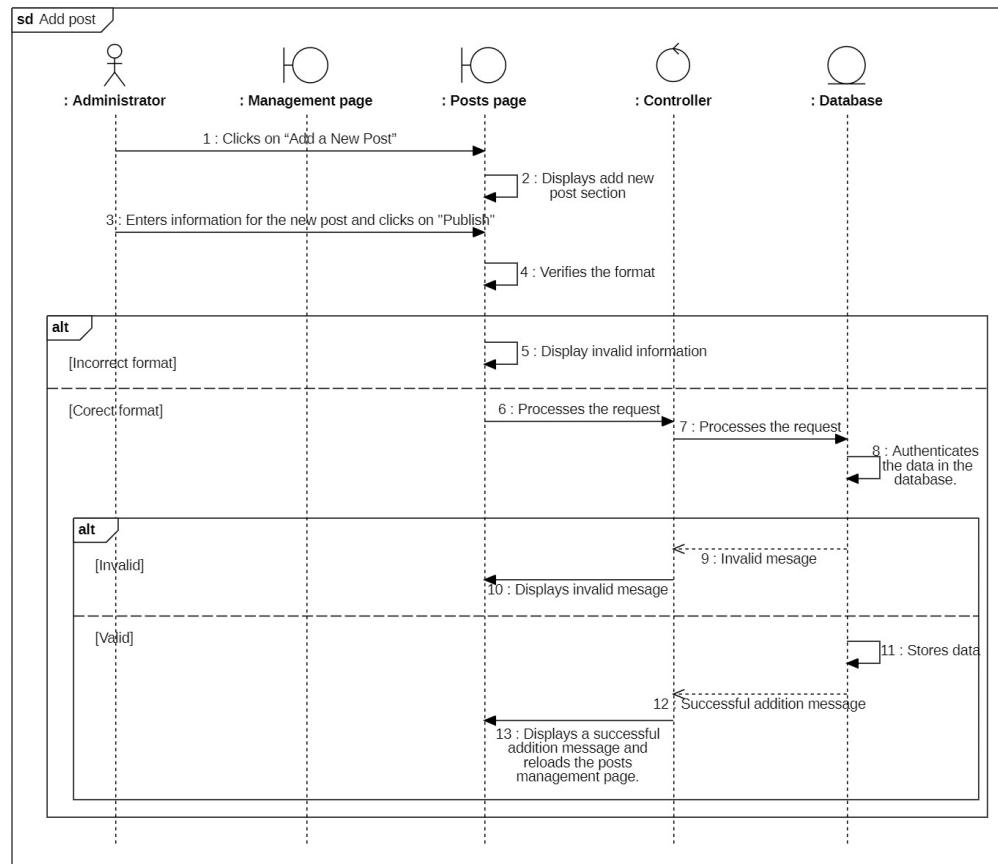


Hình 6-57 Sequence diagram "Search order"

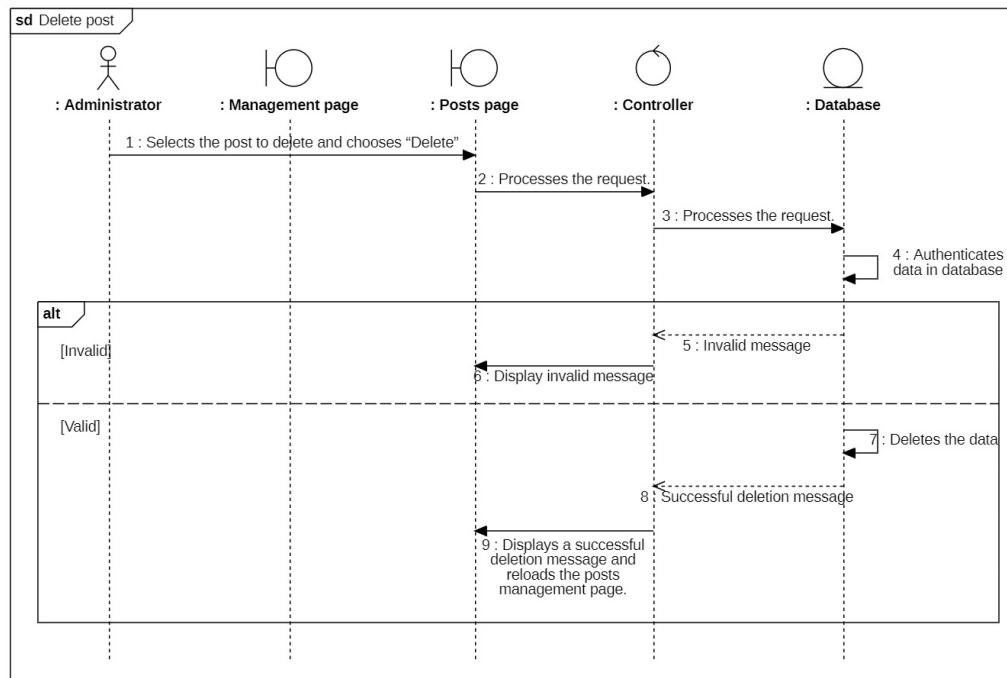
#### 6.1.4.5. Manage posts



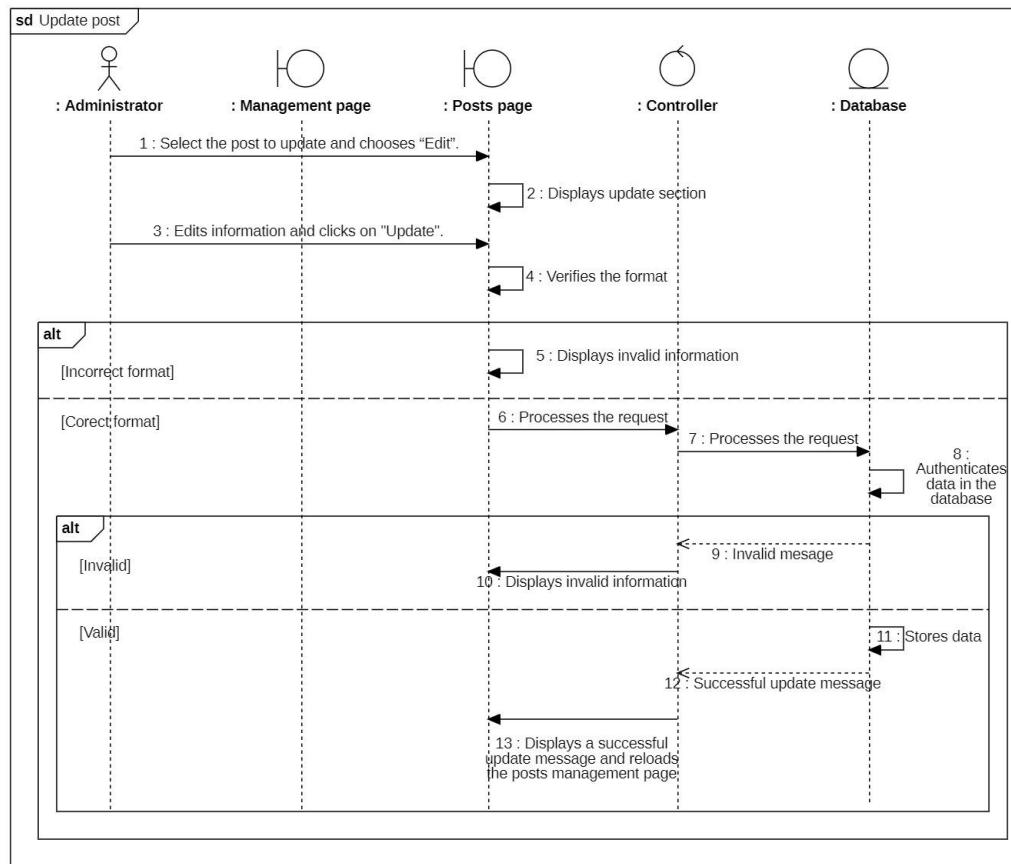
Hình 6-58 Sequence diagram "Manage post"



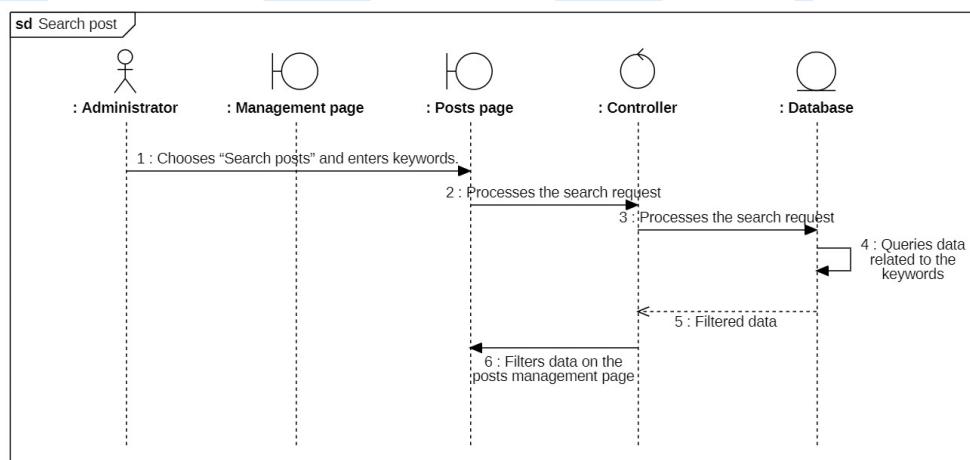
Hình 6-59 Sequence diagram "Add post"



Hình 6-60 Sequence diagram "Delete post"

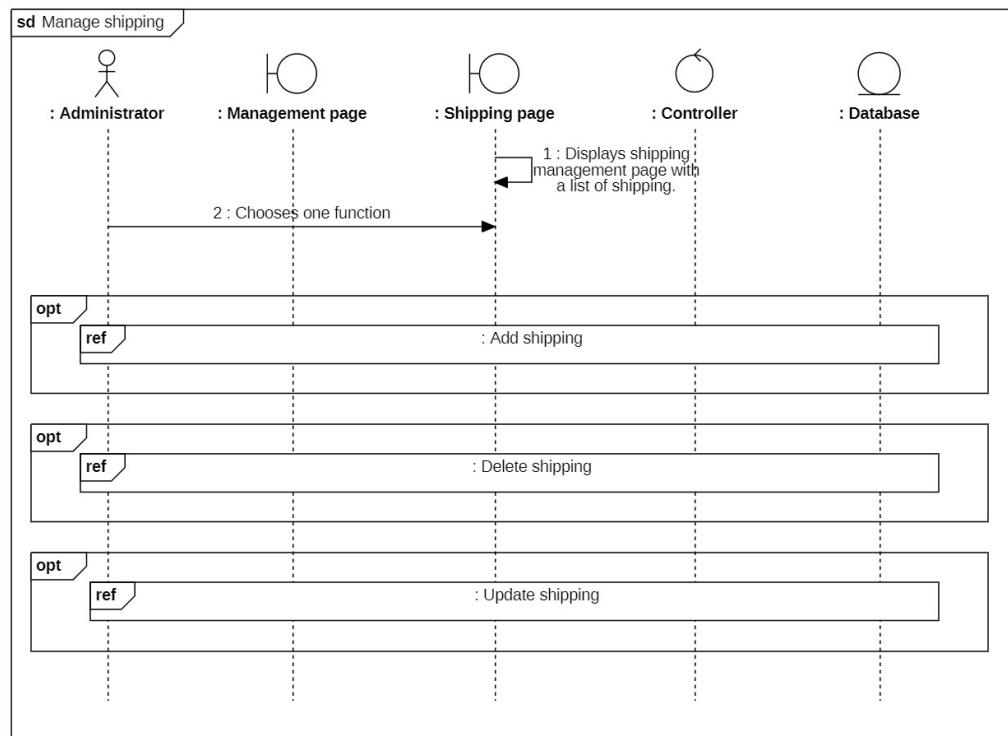


Hình 6-61 Sequence diagram "Update post"

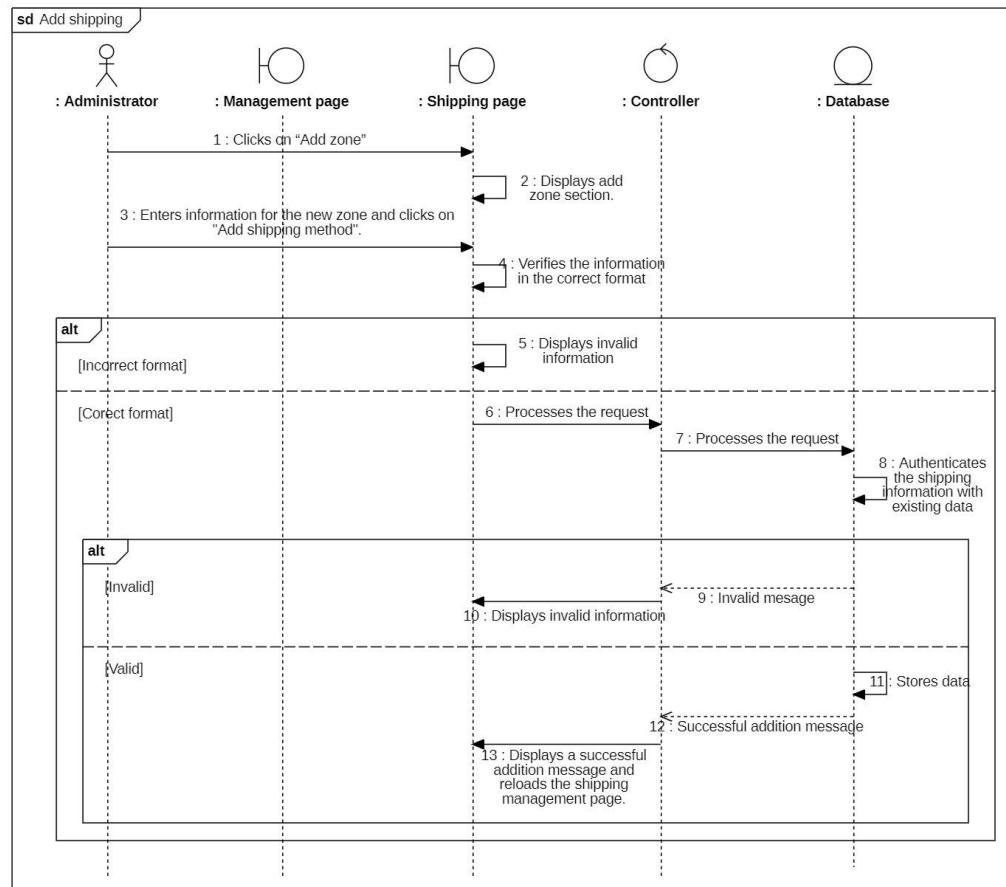


Hình 6-62 Sequence diagram "Search post"

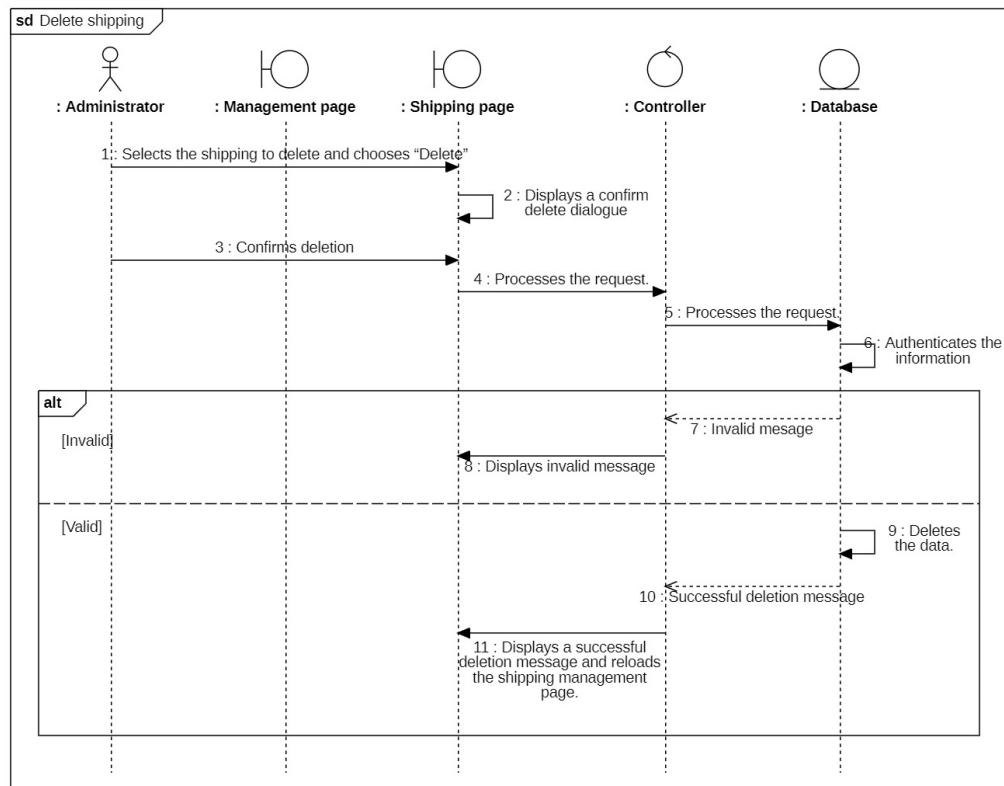
### 6.1.4.6. Manage shipping



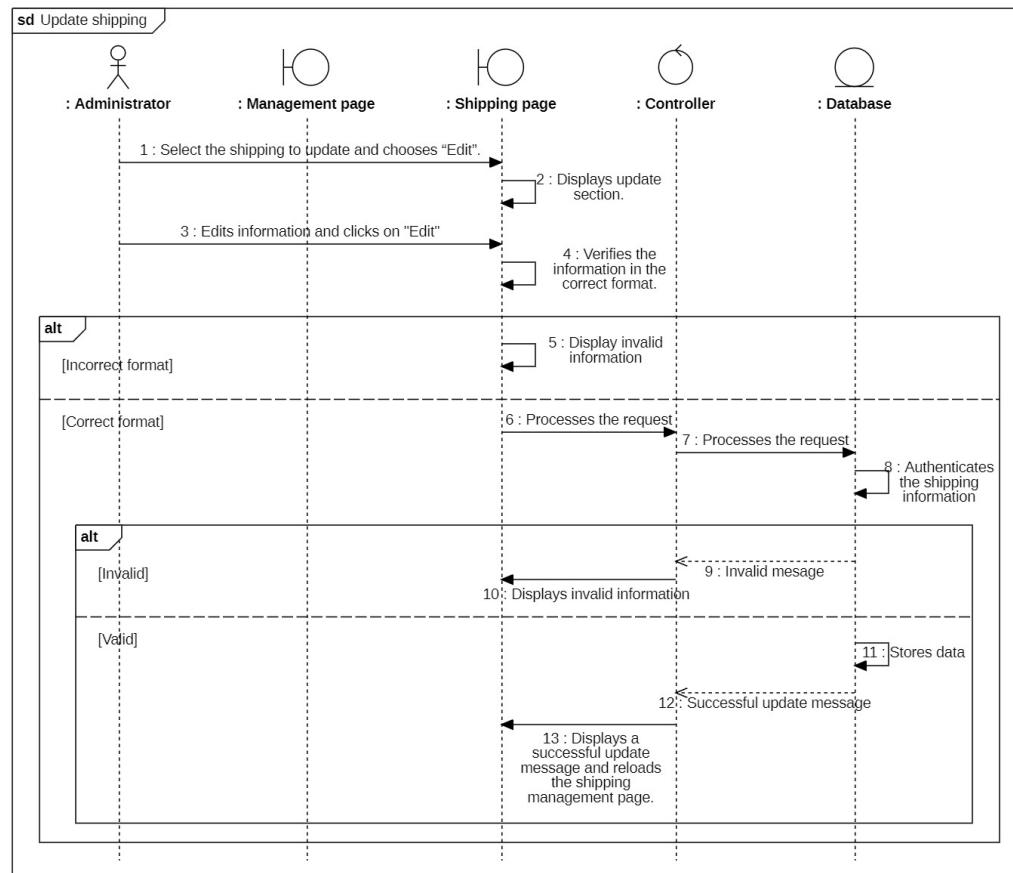
Hình 6-63 Sequence diagram "Manage shipping"



Hình 6-64 Sequence diagram "Manage shipping"

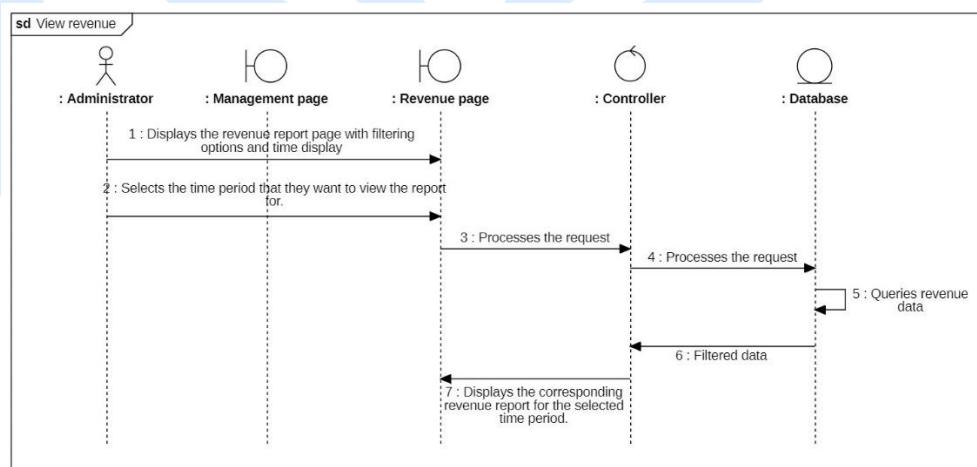


Hình 6-65 Sequence diagram "Delete shipping"



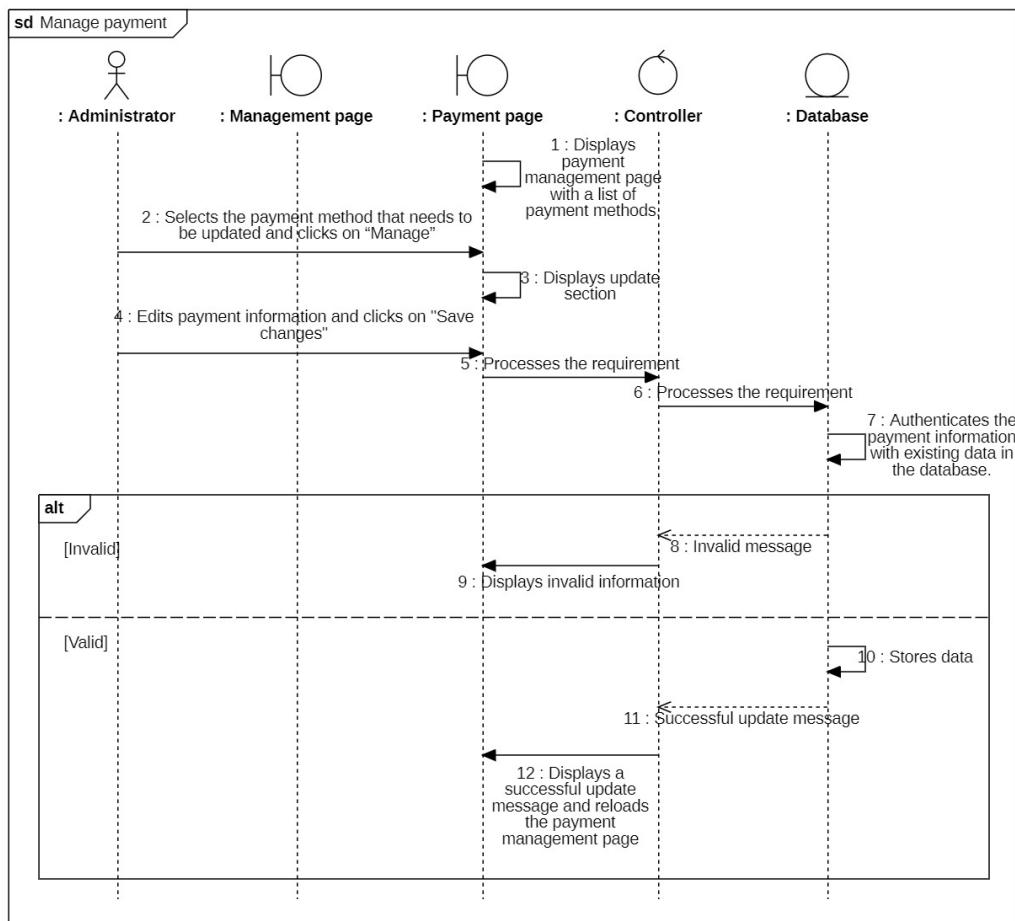
Hình 6-66 Sequence diagram "Update shipping"

### 6.1.4.7. View revenue



Hình 6-67 Sequence diagram "View revenue"

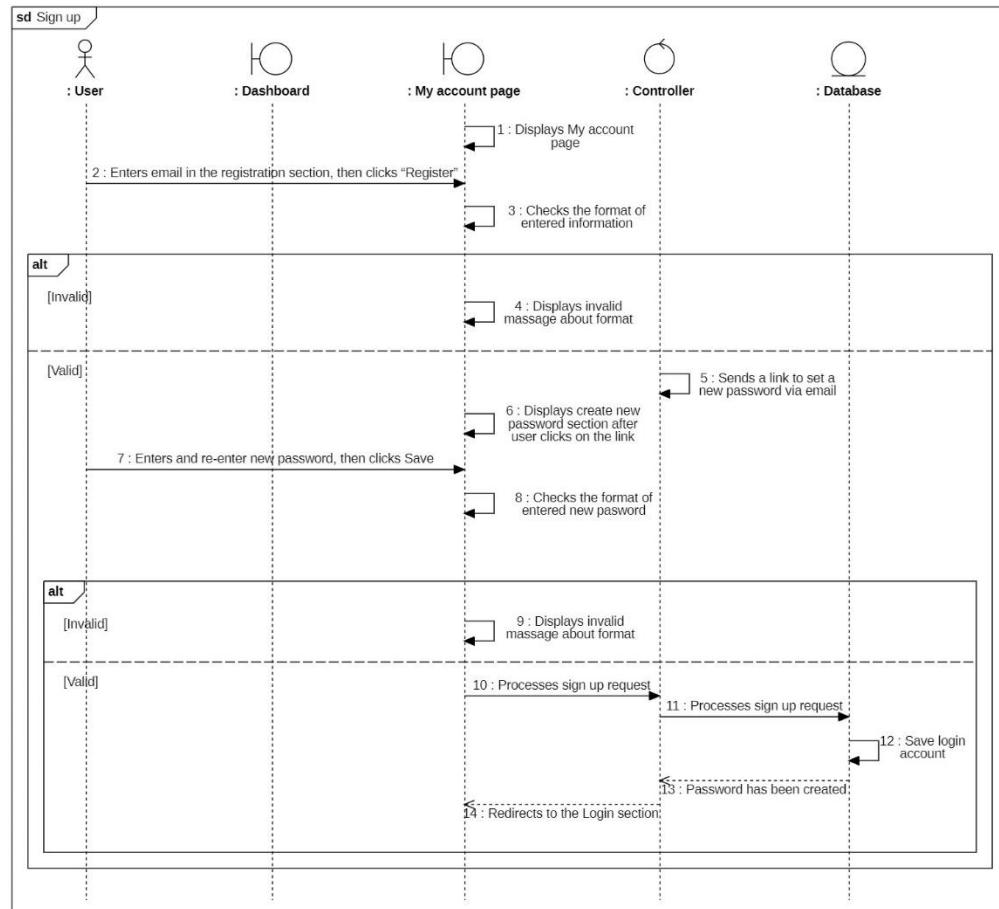
#### 6.1.4.8. Manage payment



Hình 6-68 Sequence diagram "Manage payment"

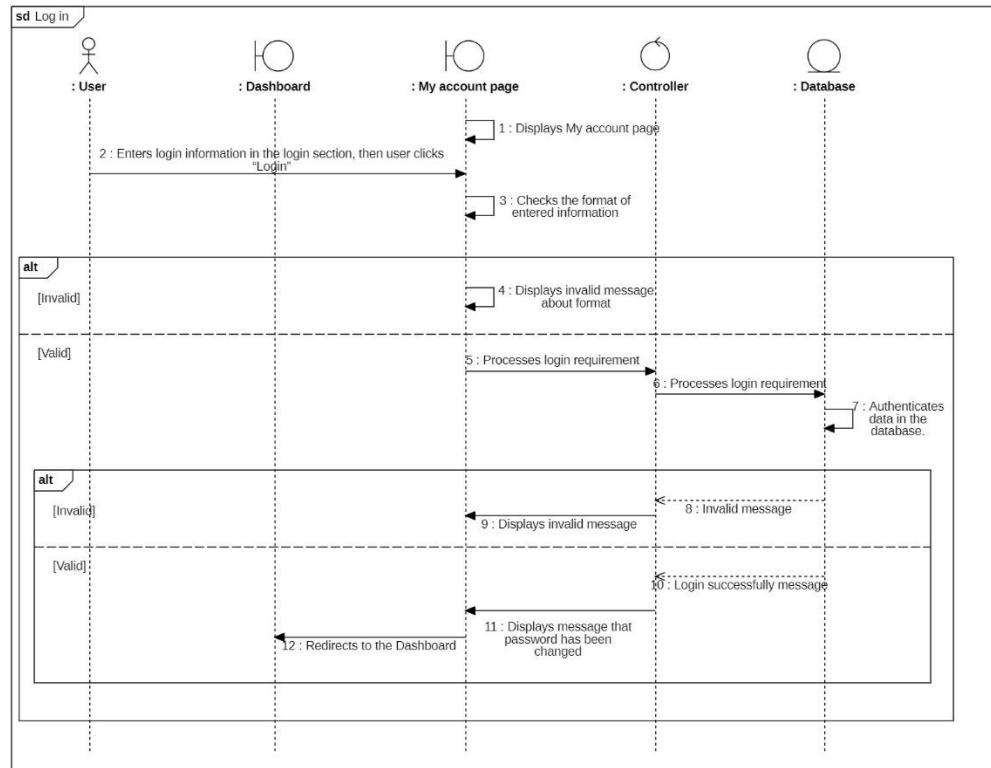
#### 6.1.5. User role

##### 6.1.5.1. Sign up



Hình 6-69 Sequence diagram "Sign up"

### 6.1.5.2. Log in

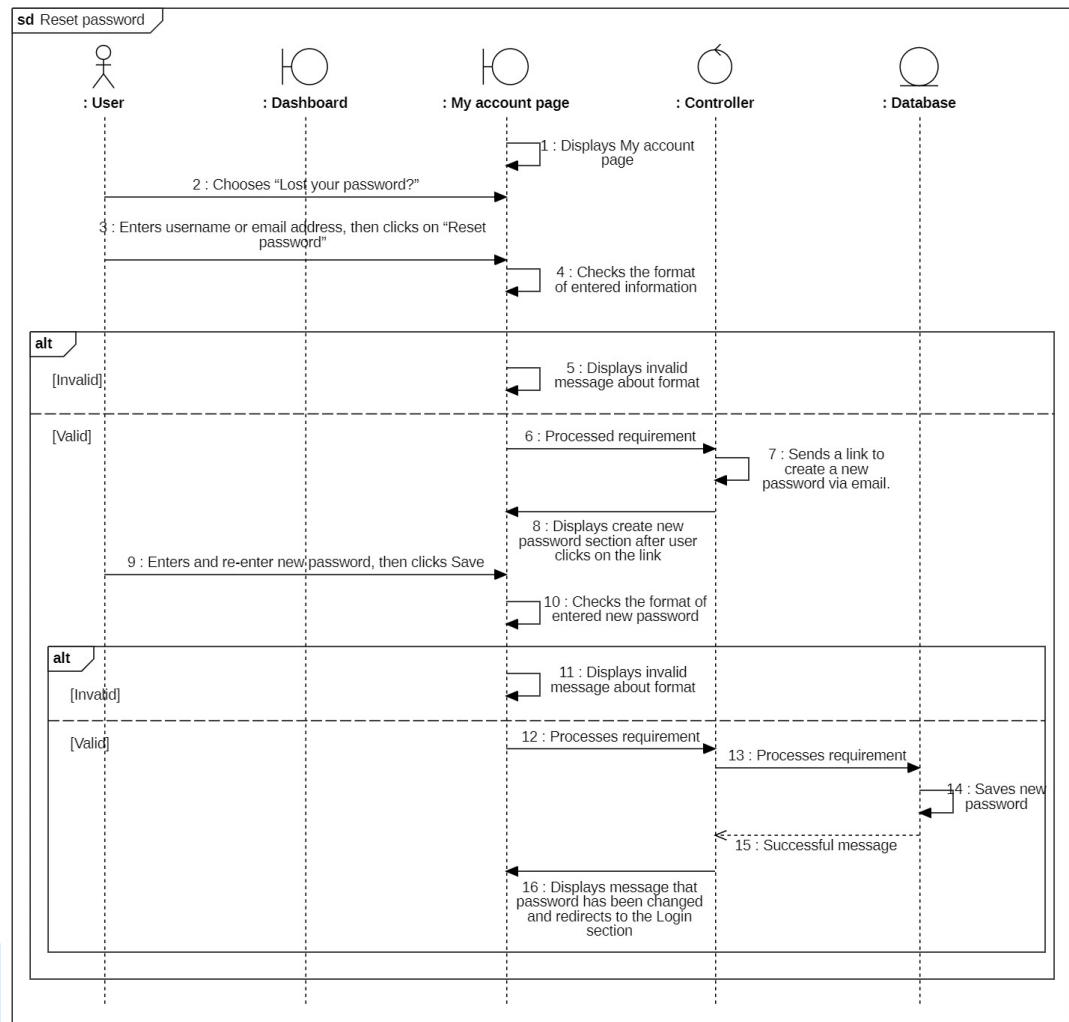


Hình 6-70 Sequence diagram "Log in"

### 6.1.5.3. Reset password

## ANALYSIS AND DESIGN

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Hình 6-71 Sequence diagram "Reset password"

# 7 DEPLOYMENT

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## System Overview

- WordPress Setup: Choose web hosting, install WordPress, and configure essential settings like SSL certificates, general settings, and permalinks.
- Theme Installation: Install and activate the Flatsome theme, and customize website design using Flotsam Builder.
- Plugin Installation: Install necessary plugins like WooCommerce, Sendinblue, Constant Contact, PayPal, and WooCommerce Shipping and Tax.
- Integration: Configure integrations with third-party services like Brevo, and PayPal for email marketing and payment processing.

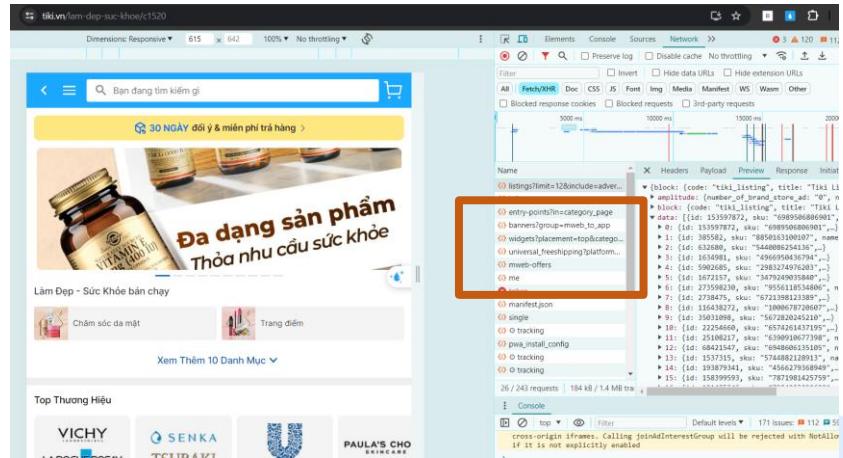
## Configuration database

- Configuration: Customize website settings, including general settings, permalinks, color palette, text size, and font styles.
- Database: Manage product attributes, categories, tags, and other database-related configurations.
- Backup Mechanism: By Hostinger, implement backup mechanisms to ensure data safety and reliability

## Web crawler and import product to website

- Step 1: Define the possibility of Product ID and crawl Product ID in a list of tiki data:

## DEPLOYMENT



Hình 7-1 Define a list of product ID data

```

File Edit View Insert Runtime Tools Help
+ Code + Text
Connection: 'keep-alive',
'TE': 'Trailers',
}

params = {
    'limit': '12',
    'include': 'advertisement',
    'is_mweb': '1',
    'aggregations': '2',
    'version': 'home-personalized',
    'trackity_id': '405757c7-5302-568f-442e-e88440daeeb6',
    'urlKey': 'lam-dep-suc-khoe',
    'categoryId': '1520',
    'category': '1520',
    'page': '1',
}

product_id = []
for i in range(1, 50):
    params['page'] = i
    response = requests.get("https://tiki.vn/api/v2/products", headers=headers, params=params)#, cookies=cookies)
    if response.status_code == 200:
        print("request success!!")
        for record in response.json().get('data'):
            product_id.append({'id': record.get('id')})
    time.sleep(random.randrange(3, 10))

df = pd.DataFrame(product_id)
df.to_csv('product_id_ncds.csv', index=False)

```

Hình 7-2 Using Python to crawl product ID

- Step 2: Export the file productID data.

## DEPLOYMENT

product_id_ncds.csv X	
1 to 10 of 598 entries <input type="button" value="Filter"/>	
	id
	153597872
	35031098
	632680
	1634981
	5902685
	631034
	273598230
	2738475
	116438272
	35031109

Show  per page

Hình 7-3 Data in the file product ID

- Step 3: Upload file list of product ID and use python to crawl product detail data

```
def parser_product(json):
    d = dict()
    d['id'] = json.get('id')
    d['sku'] = json.get('sku')
    d['short_description'] = json.get('short_description')
    d['price'] = json.get('price')
    d['list_price'] = json.get('list_price')
    d['price_usd'] = json.get('price_usd')
    d['discount'] = json.get('discount')
    d['discount_rate'] = json.get('discount_rate')
    d['inventory_status'] = json.get('inventory_status')
    d['is_visible'] = json.get('is_visible')
    d['brand_id'] = json.get('brand').get('id')
    d['brand_name'] = json.get('brand').get('name')
    d['name'] = json.get('name')
    d['images'] = json.get('images')
    return d

df_id = pd.read_csv('product_id_ncds.csv')
p_ids = df_id.id.to_list()
print(p_ids)
result = []
for pid in tqdm(p_ids, total=len(p_ids)):
    response = requests.get('https://tiki.vn/api/v2/products/{}'.format(pid), headers=headers, params=params, cookies=cookies)
    if response.status_code == 200:
        print('Crawl data {} success !!!'.format(pid))
        result.append(parser_product(response.json()))
    time.sleep(random.randrange(3, 5))
df_product = pd.DataFrame(result)
df_product.to_csv('crawled.csv', index=False)
```

Hình 7-4 Crawl product detail data according to product ID data

## DEPLOYMENT

95%	570/598 [37:48<02:00,	4.31s/it]Crawl data 64994332 success !!!
95%	571/598 [37:52<01:49,	4.07s/it]Crawl data 3415803 success !!!
96%	572/598 [37:56<01:49,	4.21s/it]Crawl data 76212747 success !!!
96%	573/598 [38:01<01:47,	4.31s/it]Crawl data 5136709 success !!!
96%	574/598 [38:06<01:45,	4.38s/it]Crawl data 73346761 success !!!
96%	575/598 [38:10<01:41,	4.39s/it]Crawl data 1659085 success !!!
96%	576/598 [38:13<01:30,	4.09s/it]Crawl data 196892106 success !!!
96%	577/598 [38:17<01:22,	3.92s/it]Crawl data 197575307 success !!!
97%	578/598 [38:21<01:16,	3.83s/it]Crawl data 17954885 success !!!
97%	579/598 [38:24<01:10,	3.71s/it]Crawl data 195981759 success !!!
97%	580/598 [38:27<01:05,	3.61s/it]Crawl data 76775262 success !!!
97%	581/598 [38:31<01:01,	3.61s/it]Crawl data 160310283 success !!!
97%	582/598 [38:34<00:56,	3.56s/it]Crawl data 58676808 success !!!
97%	583/598 [38:39<00:57,	3.81s/it]Crawl data 11183003 success !!!
98%	584/598 [38:43<00:56,	4.01s/it]Crawl data 54058499 success !!!
98%	585/598 [38:48<00:53,	4.13s/it]Crawl data 55768758 success !!!
98%	586/598 [38:52<00:50,	4.21s/it]Crawl data 117786521 success !!!
98%	587/598 [38:57<00:47,	4.34s/it]Crawl data 112984896 success !!!
98%	588/598 [39:00<00:40,	4.07s/it]Crawl data 52618847 success !!!
98%	589/598 [39:05<00:37,	4.18s/it]Crawl data 24312036 success !!!
99%	590/598 [39:08<00:32,	4.09s/it]Crawl data 76551091 success !!!
99%	591/598 [39:12<00:27,	3.89s/it]Crawl data 271408462 success !!!
99%	592/598 [39:16<00:23,	3.89s/it]Crawl data 76596657 success !!!
99%	593/598 [39:19<00:18,	3.77s/it]Crawl data 12084520 success !!!
99%	594/598 [39:23<00:14,	3.66s/it]Crawl data 130315179 success !!!
99%	595/598 [39:26<00:10,	3.60s/it]Crawl data 55214722 success !!!
100%	596/598 [39:30<00:07,	3.57s/it]Crawl data 108535222 success !!!
100%	597/598 [39:33<00:03,	3.52s/it]Crawl data 149346549 success !!!
100%	598/598 [39:36<00:00,	3.97s/it]

Hình 7-5 Crawl successfully

- Step 4: Export the file and import it to woocommerce

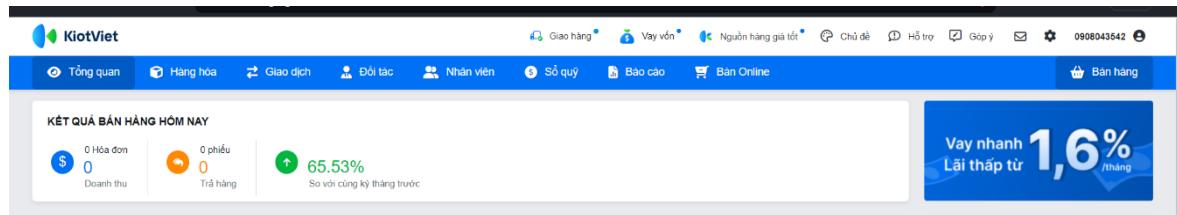
S3	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	Pages
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
2	631034	3.46E+12	Thứ tự	71500	83000	11500	14	available																20013 Hada Labo Sâu + rán
3	632690	3.47E+12	Da/Pusk+	84500	99000	14500	15	1570	available															112885 Selson Da/Pusk+
4	632690	3.47E+12	Da/Pusk+	84500	99000	14500	15	1570	available															112885 Selson Da/Pusk+
5	1634981	3.60E+12	Ca/Ký/thả	26500	33000	6500	20	254	available															112887 Acnes Giả/Vỏ/thả
6	5902684	4.77E+12	Kem ráo -a	56500	70000	13500	19	293	available															112887 Acnes Sâu + ráo -a
7	54058503	7.93E+12	hà nh phâ	79500	93000	13500	15	638	available															22013 Hada Labo Sâu + ráo -a
8	2.74E+15	6.36E+12	Ành + Ánh	748000	1360000	612000	45	1852	available															48077 LocknLock Mây Tấm
9	2728475	1.65E+12	BÀ ng Tair	110000	126000	16000	13	1643	available															48249 Silcot Bà + 3 Hå
10	1.54E+06	5.45E+12	Son trang f	133000	160000	32000	20	49	available															415907 Son trang f
11	1.54E+06	5.45E+12	Son trang f	133000	160000	32000	20	49	available															154733 Up On Up Son thỏi
12	22254660	6.82E+12	Tan+ba	303000	462000	158000	34	2501	available															27718 TREsemme Combo D4
13	2510217	2.66E+12	Sâu + ráo -a	56500	70000	13500	19	217	available															112887 Acnes Sâu + ráo -a
14	68421547	8.34E+12	Bao bát+sđ	382000	382000	0	0	1283	available															47663 Roman Combo 2
15	2.72E+15	5.92E+12	Thi chung	245000	350000	105000	30	0	available															5402475 Neuta Serum châ
16	1.94E+15	7.37E+12	Thi NG Ti	99000	99000	0	0	761	available															4766405 OZO Bé tâ i tr.
17	67271600	1.27E+12	Mây/Aph	679000	1200000	521000	43	87	available															48077 LocknLock Mây Tấm
18	1.58E+04	8.31E+12	Sá+En xu	210000	320000	110000	34	1621	available															861765 4 You Face [CHÂN H
19	1.54E+06	5.45E+12	Son trang f	133000	160000	32000	14	149	available															22013 Hada Labo Sâu + ráo -a
20	1313871	4.31E+12	Sâu + ráo -a	63000	103000	20000	19	170	available															112882 Sunplay Kem châ
21	1.21E+08	8.10E+12	Sâu + ráo -a	Ành	83000	1276370	446370	35	1904	available														21271 P/S Bã ành
22	67913328	8.98E+12	Nhâ u lô	38000	76000	38000	50	2129	available															4246951 TIAMO Tím Đen Dầu
23	1672157	6.90E+12	Bao Cao Sx	210000	317000	107000	34	1723	available															21261 Durex Bao cao s
24	54058503	7.93E+12	hà nh phâ	79500	93000	13500	15	638	available															22013 Hada Labo Sâu + ráo -a
25	460943	9.21E+12	Better For	338000	338000	0	0	2458	available															41661 LISTERINE Bã ành
				370000	370000	270000	26	127																https://salt.tikcdn.com/s/produ

Hình 7-6 Data crawled

## 7.3 Kiot Viet imtregation

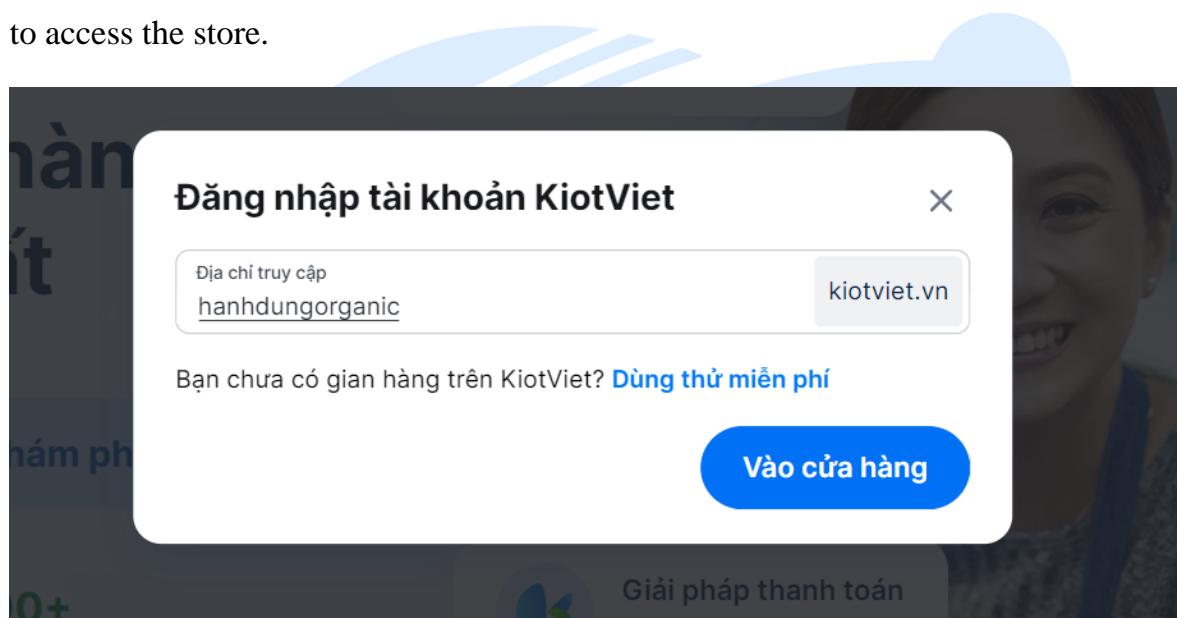
First, we will go to Kiot Viet website and register to use.

## DEPLOYMENT



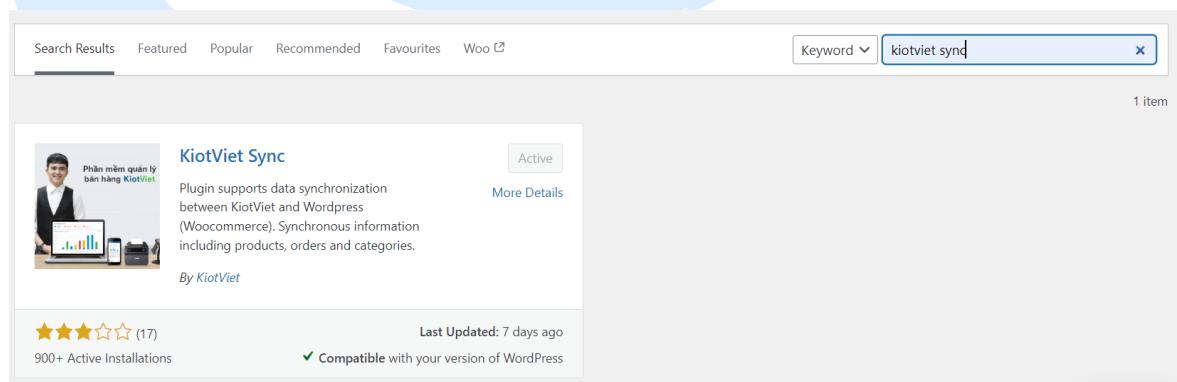
Hình 7-7 Register KiotViet successfully

Now we can access it by going to Kiot Viet's website by entering "hanhdungorganic" to access the store.



Hình 7-8 Access to shop in KiotViet

Then, we'll install a plug in naming “KiotViet sync”.



Hình 7-9 Plugin KiotViet Sync

## DEPLOYMENT

After installation is complete, we will enter Client ID and Security Code from Kiot Viet account into the Settings section of the plugin.

The screenshot shows the 'KiotViet Sync' settings page. It has fields for 'Tên kết nối' (Connection name) set to 'hanhdungorganic', 'Client ID' set to 'da8504ed-41ff-4ffa-b97f-4b4284396483', and 'Mã bảo mật' (Security code) set to 'B8A3943EFCCEDA9D76A5ECA108B1307333C3993B'. A 'Tạo mã' (Create) button is visible. Below these, there are two radio buttons: 'Hoạt động' (Active) and 'Ngừng hoạt động' (Inactive), with 'Hoạt động' selected. A checked checkbox 'Cho phép truy xuất thông tin khách hàng, hóa đơn, đặt hàng từ gian hàng của bạn' (Allow access to customer information, invoices, orders from your store) is present. A note in Vietnamese follows: 'Bằng việc bật tùy chọn này bạn đã cho phép các bên thứ ba được quyền truy xuất toàn bộ thông tin Số điện thoại, Địa chỉ, Email của Khách hàng và chi tiết các giao dịch Hóa đơn, Đặt hàng từ gian hàng của bạn. Vui lòng cân nhắc kỹ trước khi cấp quyền sử dụng.' (By enabling this option, you allow third parties to access all customer information, such as phone number, address, email, and transaction details of invoices, orders from your store. Please consider carefully before granting permission to use.)

Hình 7-10 ID and Security of KiotViet account

At this time, Kiot Viet has been successfully integrated into the website, we can synchronize products from Kiot Viet.

The screenshot shows the WordPress admin dashboard under the 'KiotViet Sync' plugin. The left sidebar includes 'Thiết lập thông tin đồng bộ' (Sync info setup) and 'Danh sách sản phẩm đồng bộ' (Synced products list). The main area displays a table of products:

Ảnh	Tên sản phẩm	SKU	Trạng thái kho	Giá	Đồng bộ
	Mỹ phẩm Ohui The First tái sinh cao cấp 5 sản phẩm	SP000001	Outofstock (0)	750.000đ	<button>Ngừng đồng bộ</button>
	Set mỹ phẩm Ohui dưỡng trắng da và dành cho da lão hóa	SP000003	Instock (50)	500.000đ	<button>Ngừng đồng bộ</button>
	Set mỹ phẩm Whoo tái sinh da cao cấp 6 Bit	SP000004	Instock (38)	800.000đ	<button>Ngừng đồng bộ</button>
	Set mỹ phẩm Whoo tái sinh da cao cấp	SP000002	Instock (40)	650.000đ	<button>Ngừng đồng bộ</button>
	Miếng dán trắng răng Crest 3D White Stain Shield 5 Minute Touch-Up (28 Ngày)	SP000010	Instock (22)	950.000đ	<button>Ngừng đồng bộ</button>
	Crest 3D White Intensive Professional Effects (7 Ngày)	SP000007	Instock (46)	1,400.000đ	<button>Ngừng đồng bộ</button>
	Miếng dán trắng răng Crest 3D White Professional Effects (20 Ngày)	SP000008	Instock (22)	1,200.000đ	<button>Ngừng đồng bộ</button>

Hình 7-11 Products integrated into shop(Hanh Dung Organic)

In addition, we can also synchronize orders from the website to Kiot Viet.

## DEPLOYMENT

The screenshot shows the WordPress admin interface with a sidebar containing various plugins like Flatsome, Tidio Chat, Hostinger, Insights, WPForms, and SEO. The main content area displays a table of orders from the KiotViet plugin. The columns include Order ID, Customer Name, Product Name, Date, Phone Number, Status, Total Amount, and Action buttons. Some orders are marked as 'Đồng bộ lại' (Sync again) and others as 'Thành công' (Success). The table has a light gray background with alternating row colors.

GHN	Mã ĐH	Tên khách hàng	Ngày tạo	Số điện thoại	Trạng thái	Thành tiền	Trạng thái
#2740 hoaphan	Chưa có	hoa phan	29/05/2024	+84865029036	Checkout-draft	22,402đ	Đồng bộ lại
#2484 PhúcNguyễn Mai Hữu	Chưa có	Phúc Nguyễn Mai Hữu	29/05/2024	0888135231	On-hold	195,030đ	Đồng bộ lại
#2481 Nguyen Mai HuuPhuc	#DHWS000002	Nguyen Mai Huu Phuc	29/05/2024		Processing	75,900đ	Thành công
#2480	Chưa có		29/05/2024		Checkout-draft	1,562,000đ	Đồng bộ lại
#2479	Chưa có		29/05/2024		Checkout-draft	1,562,000đ	Đồng bộ lại
#2478 hoangphan	Chưa có	hoang phan	29/05/2024	+84865029036	On-hold	902,000đ	Đồng bộ lại
#2476 HoàngMinh Hung	Chưa có	Hoàng Minh Hưng	29/05/2024	0908043542	Checkout-draft	20,000đ	Đồng bộ lại
#2473	Chưa có		28/05/2024		Checkout-draft	97,900đ	Đồng bộ lại
#2441 HoàngMinh Hung	Chưa có	Hoàng Minh Hưng	28/05/2024	0908043542	Checkout-draft	64,900đ	Đồng bộ lại
#2370 HoàngMinh Hung	Chưa có	Hoàng Minh Hưng	28/05/2024	0908043542	Processing	39,000đ	Đồng bộ lại
#2303 HoàngMinh Hung	#DHWS000001	Hoàng Minh Hưng	27/05/2024	0908043542	Processing	950,000đ	Thành công
Mã ĐH	Mã ĐH KiotViet	Tên khách hàng	Ngày tạo	Số điện thoại	Trạng thái	Thành tiền	Trạng thái

Hình 7-12 List of orders in KiotViet plugin

When we click "Resynchronize", the order information will be synchronized to the store's account on Kiot Viet website.

Visit the Kiot Viet website and you will see a list of synchronized orders.

The screenshot shows the KiotViet website interface with a navigation bar including Giao hàng, Vay vốn, Nguồn hàng giá tốt, Chủ đề, Hỗ trợ, Góp ý, and a phone number 0908043542. The main content area displays a table of orders under the heading 'Phiếu đặt hàng'. The columns include Mã đặt hàng, Thời gian, Khách hàng, Khách cần trả, Khách đã trả, and Trạng thái. Two orders are listed: one for 'Nguyen Mai Huu Phuc' and another for 'Hoàng Minh Hưng', both marked as 'Phiếu tạm' (Pending).

Mã đặt hàng	Thời gian	Khách hàng	Khách cần trả	Khách đã trả	Trạng thái
DHWS000002	29/05/2024 23:28	Nguyen Mai Huu Phuc	69,000	0	Phiếu tạm
DHWS000001	28/05/2024 02:39	Hoàng Minh Hưng	950,000	0	Phiếu tạm

Hình 7-13 List of orders synced in KiotViet website

When we click on the desired Order to view details, the screen will display the order details.

## DEPLOYMENT

The screenshot shows a detailed order view for order number DHWS000001. The order was placed by Hoang Minh Hung on 28/05/2024 at 02:39. The total amount is 950,000 VND. The status is 'Phiếu tạm' (Temporary Note). The delivery method is 'Đơn hàng từ website, mã đơn hàng #2303. Cash on delivery'.

**Thông tin**

Mã đặt hàng:	DHW S000001	Trạng thái:	Phiếu tạm	Đơn hàng từ website, mã đơn hàng #2303. Cash on delivery.	
Thời gian:	28/05/2024 02:39	Nguồn nhận đặt:	Hoàng Minh Hung		
Khách hàng:	KHA8C746B - Hoàng Minh Hung	Người tạo:	Hoàng Minh Hung	Kênh bán:	Website

**Bảng giá:**

Địa chỉ lấy hàng: . . - 0908043542	Mã vận đơn:	Người giao:	Chọn đối tác...
Người nhận:	Hoàng Minh Hung	Trọng lượng:	0 gram
Điện thoại:	0908043542	Kích thước:	Dài Rộng Cao
Địa chỉ:	Ký túc xá Khu B, Thành phố Thủ Đức, VN	Phí trả ĐTGH:	0
Khu vực:	Q_ Chon Tinh/TP - Quận/Huyện	Dịch vụ:	Thời gian giao hàng:
Phường xã:	Q_ Chon Phuong/Xa		

**Ghi chú giao...**

**Chi tiết sản phẩm:**

Mã hàng	Tên hàng	Số lượng	Đơn giá	Giảm giá	Giá bán	Thành tiền
SP000021	Mineral Kem nở ngực chai 35ml	1/0	950,000	0	950,000	950,000

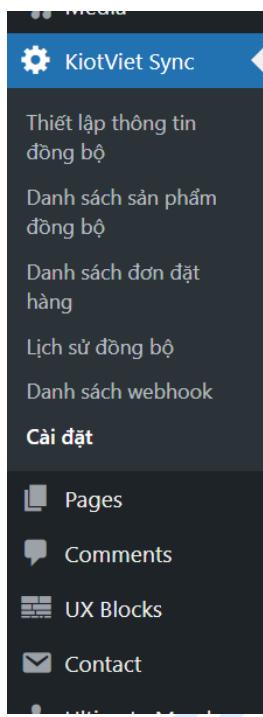
Tổng số lượng: 1  
Tổng tiền hàng: 950,000  
Giảm giá phiếu đặt: 0  
Tổng cộng: 950,000  
Khách đã trả: 0

**Actions:** Kết thúc, Lưu, Xử lý đơn hàng, In, Xuất file, Sao chép, Hủy bỏ

Hình 7-14 Detail order when click on the order

In addition, we can also set up other features if necessary such as "Automatically re-synchronize orders", "Check synchronized orders after the desired time" as well as "Number of orders that the store wants to check".".

## DEPLOYMENT

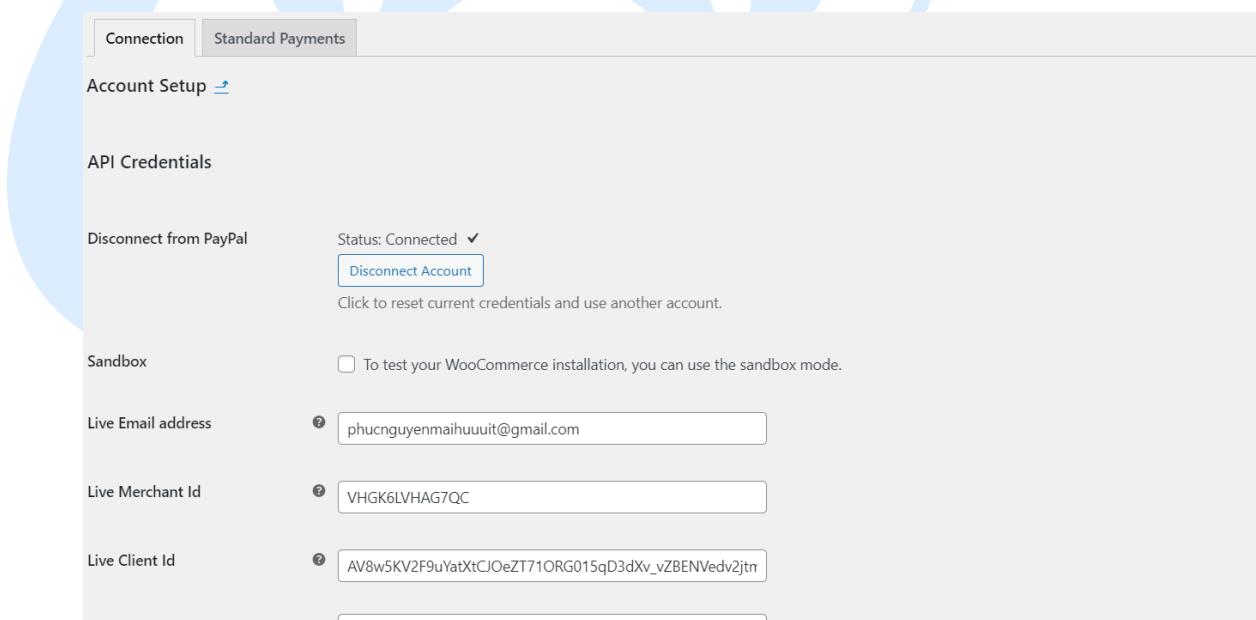


The screenshot shows the KiotViet Sync interface. On the left sidebar, there are several options: Thiết lập thông tin đồng bộ, Danh sách sản phẩm đồng bộ, Danh sách đơn đặt hàng, Lịch sử đồng bộ, Danh sách webhook, and Cài đặt. Under Cài đặt, there are sub-options: Pages, Comments, UX Blocks, and Contact. The main content area has a banner for MonsterInsights. It includes checkboxes for: Đồng bộ sản phẩm qua mã sản phẩm (SKU), Đồng bộ sản phẩm qua mã sản phẩm (SKU) khi đồng bộ đơn hàng, Đồng bộ phí ship trong đơn hàng, and Tự đồng bộ lại đơn hàng. A note in red text says: '(Lưu ý: tính năng này chỉ hoạt động khi CronTab được bật, nếu bật tính năng này hệ thống sẽ tự động thiết để tránh gây tốn tài nguyên của server)'. There are input fields for 'Kiểm tra đơn hàng đồng bộ sau:' (s) and 'Số đơn hàng muốn kiểm tra:' (đơn hàng). A blue 'Lưu' button is at the bottom.

*Hình 7-15 Other functions of KiotViet*

### 7.4 PayPal integration

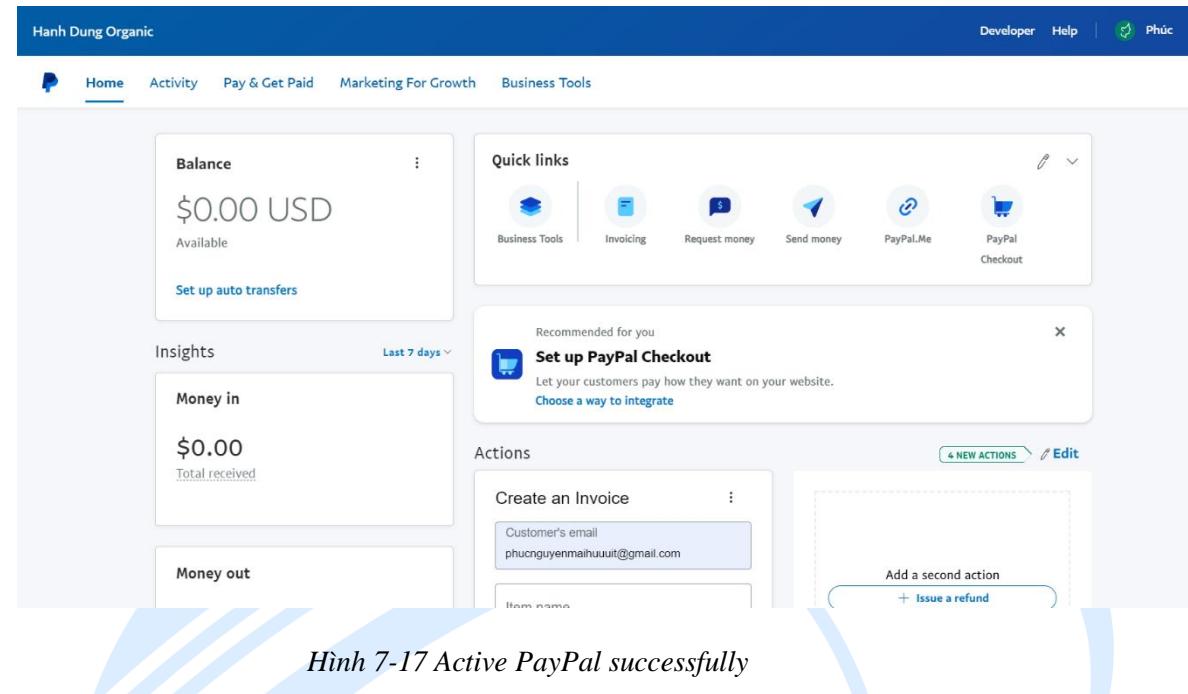
Select 'accept all major credit cards' and activate PayPal.



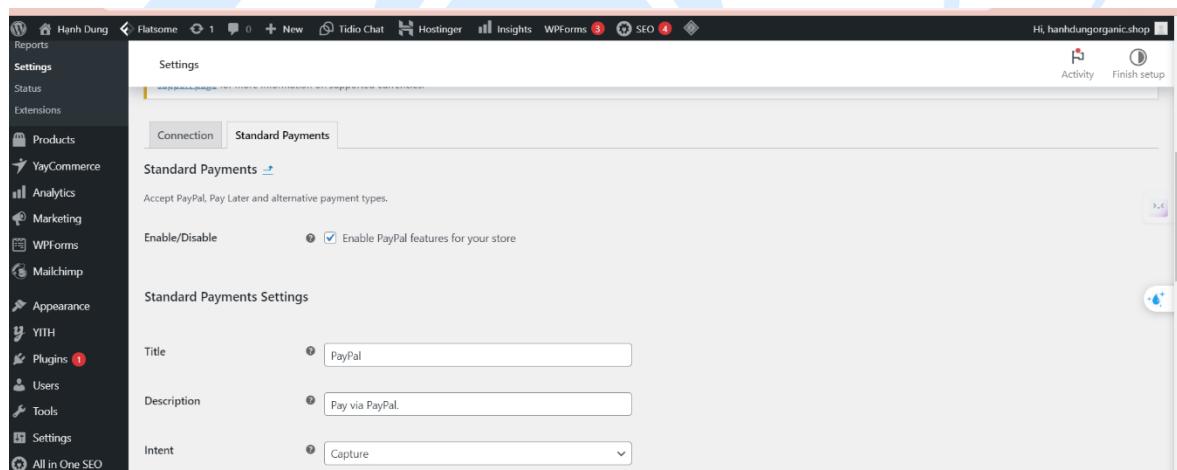
The screenshot shows the WooCommerce PayPal settings page. At the top, there are tabs for Connection and Standard Payments, with Connection selected. Below that is an Account Setup section with a link to 'API Credentials'. In the API Credentials section, there is a 'Disconnect from PayPal' button with a status of 'Connected' and a checkmark. A note says: 'Click to reset current credentials and use another account.' Under the 'Sandbox' section, there is a checkbox for testing with sandbox mode. Below that are fields for 'Live Email address' (phucnguyenmaihiuuit@gmail.com), 'Live Merchant Id' (VHGK6LVHAG7QC), and 'Live Client Id' (AV8w5KV2F9uYatXtCJOeZT71ORG015qD3dXv\_vZBENVedv2jtn).

*Hình 7-16 Connect PayPal account*

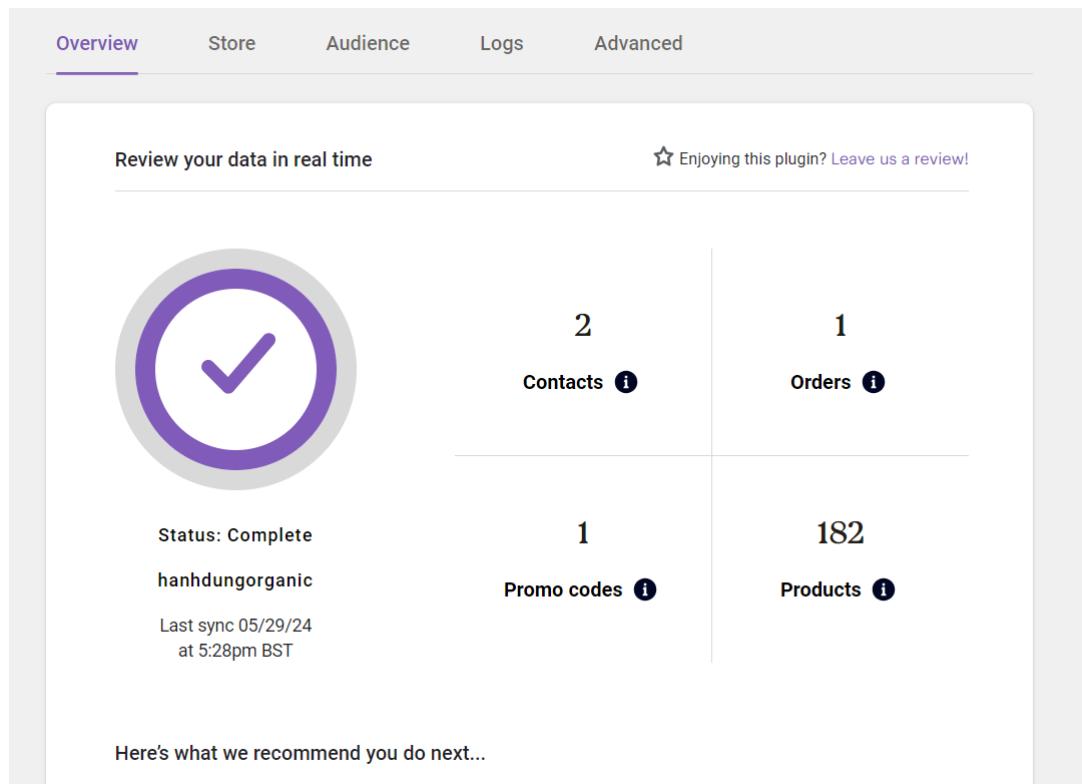
## DEPLOYMENT



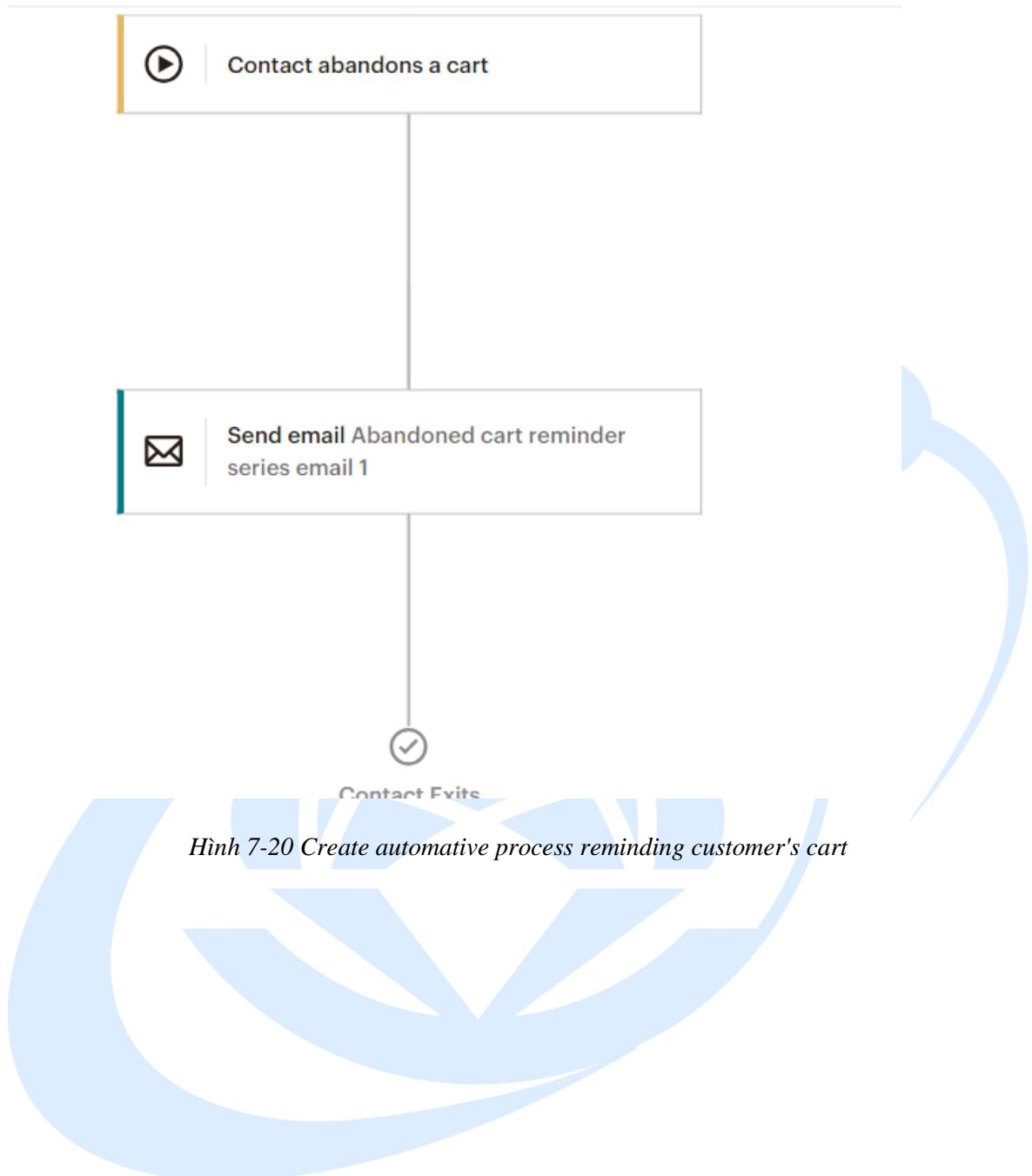
Customize payment options and disable unnecessary display on product and cart pages.

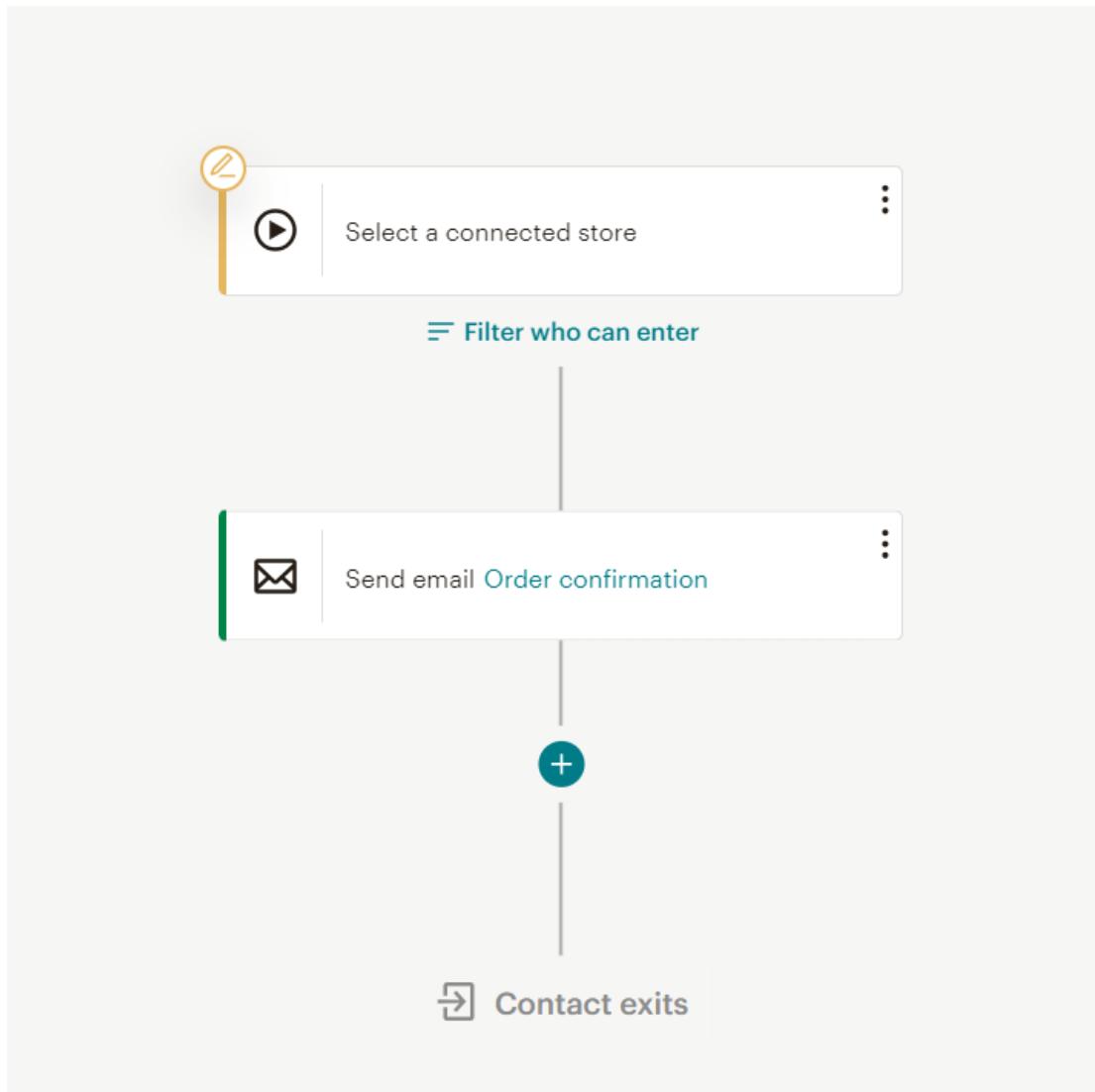


### 7.5 Mailchimp integration

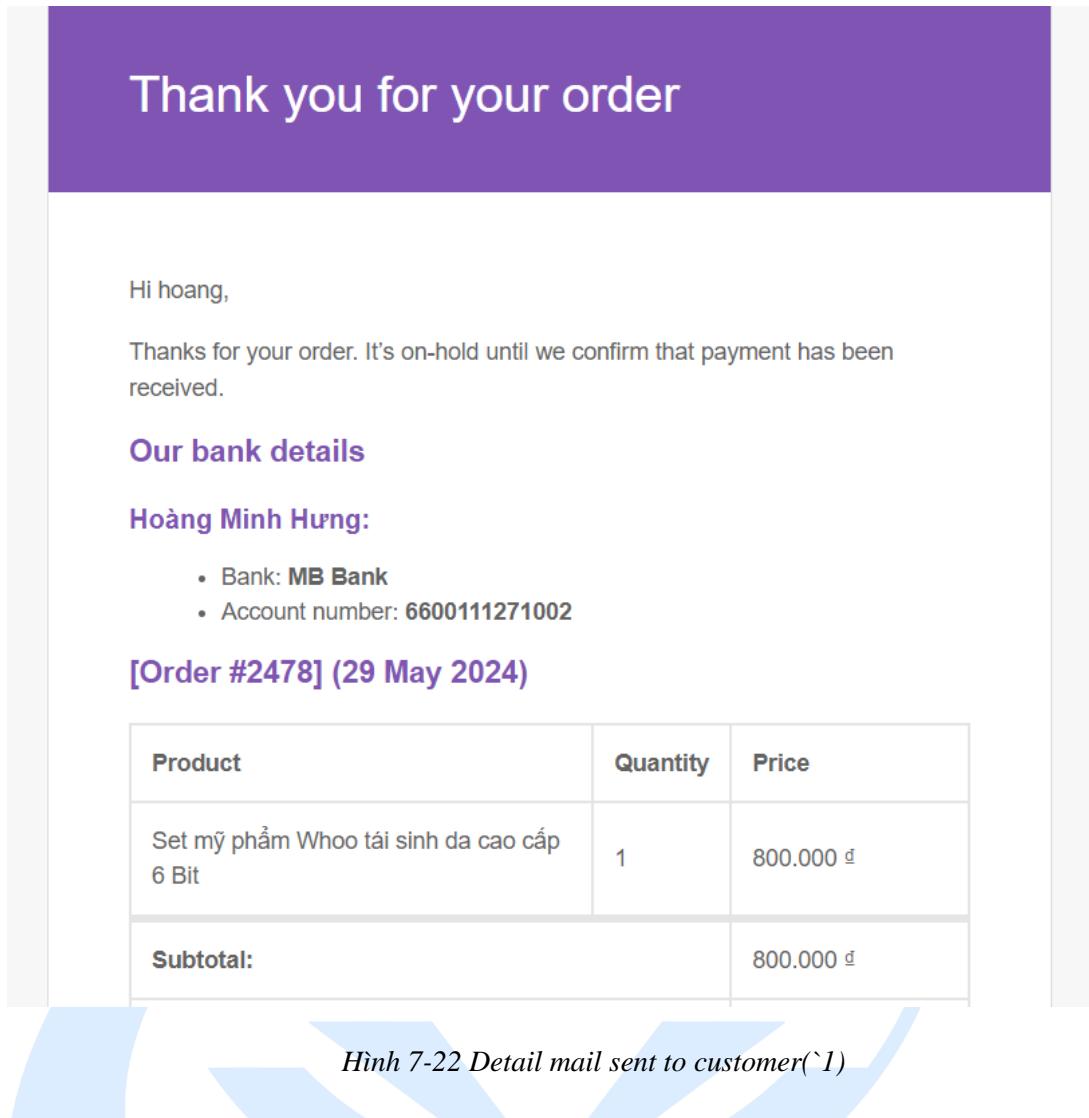


Hình 7-19 Integrated Mailchimp successfully





Hình 7-21 Create confirmation order via email automatically



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You are receiving this email because you opted in via our website.

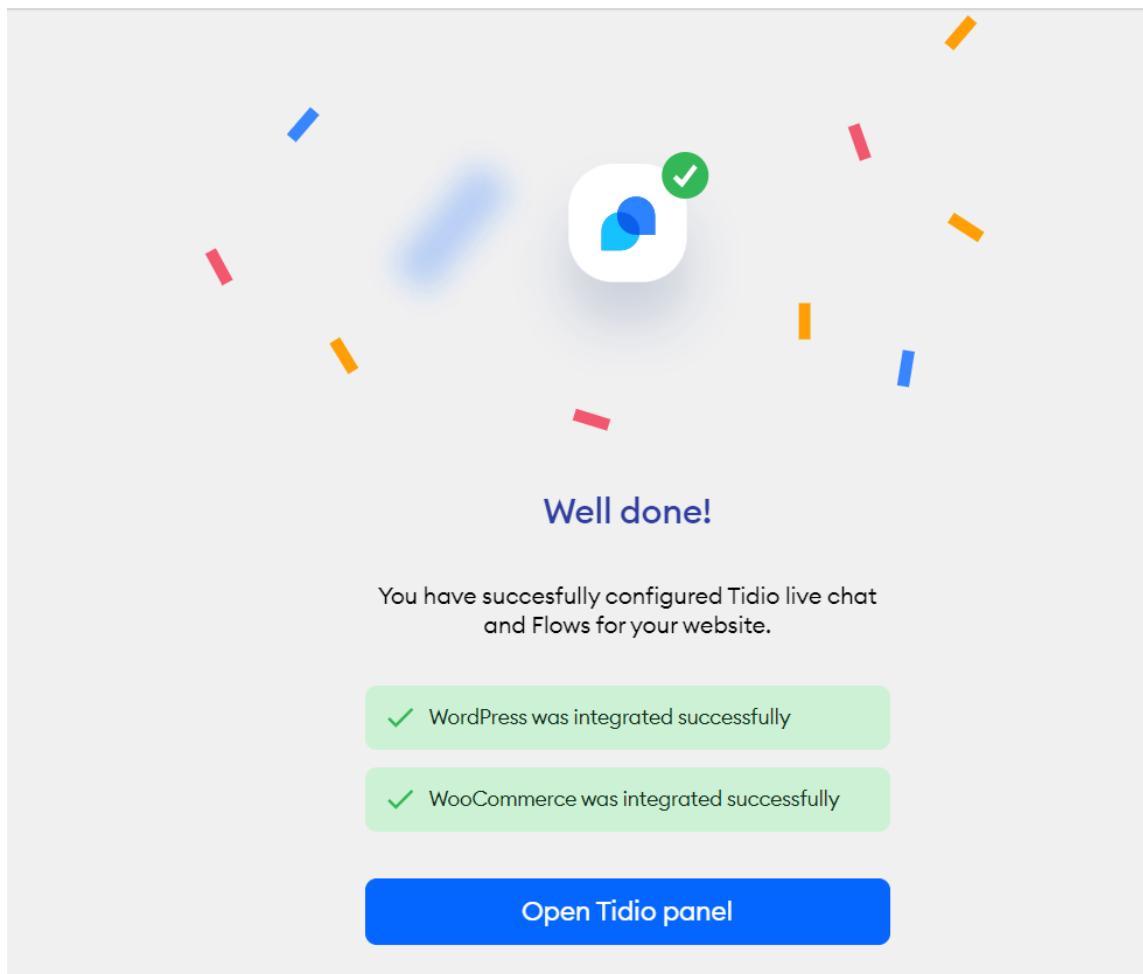
Unsubscribe [PhanNhatHoang.work@gmail.com](mailto:PhanNhatHoang.work@gmail.com) from this list:  
[https://hanhdungorganic.us17.list-manage.com/unsubscribe?u=6bcad8077ce2f9e28d811ea91&id=d43784b4cb&t=b&e=\\_test\\_email\\_&c=facf73251](https://hanhdungorganic.us17.list-manage.com/unsubscribe?u=6bcad8077ce2f9e28d811ea91&id=d43784b4cb&t=b&e=_test_email_&c=facf73251)

Our mailing address is:  
Hanh Dung Organic  
Duong Han Thuyen  
Thu Duc, Dong Nam Bo 22345  
Vietnam

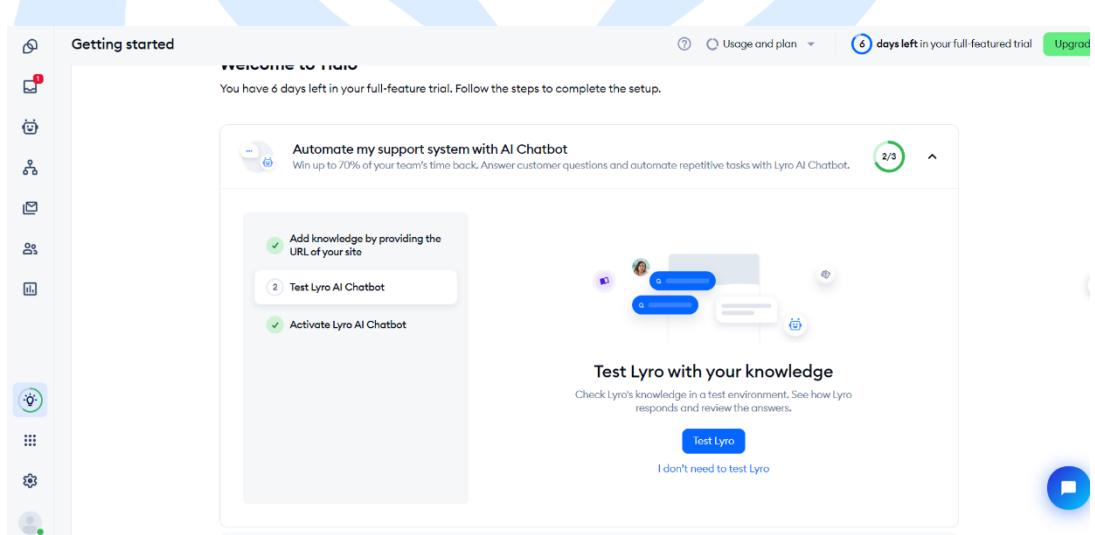
*Hình 7-23 Save information to promote in the future*

### 7.6 Chatbot integration

## DEPLOYMENT



Hình 7-24 Integrated Chatbot successfully



Hình 7-25 Tido panel

## DEPLOYMENT

The screenshot shows the Lyro AI Chatbot interface. On the left, there's a sidebar with options: Hub, Knowledge (selected), Data sources (highlighted with a blue border), Suggestions (25), Playground, Tasks, Configure, and Analytics. The main area is titled "Data sources" with the sub-section "Q&A (2) Website (1)". It includes a search bar and a table titled "All questions: 2". The table has columns for "Question", "Status", and "Last updated". Three rows are listed:

Question	Status	Last updated
How can I find and discuss the blogs on this website?	Used	May 29, 2024, 6:10 PM
Can you provide information about the products and categories available on this website?	Used	May 29, 2024, 6:08 PM

Hình 7-26 Train the Chatbot

The screenshot shows a test chatbot interface. At the top, it says "Hi there" with a waving hand emoji. Below it, a green dot indicates "We reply immediately". A blue bar at the bottom says "Dung Organic?". The main area contains several message bubbles:

- A message from the bot: "The flash sale at Hanh Dung Organic is running for 2 weeks, 6 days, 13 hours, 57 minutes, and 59 seconds from the time the information was captured. 😊 [Read more here](#)"
- A question from the user: "What is the philosophy behind Hanh Dung Organic's products?"
- An answer from the bot: "Hanh Dung Organic's philosophy is to provide natural, safe, and effective skin care products that allow customers to love"
- A text input field with placeholder "Enter your message..." and a send button with a right-pointing arrow.
- At the bottom, there are icons for attachments and emojis, followed by "POWERED BY TIDIO".

Hình 7-27 Test Chatbot

## DEPLOYMENT

The screenshot shows a customer service inbox interface. On the left, there's a sidebar with sections for 'LIVE CONVERSATIONS' (Unassigned, My open, Solved), 'TICKETS' (Solved), 'VIEWS' (Messenger, Instagram, WhatsApp), and 'OPERATORS' (Lyro, AI). The main area is titled 'Unassigned' and shows a live chat with a user named 'yeuthaoto@gmail.com'. The message history includes:

- yeuthaoto@gmail.com 6:05 PM: Talk to a person
- Lyro 6:05 PM: Absolutely! I'm transferring you to a human right away  
Seen on 29th May at 6:04 PM ✓
- Lyro 6:07 PM: Flow was transferred to operator
- yeuthaoto@gmail.com 6:07 PM: 1+1=?

A note at the bottom states: "This message was forwarded as an email to phannhatthoang.sales@gmail.com at 6:48 PM". On the right side, there are tabs for 'Info', 'Viewed pages', and 'Notes'. Below these are sections for 'CUSTOMER DATA' (Customer info like name, email, location, phone, browser, IP), 'LAST VIEWED PAGE' (history of viewed pages), and 'SATISFACTION SURVEY'.

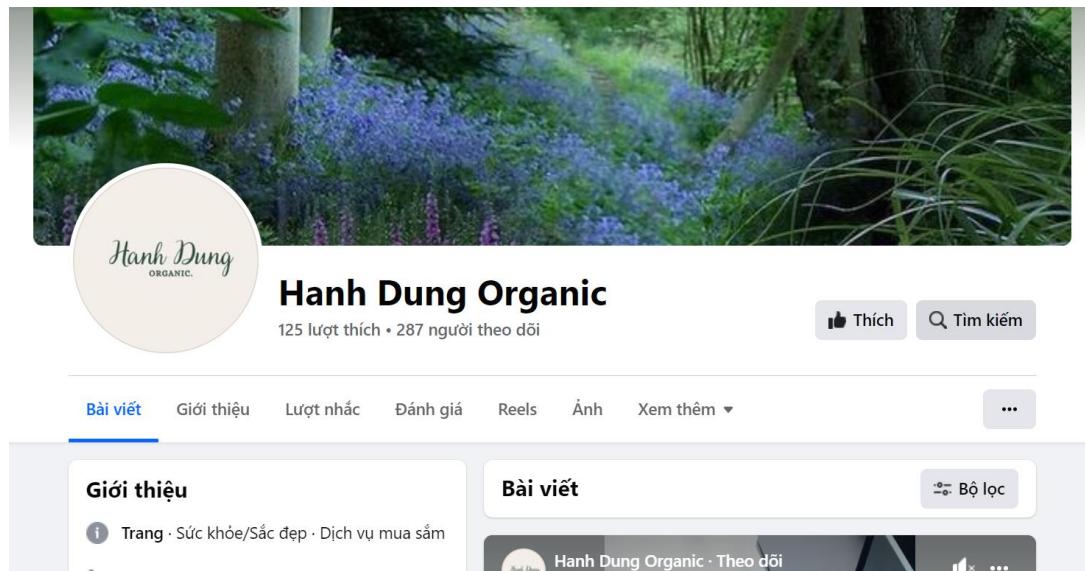
Hình 7-28 CRUD customer inbox, click "Join conversation"



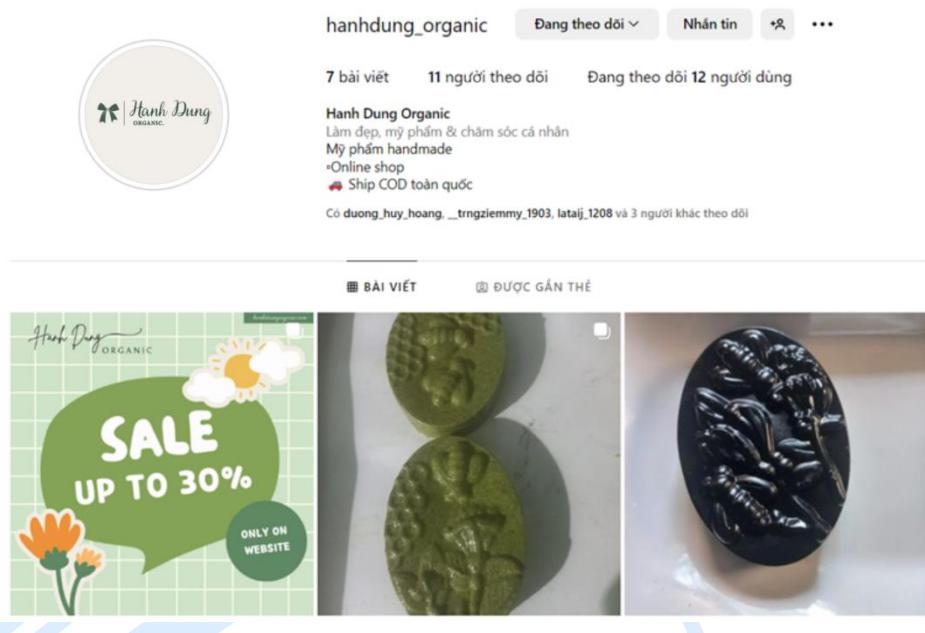
# 8 PROMOTION

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## 8.1 Plan-making



## PROMOTION



Hình 8-2 Instagram "Hanh Dung Organic"

- Posting schedule: 8:00 PM - 9:00 PM weekly

Day	Content	Personnel	Platforms	KPI
Monday	Advertising post, product introduction	Diem My	Facebook	Adjustments weekly
Tuesday	Advertising post, product introduction	Diem My	Instagram	Adjustments weekly
Wednesday	Create an 'Ask for Answers' link for addressing inquiries and sharing concerns with customers.	Diem My	Instagram	Adjustments weekly

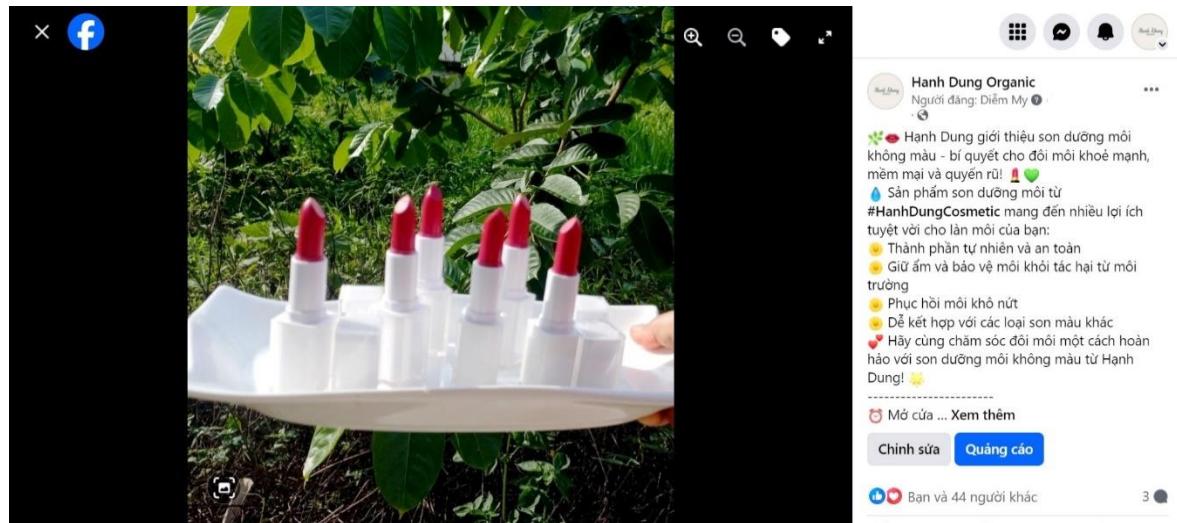
	Create a survey to understand customer needs.			
<b>Thursday</b>	Advertising post, product introduction	Diem My	Facebook	Adjustments weekly
<b>Friday</b>	Advertising post, product introduction	Diem My	Instagram	Adjustments weekly
<b>Saturday</b>	Posts sharing beauty tips, latest trend updates	Diem My	Facebook	Adjustments weekly
<b>Sunday</b>	Share brand stories with customers. Post about upcoming promotional events and offers (if any)	Diem My	Facebook, Instagram	Adjustments weekly

Bảng 8-1 Posting schedule weekly

## 8.2 Implement the plan

- Monday: Post an advertisement for tinted lip balm products on the store's Fanpage.

## PROMOTION



Hình 8-3 Fanpage Facebook post(1)

### Bài viết của Hanh Dung Organic

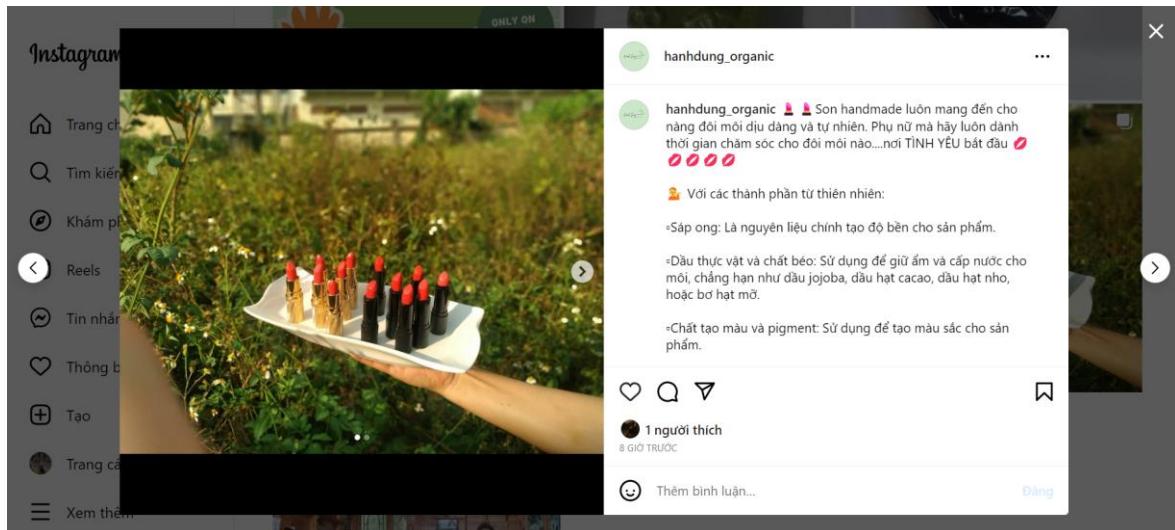


Hình

8-4 User's comments on fanpage Facebook post(1)

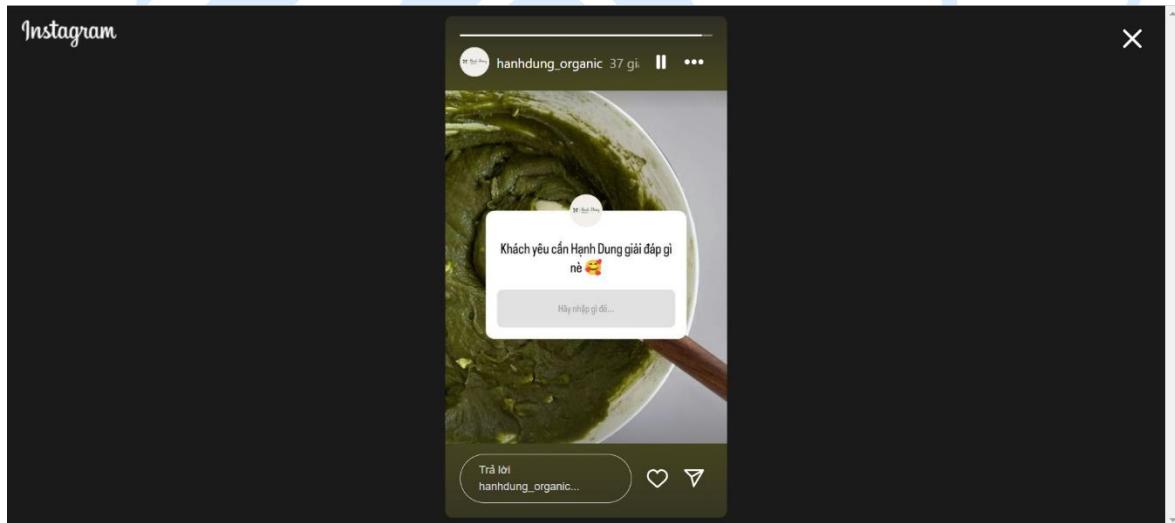
- Tuesday: Advertise the store's organic lipstick products on Instagram.

## PROMOTION



Hình 8-5 Instagram post

- Wednesday: Use Instagram Stories to answer questions and share thoughts with customers via the anonymous ask box.



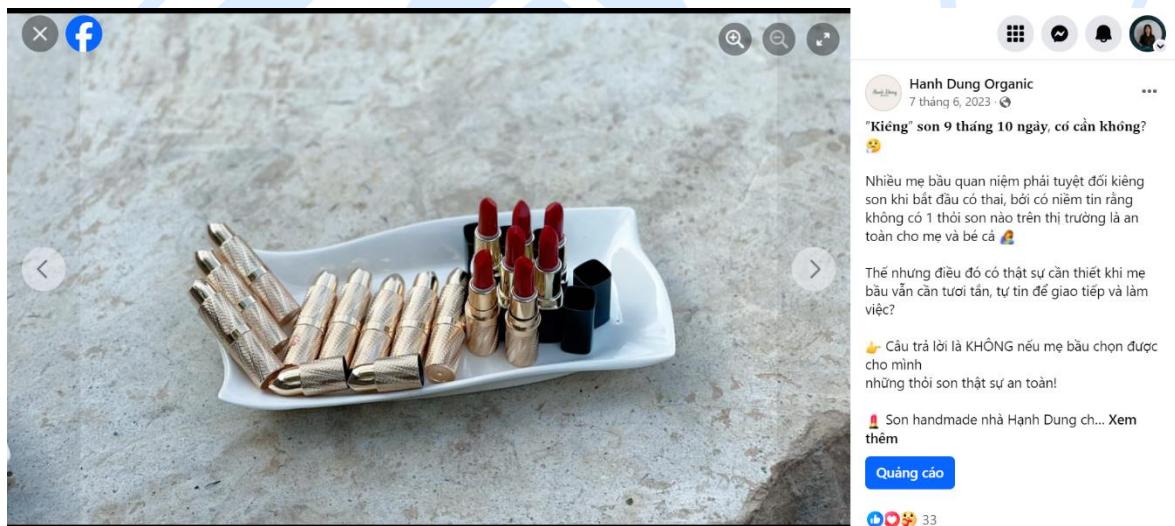
Hình 8-6 Instagram story(1)

## PROMOTION



8-7 Instagram story(2)

- Thursday: Post an advertisement for the store's organic lipstick products on the Fanpage.



Hình 8-8 Fanpage Facebook post(2)

**Bài viết của Hanh Dung Organic**

Phù hợp nhất ▾

 Trần Thanh  
50 tuần Thích Phản hồi

 Thiên Hương Nguyễn  
Chị giỏi quá! Dùng son môi của chị rất tuyệt!  
50 tuần Thích Phản hồi

 Hanh Mai  
Thiên Hương Nguyễn cảm ơn Hướng nha  
50 tuần Thích Phản hồi



 Bình luận với vai trò Diễm My  

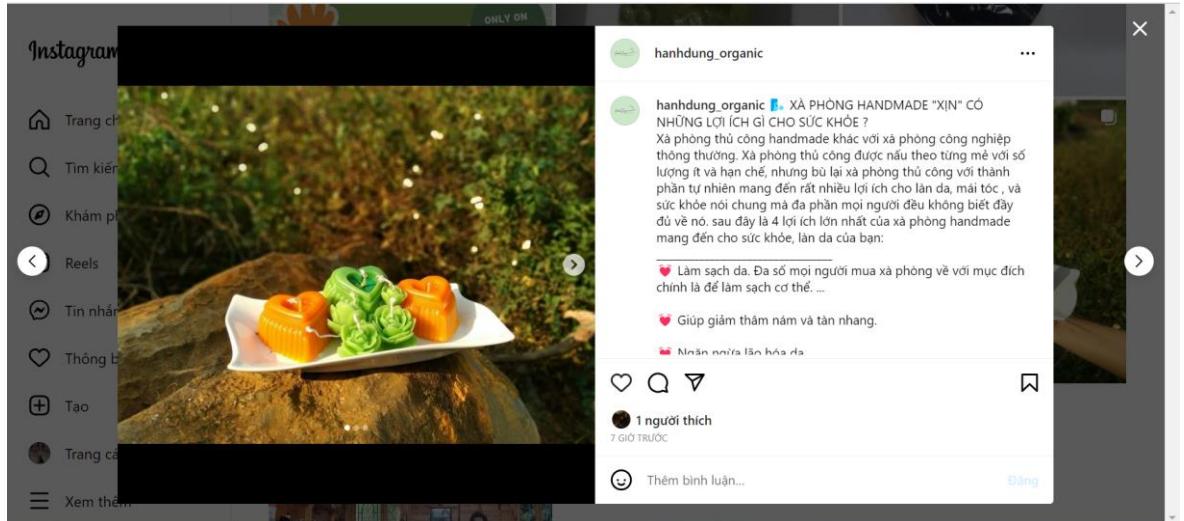

⚠ Bạn đang bình luận dưới tên Diễm My.

*Hình*

8-9 User's comment on fanpage Facebook post(2)

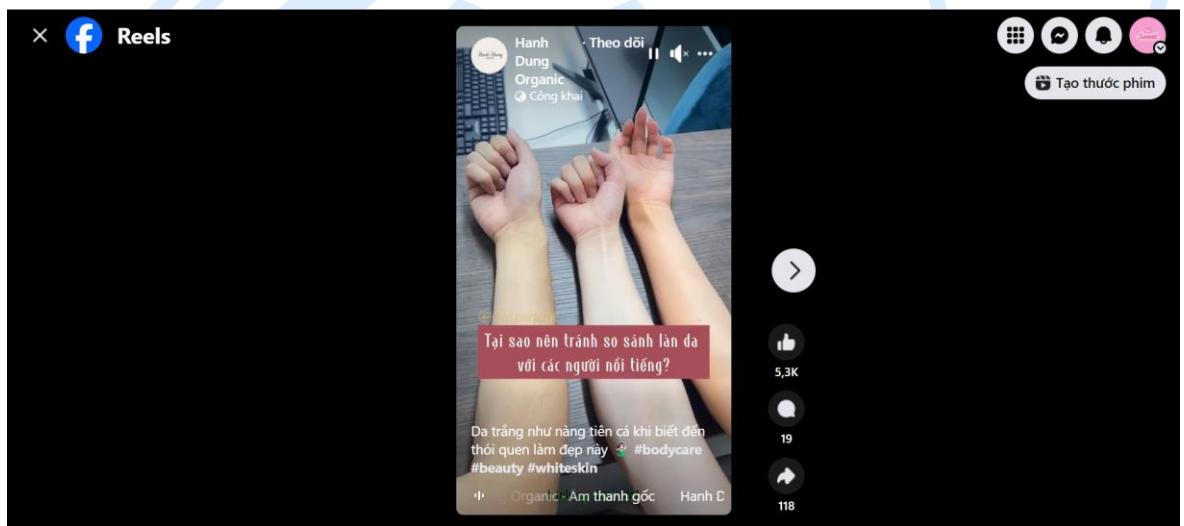
- Friday: Advertise the store's organic lipstick products on Instagram.

## PROMOTION



Hình 8-10 Instagram post(2)

- Saturday: Share useful and trendy beauty tips with customers.



Hình 8-11 Facebook Reels

- Sunday: Post an announcement about upcoming promotional events on both the Fanpage and Instagram.

## PROMOTION

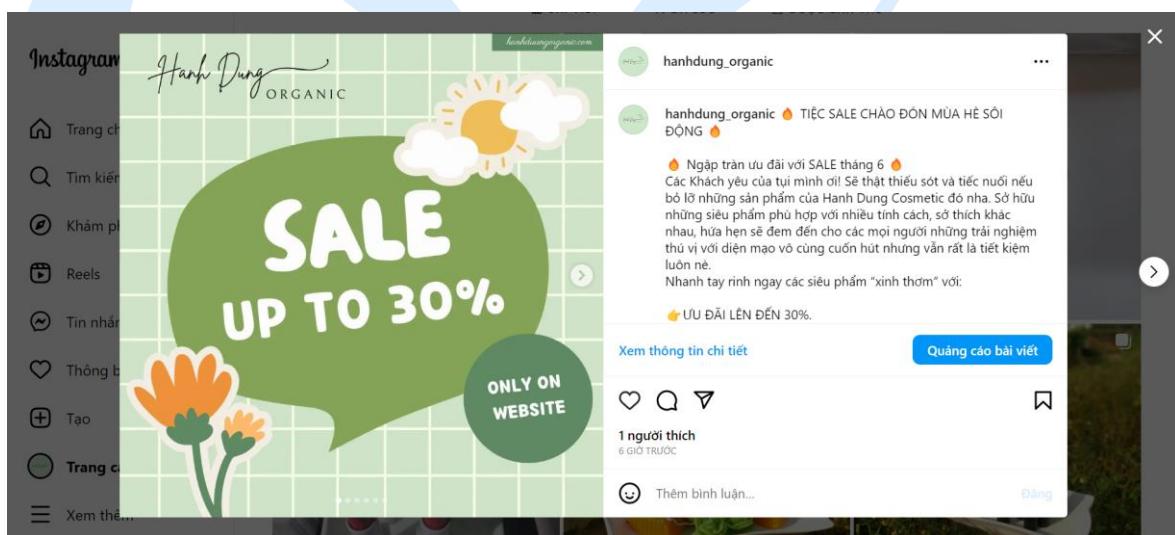


Hình 8-12 Upload Sale post on fanpage Facebook

## PROMOTION



Hình 8-13 Images used for Uploading Sale post



Hình 8-14 Upload Sale post on Instagram

## PROMOTION

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Hình 8-15 User's comment on Sale post fanpage Facebook

# 9 ASSESSMENT AND DEVELOP DIRECTIONS

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## 9.1 Assessment

- **Strengthens:**

- Building a business model selling organic cosmetics and benign, user-friendly skin care products.
- Deploy a complete, operational website with basic functions and meet the needs of an e-commerce system such as liking an item, adding to cart and paying for purchases. Users can manage information about products, invoice information, etc
- Implement functions such as third-party payments such as PayPal applications.
- Delivery fee calculation function for express delivery, helping users determine the specific unit price to pay.
- Successfully integrated marketing campaigns to promote the store's brand.
- The website also has an SSL certificate, further contributing to increasing the security of the website.
- Successfully deployed the Kiot Viet application into Woocommerce to easily manage products and customers as well as create revenue statistics, synchronize products and orders on both sides, appropriately and easily. easier for management.

- **Weaknesses:**

- Although the website has a relative SEO score, it still cannot help the website rank on top when users search for information related to organic cosmetic products.
- Website speed is sometimes slow due to many unnecessary items
- Some proposed processes have not been implemented
- The website interface is still a bit simple, not reaching the expectations and features initially proposed by the team.
- Integration of GHN API, Facebook API and ChatGPT API is still unfinished.

### 9.2 Directions

- Improve website interface and increase website traffic through better SEO.
- Adjust the interface to meet the team's expectations and desired features.
- Continue to integrate GHN API, Facebook API and ChatGPT API for the website's automated system.
- Check Payment successfully in real time.
- Continue to correct shortcomings.

# 10 CONFIRMATION FROM TEAM MEMBERS

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