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UNIVERSITY OF INFORMATION TECHNOLOGY



Subject: Model data, processes
and objects.

Topic: Furniture Online Store Website

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Group: 2

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COMMENT

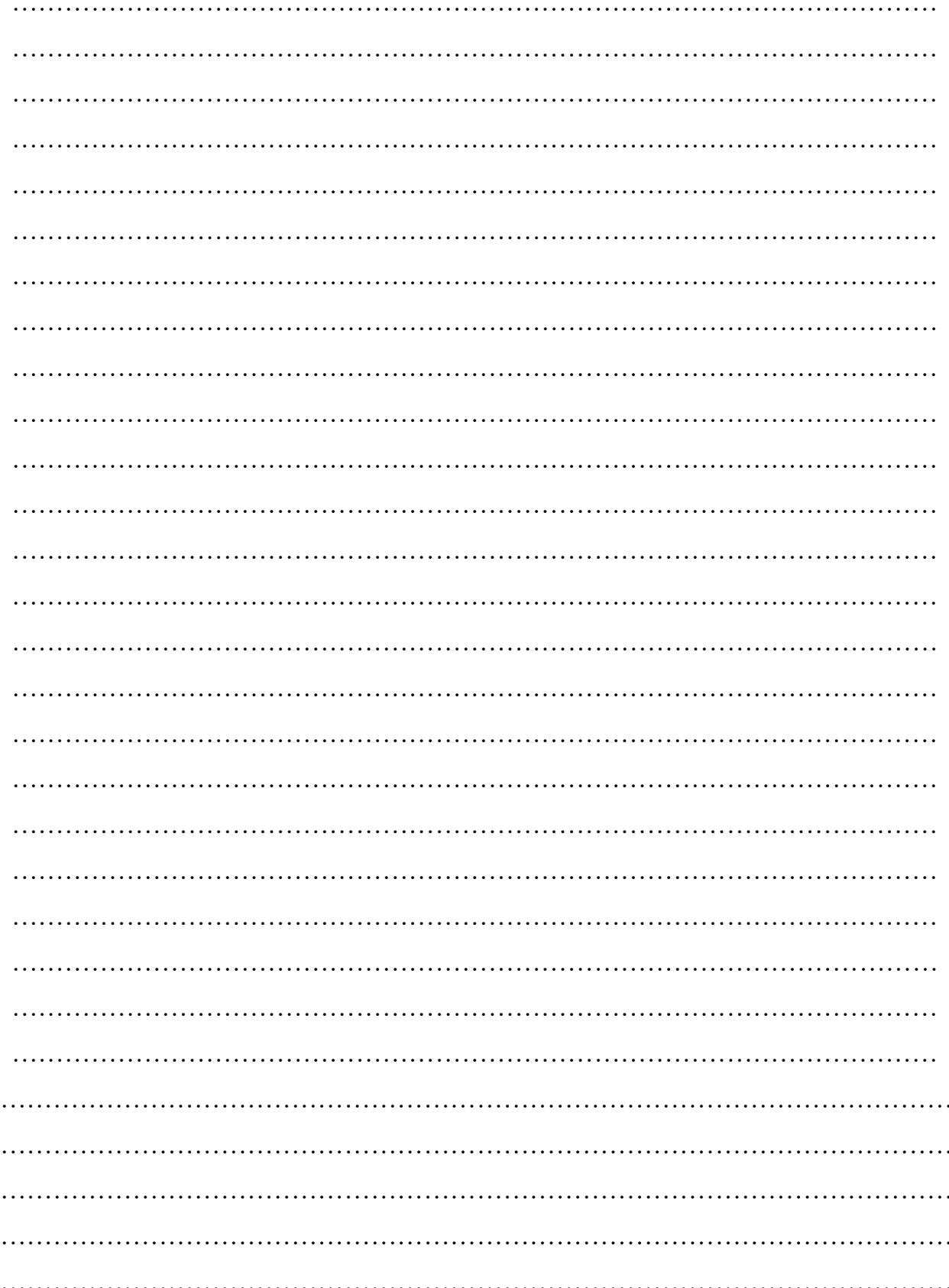
Furniture Online Store Website– Group 2



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1 Introduction

1.1 Background

In the evolving landscape of retail, the furniture industry has experienced a significant shift from traditional in-store shopping experiences to online transactions. This change has been driven by advancements in e-commerce technology, changes in consumer shopping preferences, and the increasing importance of digital accessibility. The rise of online shopping, further catalyzed by global events such as the COVID-19 pandemic, has underscored the need for traditional furniture retailers to adapt to this digital era.

The initiation of the Online Furniture Store Website Project is a strategic response to these market dynamics. The project's conception arose from the recognition of the untapped potential in the online furniture market and the necessity for traditional furniture businesses to expand their digital footprint to remain competitive and meet the changing needs of consumers.

1.2 Overview of Project

To create and launch a comprehensive, customer-centric online furniture store that delivers an exceptional shopping experience, effectively meeting the needs and preferences of a diverse customer base. This digital platform aims to blend convenience, variety, and quality in a seamless online environment.

1.2.1 Objectives and scope of the project

1.2.1.1 Objectives of the project

The primary goal of this project is to develop a user-friendly, visually appealing, and efficient online store dedicated to furniture. This digital platform aims to offer a seamless shopping experience for customers seeking quality furniture, catering to a wide range of styles, preferences, and budgets.

1.2.1.2 Scope of the project

Within a limited time frame, our team will build an online sales management software with management system for employee and customer, but with administration, we didn't have enough time to implement.

1.2.1.2.1 Project Service Scope table

STT	Service	Within the project scope
1	Customer Management	Yes
2	Employees Manage	Yes
3	Furniture Management	Yes
4	Promotion Management	Yes

1.2.1.2.2 Table Data Range Project

STT	Data	Within the project scope
1	Customer Data	Yes
2	Employee Data	Yes
3	Furniture Data	Yes
4	Promotion Data	Yes
5	Screening Data	Yes

1.2.2 Business needs, system requirements

1.2.2.1 Project Scope Chart

STT	Business/Process	Within the project scope
1	Add Customer (Register client)	Yes
2	Edit Customer Information	Yes

3	Add an employee	Yes
4	Edit Staff	Yes
5	Remove employee	Yes
6	Look up Employee information	Yes
7	Look up customer information	Yes
8	Product statistics	Yes
9	Order statistics	Yes
10	Customer statistics	Yes
11	Employee statistics	Yes
12	Add product	Yes
13	Delete product	Yes
14	Update product	Yes
15	Lookup product	Yes
16	Product turnover statistics	Yes
17	Add order	Yes
18	Delete order	Yes
19	Update order	Yes
20	Look up Order information	Yes
21	Promotions statistics	Yes
22	Add promotion	Yes
23	Delete promotion	Yes

1.2.3 Project objective

- Information Systems Analysis: In the direction of structure and object orientation.
- Completing subjects, achieving results, preparing the output of the subject.

- Training the ability of teamwork, analysis of information system design according to the requirements of the Organization, synthesis, writing reports.
- Successful construction of cinema management software.

1.2.4 Feature groups to design

STT	List of features to design
1	Customer Management
	Employee Management
3	Product Management
4	Order Management
5	Payment and Transaction
6	Statistics and Reports
7	Security and Data Management
8	Promotion Management

1.3 Key stakeholders and personnel

No	Name	Parts	Roles & Responsibilities	Contact
1	Luong Gia Han	Product Management	Staff of Product Management, carry product information to the system	
2	Bui Thu Ha	Customer Management	Manage employee customer information	

3	Pham Thuy Dung	Employee Management	Buy product, access the system view customer information.	
4	Nguyen Thi Minh Loan	Customer Care Services	Make promotions in the store, news. Understand the stored customer information, do a good customer care work	

1.4 Roles and responsibilities of project members

No	Name	Role	Main responsibilities
1	Luong Gia Han	Leader	
2	Bui Thu Ha	Member	
3	Pham Thuy Dung	Member	
4	Nguyen Thi Minh Loan	Member	

2 REQUIREMENT SPECIFICATION

2.1 Situation survey/ Survey of current situation

The initial step in system analysis involves a comprehensive survey to gather business requirements for the Furniture Online Store System. This survey aims to collect essential information about the current system, serving as the foundation for the analysis and development of the new system while addressing any existing shortcomings.

2.1.1 Survey of the organization/ Current organizational situation

2.1.1.1 Survey Request

The purpose of the required identification step are Provide insights into your current experience with our existing system and highlight any challenges or inefficiencies you encounter in your day-to-day operations.

2.1.1.2 Survey Object

The primary objectives of this survey are:

- Understand the methodology for creating a systematic System Requirements Table.
- Acquire proficiency in technical requirements analysis techniques.
- Familiarity with the application of technical analysis in meeting professional requirements.
- Mastery of data collection techniques, including interviewing, technical questionnaires, and document analysis.
- Competence in selecting and applying appropriate data collection techniques.

2.1.1.3 Survey content

2.1.1.3.1 Current System Experience

How satisfied are you with the current Furniture Store System?

- Very Satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very Dissatisfied

What aspects of the current system do you find most beneficial?

What challenges or inefficiencies have you encountered while using the current system?

2.1.1.3.2 Technical Analysis

How would you rate the system's performance in handling day-to-day operations?

- Excellent
- Good
- Fair
- Poor
- Very Poor

Are there specific technical features or improvements you believe could enhance the system's functionality?

Do you encounter any issues related to hardware, software, or network connectivity?

2.1.1.3.3 Professional Requirements

To what extent does the current system align with industry standards and professional requirements?

- Fully Aligned
- Partially Aligned
- Not Aligned

Are there specific professional requirements or compliance measures you believe the system should adhere to?

How confident are you in the system's security features and data protection measures?

- Very Confident
- Confident
- Neutral
- Not Confident
- Not at all Confident

2.1.1.3.4 Data Collection Techniques

Have you participated in any interviews or responded to technical questionnaires during the system analysis phase?

- Yes
- No

If yes, please share your experience and any suggestions for improvement.

Are there additional documents or insights you believe would contribute to a more thorough system analysis?

2.1.1.3.5 General Comments

What additional comments or suggestions do you have regarding the Furniture Online Store System?

2.1.1.3.6 Conclusion:

Thank you for completing our Furniture Online Store System Enhancement Survey. Your input is crucial in shaping the future of our system.

2.1.3. Survey Methodology

The survey will be disseminated electronically via email to pertinent stakeholders, encompassing store managers, staff, and IT professionals. To uphold participant confidentiality, responses will be treated anonymously, ensuring that no personally identifiable information is associated with individual inputs. A specified time frame will be allocated for participants to complete the survey, with follow-up reminders strategically dispatched to encourage robust participation. Subsequently, the collected responses will undergo thorough aggregation and analysis, aiming to pinpoint prevalent trends, challenges, and valuable suggestions. This comprehensive data analysis will serve as a foundational element in steering the development strategy for the Furniture Online Store System, prioritizing enhancements aligned with the collective insights and needs of our stakeholders.

2.1.1.4 Survey result

Overall Satisfaction: The survey revealed a 70% in overall satisfaction levels among respondents, providing a comprehensive understanding of stakeholders' sentiments towards the current Furniture Online Store System.

Beneficial Aspects: From the survey, it was identified that efficient inventory management, user-friendly interface, robust security measures stood out as particularly beneficial according to participant feedback. This insight is instrumental in recognizing and preserving elements that contribute positively to the user experience.

Challenges: The survey identified inventory management complexity faced by stakeholders, offering a targeted focus for improvement initiatives. Addressing these challenges will be a priority in the system enhancement strategy.

2.1.1.5 Survey of business processes, major activities

As part of our ongoing commitment to continuous improvement, we are conducting a comprehensive survey to gain insights into our business processes and major activities. Your input is vital in understanding the current state of our operations, identifying areas for enhancement, and ensuring alignment with our organizational goals.

2.1.1.5.1 Process Mapping

- Gain an understanding of our existing business processes through process mapping.
- Identify key workflows, inputs, outputs, and interactions among different departments.

2.1.1.5.2 Efficiency Assessment

- Evaluate the efficiency of major activities within each business process.

- Identify bottlenecks, redundancies, and areas where improvements can be made.

2.1.1.5.3 Stakeholder Perspectives

- Collect feedback from stakeholders at various levels to understand their perspectives on existing processes and activities.
- Prioritize feedback from frontline staff, middle management, and executives.

Technology Integration:

- Assess the integration of technology in our business processes.
- Identify opportunities for leveraging technology to enhance efficiency and effectiveness.

2.1.1.6 Survey of existing system

Organization: <https://www.ashleyfurniture.com/>

In our pursuit of continuous improvement, we are conducting a comprehensive survey to assess our existing system's effectiveness and gather valuable insights from users like you. Your input is essential in understanding the current state of our system, identifying strengths, pinpointing weaknesses, and gauging user satisfaction.

User Experience Assessment:

Ashley Furniture's website offers a wide range of products, from living room and bedroom furniture to home decor and lighting. The online platform features a Room Builder tool, allowing customers to visualize furniture in their space. The website is generally user-friendly and provides a variety of options in colors and textures for most products.

Functionality Evaluation:

The website's functionality is reasonably good, offering options for both in-store and online purchases with different delivery methods, including regular doorstep delivery and premium delivery with assembly. The site also supports a price-matching program and a price adjustment guarantee, along with special financing options.

Performance and Reliability:

Ashley Furniture products are known for their economical pricing and reasonable quality. The company uses engineered wood in many of its products, which is eco-friendly and durable. However, some customers have reported issues with the quality and durability of products.

User Feedback:

- Collect feedback on specific aspects of the system, including user interfaces, navigation, and system responsiveness.
- Identify any recurring issues or pain points reported by users.

2.1.1.6.1 Interview

Interviewer: Bùi Thu Hà

Interviewee: CEO of Juno.vn

2.1.1.6.2 Questions

Background and Vision:

Can you share your journey to becoming the CEO of Ashley Furniture?

What is your vision for the future of Ashley Furniture?

Company Strategy and Industry Position:

How does Ashley Furniture differentiate itself in the highly competitive furniture market?

What are the key factors driving your company's growth strategy?

Product Development and Innovation:

How does Ashley Furniture approach product design and development?

Can you discuss any recent innovations or new product lines that the company is particularly excited about?

Customer Experience and Engagement:

How does Ashley Furniture ensure a high-quality customer experience, especially in the digital space?

What are the biggest challenges you face in maintaining customer satisfaction and loyalty?

Sustainability and Social Responsibility:

How is Ashley Furniture addressing sustainability and environmental concerns in its manufacturing and supply chain processes?

Can you elaborate on any corporate social responsibility initiatives that the company is currently engaged in?

Market Trends and Challenges:

What trends are you observing in the furniture industry, and how is Ashley Furniture adapting to these trends?

What do you see as the biggest challenge facing the furniture industry today?

Technology and Digital Transformation:

How is technology impacting the furniture industry, and what role does it play at Ashley Furniture?

Can you discuss any digital transformation initiatives within the company?

Employee Development and Company Culture:

How do you foster a positive and productive company culture at Ashley Furniture?

What initiatives are in place for employee development and retention?

Global Operations and Expansion:

Can you discuss Ashley Furniture's global footprint and any plans for international expansion?

How does the company manage the complexities of operating in different international markets?

Future Outlook:

What are the long-term goals for Ashley Furniture?

How do you envision the future of the retail furniture sector evolving in the next 5-10 years?

2.2 Software requirements

2.2.1 Functional requirements

2.2.1.1 Data Requirements:

Customer data, administrator information, product catalog, inventory details, order history, and transaction records.

2.2.1.2 Feature Requirements:

For Customers:

- View the product catalog with detailed descriptions and prices.
- Search, filter, and sort products based on various attributes.
- Add, remove, or update items in the shopping cart.
- Place orders securely.
- View order confirmation and order status.
- Create, edit, and delete user profiles.

For Administrator

- Add, remove, and edit user information.
- Look up customer details, edit customer information, and search for customers.
- Manage user preferences and order history.
- For Inventory Management Staff:
 - Track and update inventory in real-time.
 - Receive notifications for low stock items.

2.2.2 Non-functional requirements

2.2.2.1 Interface Requirements:

The interface should be user-friendly, intuitive, and easy to navigate for both customers and staff.

2.2.2.2 Quality Requirements:

The system must provide reliable performance and operate seamlessly during regular use.

2.2.2.3 Tight Permissions:

Implement strict permission controls to restrict access based on user roles, ensuring data security.

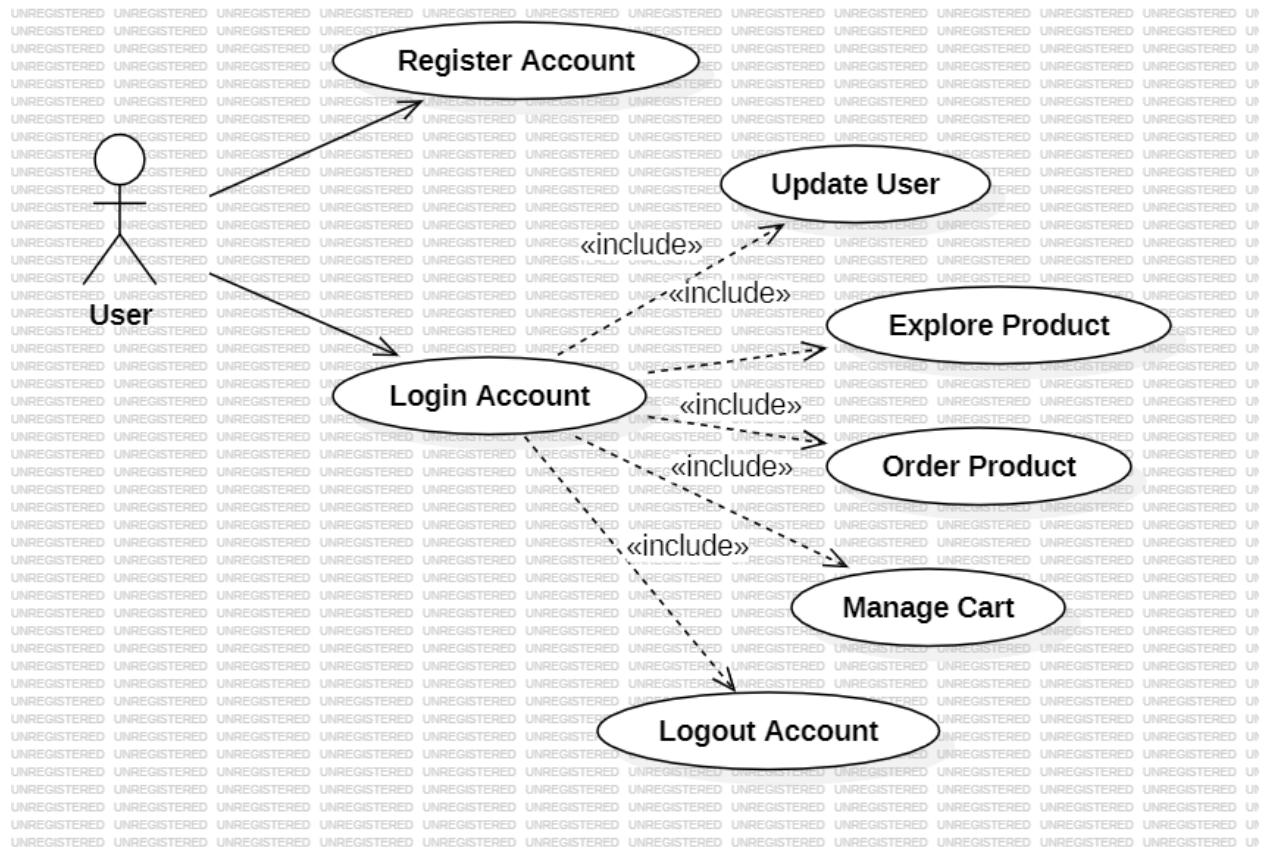
2.2.2.4 Convenient Request:

Ensure the system is easy to use, intuitive, and offers a friendly shopping experience for customers.

3 ANALYSIS AND DESIGN

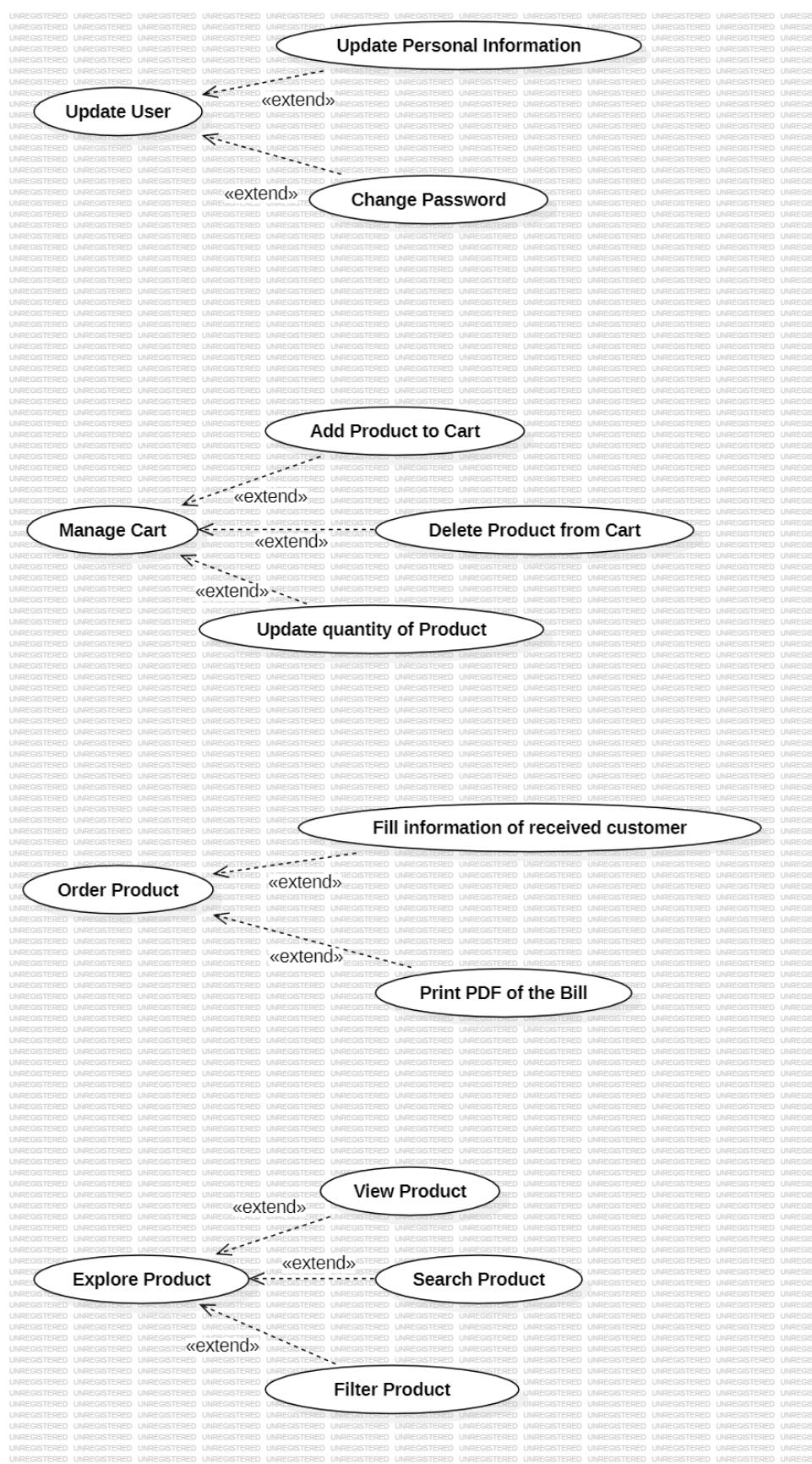
3.1 Use Case Diagram

3.1.1 Use case Diagram for User

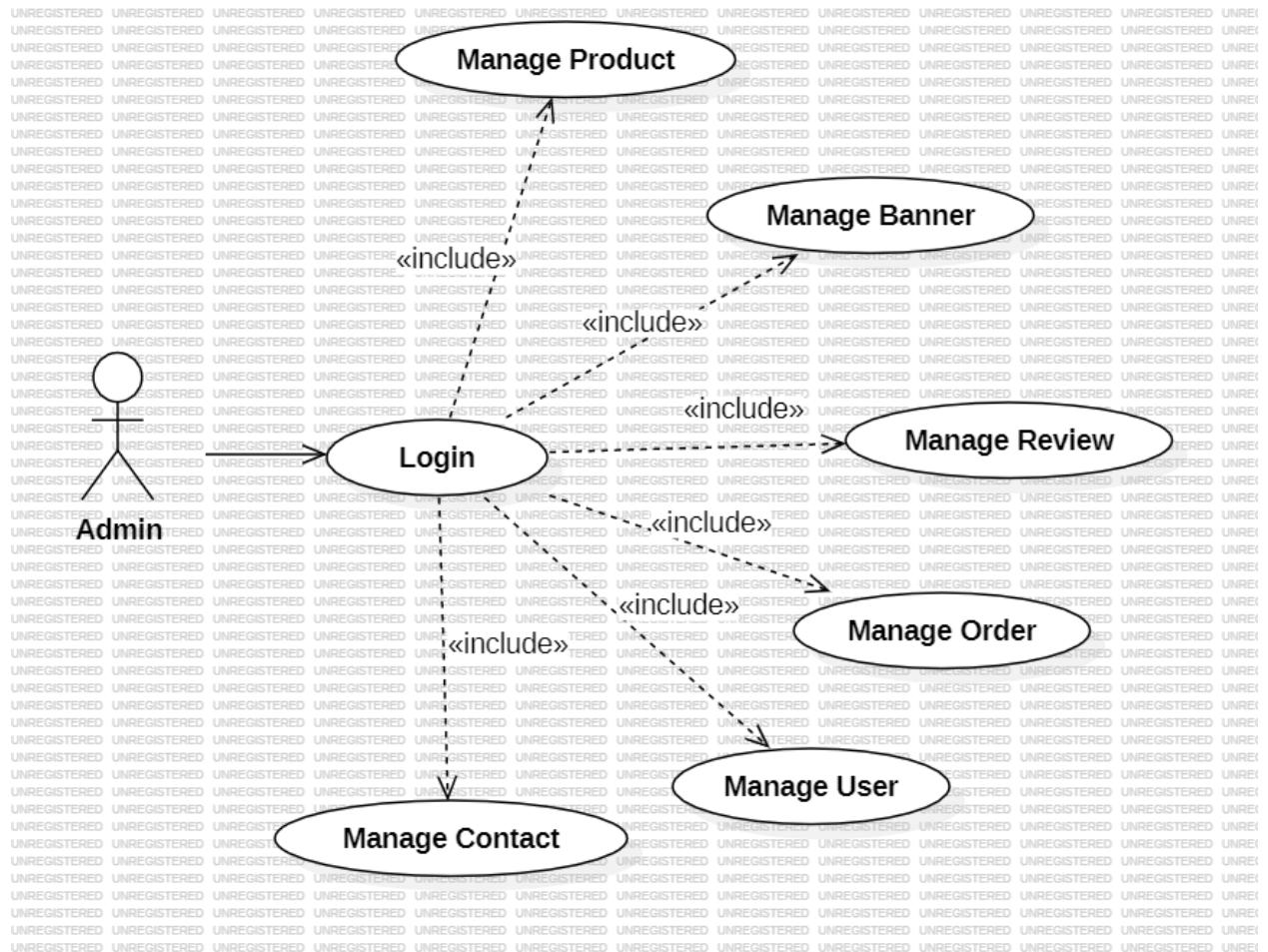


3.1.2 Use Case Diagram for User in Detail

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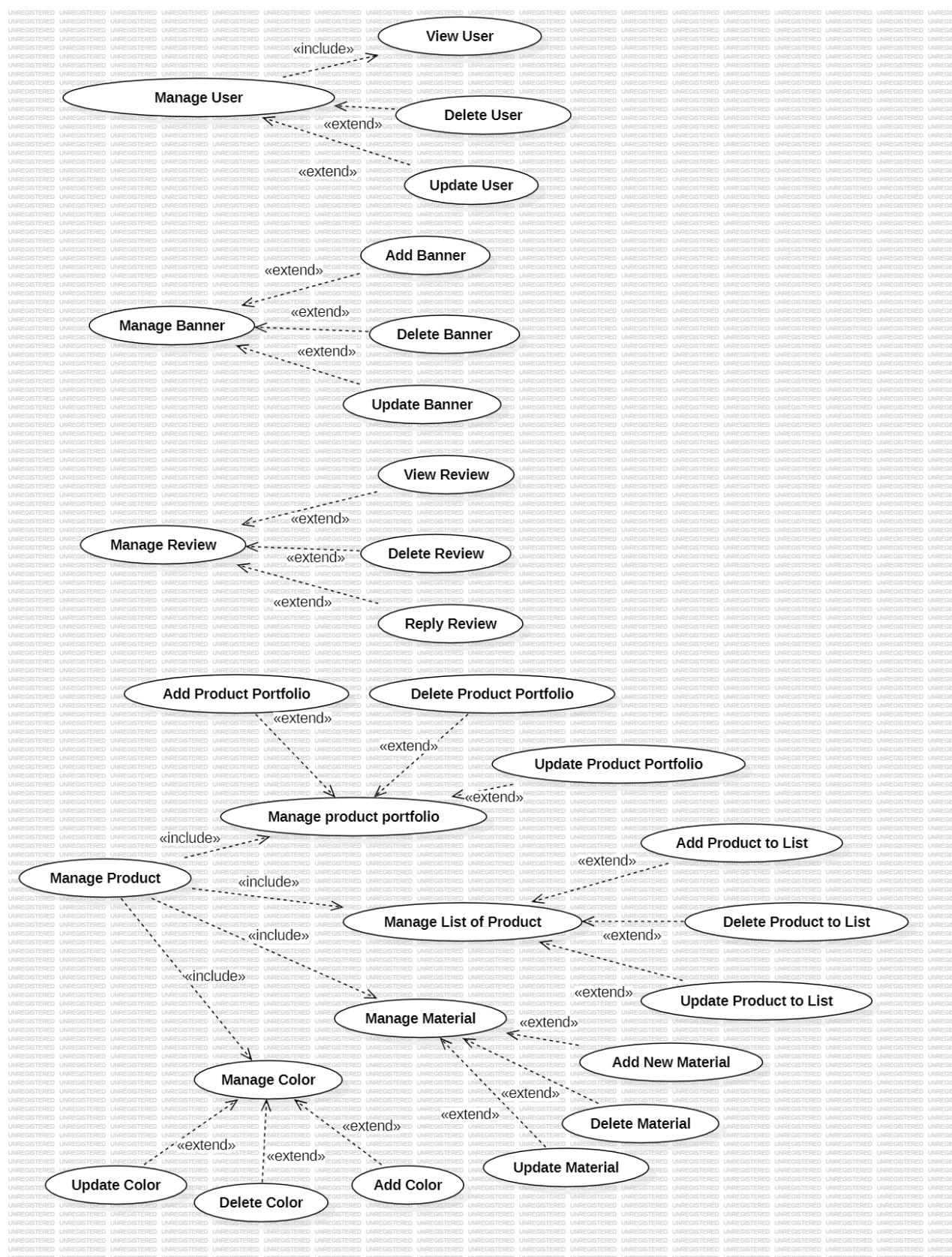


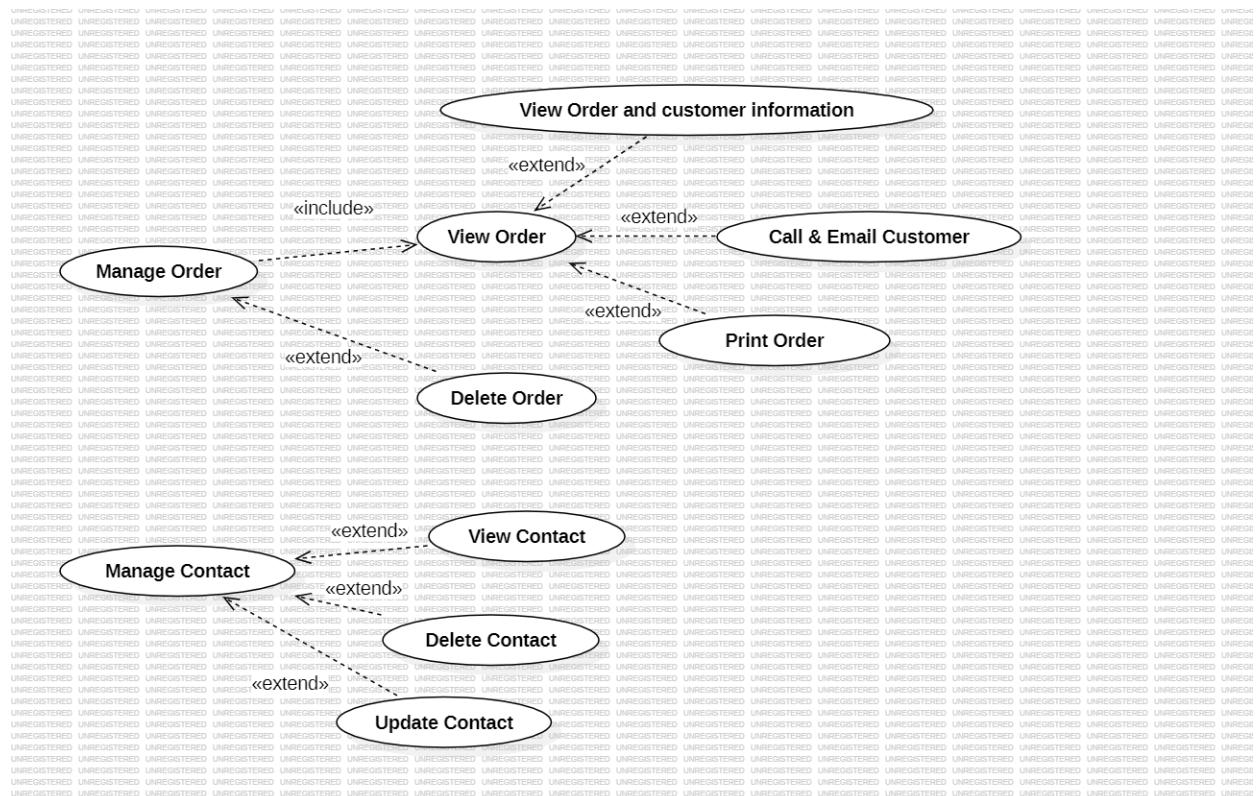
3.1.3 Use Case Diagram for Administration



3.1.4 Use Case Diagram for Administration in Detail

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3.2 Use-case Diagram Description

3.2.1 List of actors:

No	Actor	Meaning
----	-------	---------

1	Register User	Register to login the system
2	Sign-In Customer	Sign in to system to use all the system's services
3	Administrator	Manage all system

3.2.2 List of Use-case

No.	Use-cases	Meaning
1. User's Role		
1.1	Register User	Register User Information
1.2	Sign in	Sign in to user's services
1.3	Update User	Update user information like user name, phone, email,...
1.4	Order Product	View, filter Product, Fill information of receiving customer, in here user can print the pdf of the bill

1.5	Manage Cart	Add, delete, update product in cart
1.6	Choose Product	View, search product and filter product by price and color

2. Administrator's Role

2.1	Sign in	Sign in to use administration's system
2.2	Manage product	Manage portfolio, product, material, color...
2.3	Manage banner	View, update, delete banner
2.4	Manage Review	View, delete review
2.5	Manage Order	View order & customer information, call & email to customer, and print the invoice
2.6	Manage User	View, delete, update user
2.7	Manage Contact	View delete, update contact

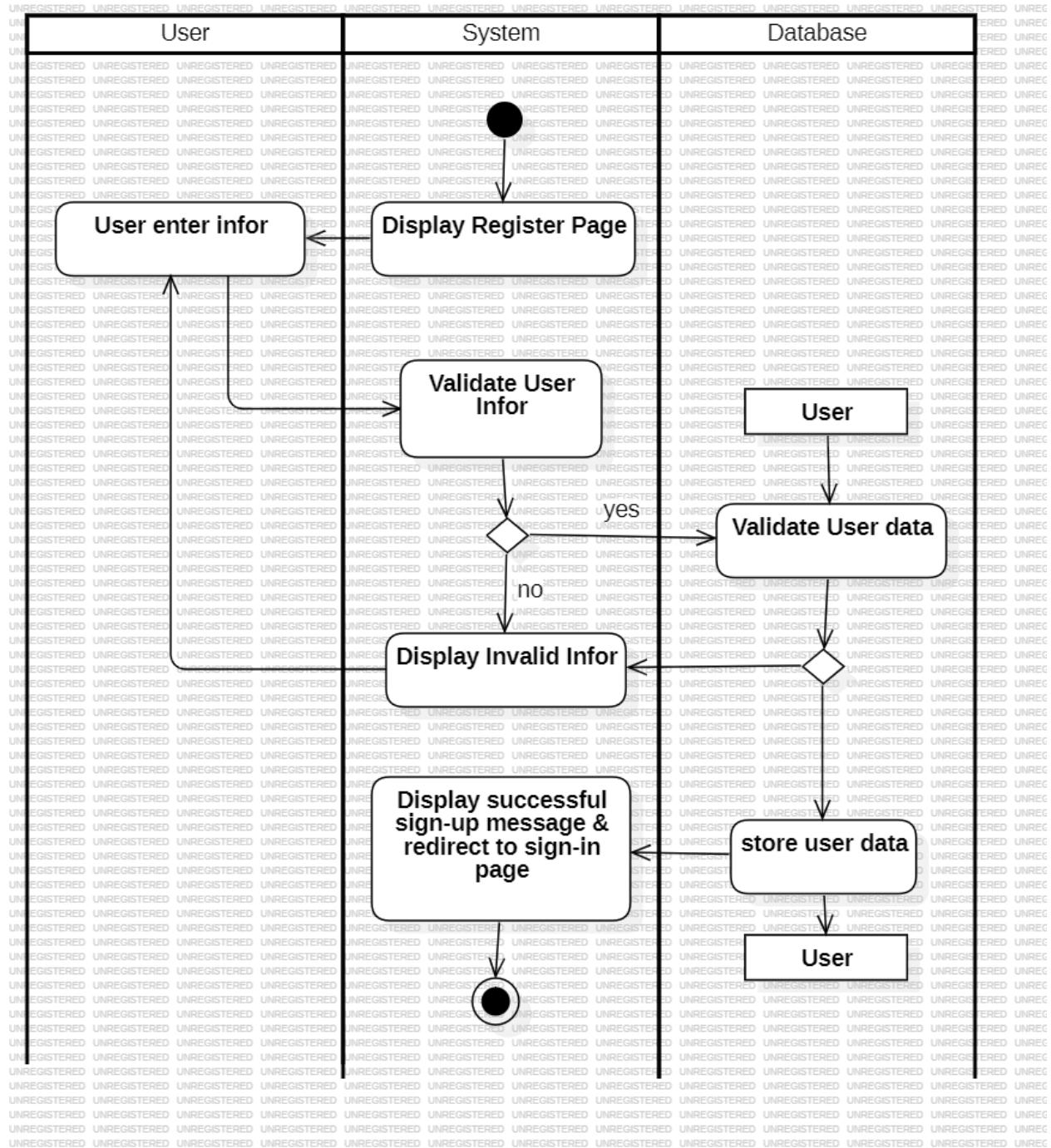
3.3 Use-case specification and Activity Diagram

3.3.1 User case specification and activity diagram for Customer

3.3.1.1 Register new Account

Use case name	Register New Account
Description	User creates an account to use all user's services
Trigger	User clicks to register the account
Pre-condition	User's device must be connect to internet
Post-condition	<p>User gets a notification of successful creation for registration account</p> <p>User Account is created and can be used in the next time</p>
Basic flow	<ol style="list-style-type: none"> 1. User click to register new account if user didn't create before 2. System displays sign up page 3. User enters information such as

	<p>email, password, name... and click confirm</p> <ol style="list-style-type: none">4. System validates user entered information in the right format5. System validates user entered data is unique in database of user6. System notifies user that account created successfully and then user can sign in by using email signed and password
Alternative flow	<p>3.a The user chooses the registration method with a new account using Email or phone number, then the system switches to the login screen.</p> <p>3.a The user enters the account and selects the login command</p> <p>4.a The website successfully authenticates the login information and allows the user to access the application.</p>
Exception Flow	<p>3. b System display invalid format, user need to enter user's information again.</p> <p>4. b. System display invalid data due to</p>

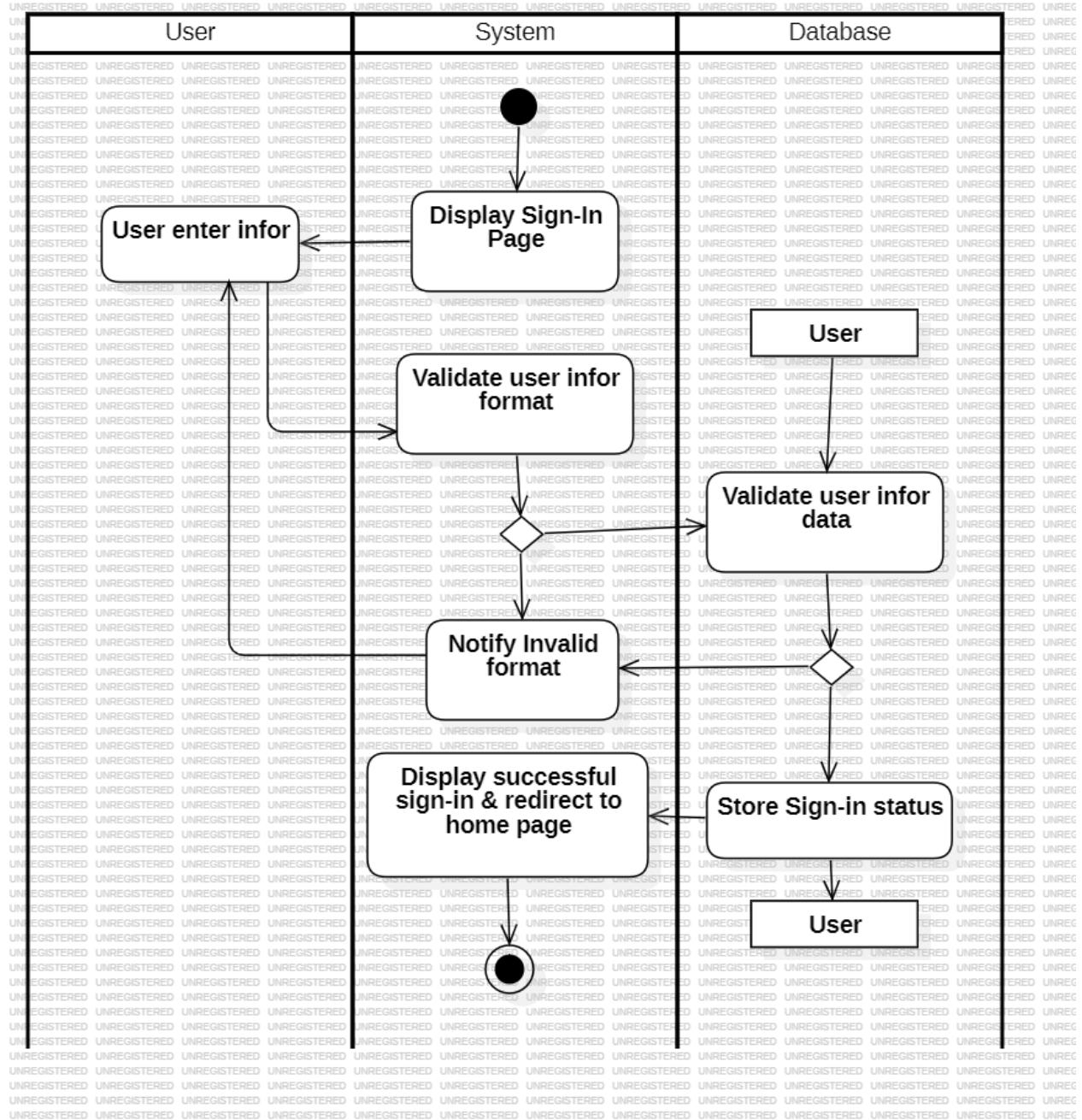


3.3.1.2 Login Account as a User

Use case name	Sign – in as customer
Description	User uses existed account to log in the system
Trigger	User clicks to sign-in button
Pre-condition	User's device must be connect to internet User's account must be existed
Post-condition	User get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here customer can use the services

Basic flow	<ol style="list-style-type: none">1. System display sign-in page2. User enters email & password and click confirm3. System validate email & password in the right format4. System validates email & password data with exist email & password in database of user5. System stores sign in status6. System display successful sign-in and redirect to homepage
Alternative flow	<p>2 a. The user logs in to their account using gmail or phone number and selects the login command.</p> <p>3.a. Website authenticates the correct and successful login information then allows the user to access the website</p>
Exception flow	<p>2. b System display invalid information due to wrong format of email or password</p> <p>3.b. System displays invalid account due to non-existed account in database</p>

Furniture Online Store Website– Group 2

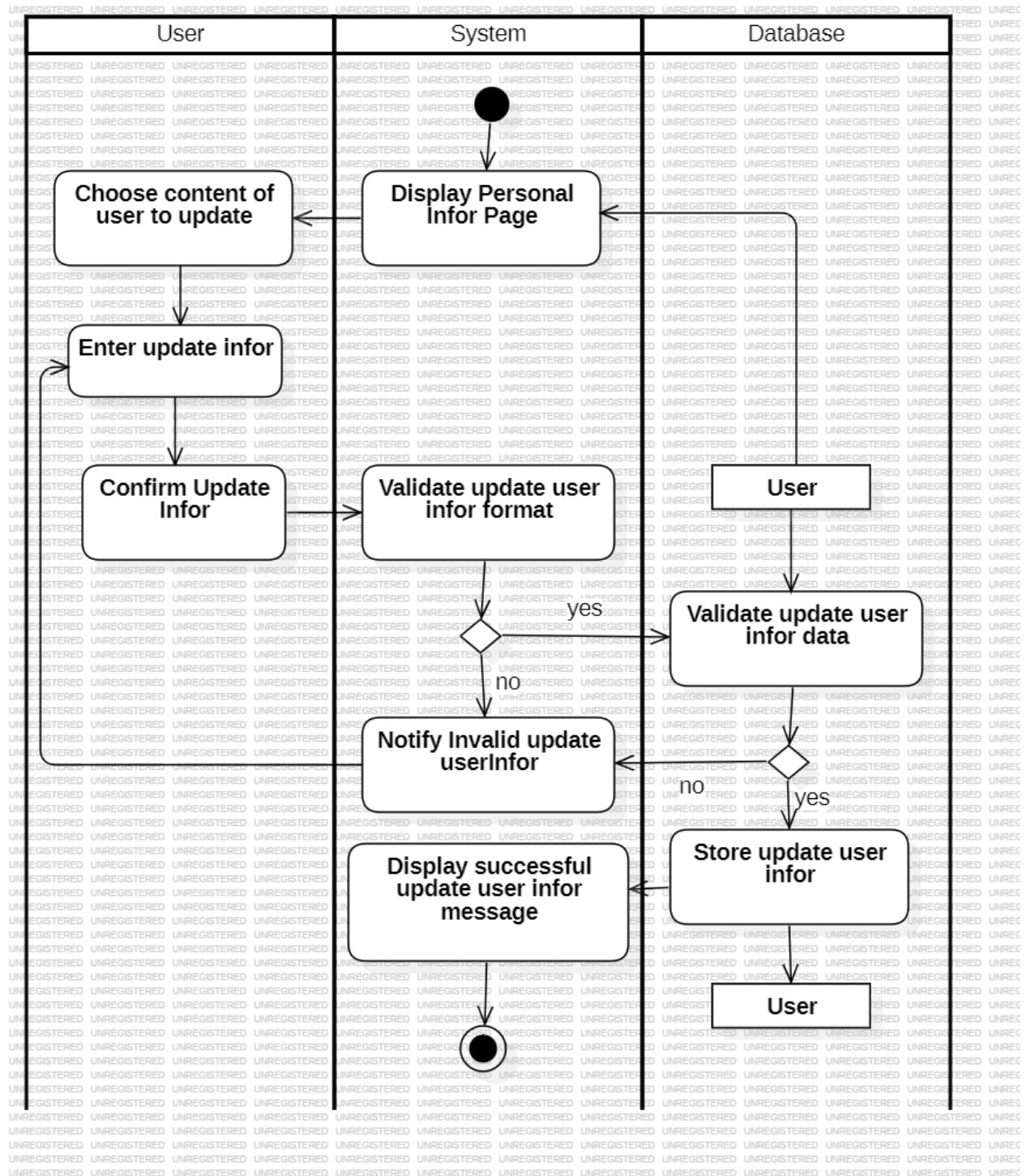


3.3.1.3 Use-case update user

Use case name	Update user as customer
Description	User wants to update existed user account information
Trigger	User clicks to button seen to update infor
Pre-condition	User's device must be connected to internet User's account must be existed User's status is sign in
Post-condition	User get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here customer can use the services User chooses user update to update user's information

Basic flow	<ol style="list-style-type: none">1. System display user update page information2. User choose the content like name, email, password.... which he/she wants to update3. User click update button to confirm update information4. System validates update user information format5. System validates update user information data with old data6. System store new update user information in database of user7. System displays successful update user information message
Alternative flow	<ol style="list-style-type: none">4. a. System display information update successfull.5. a. System validates update user information data with new data.
Exception flow	<ol style="list-style-type: none">4. b System display invalid information due to wrong format of email or password

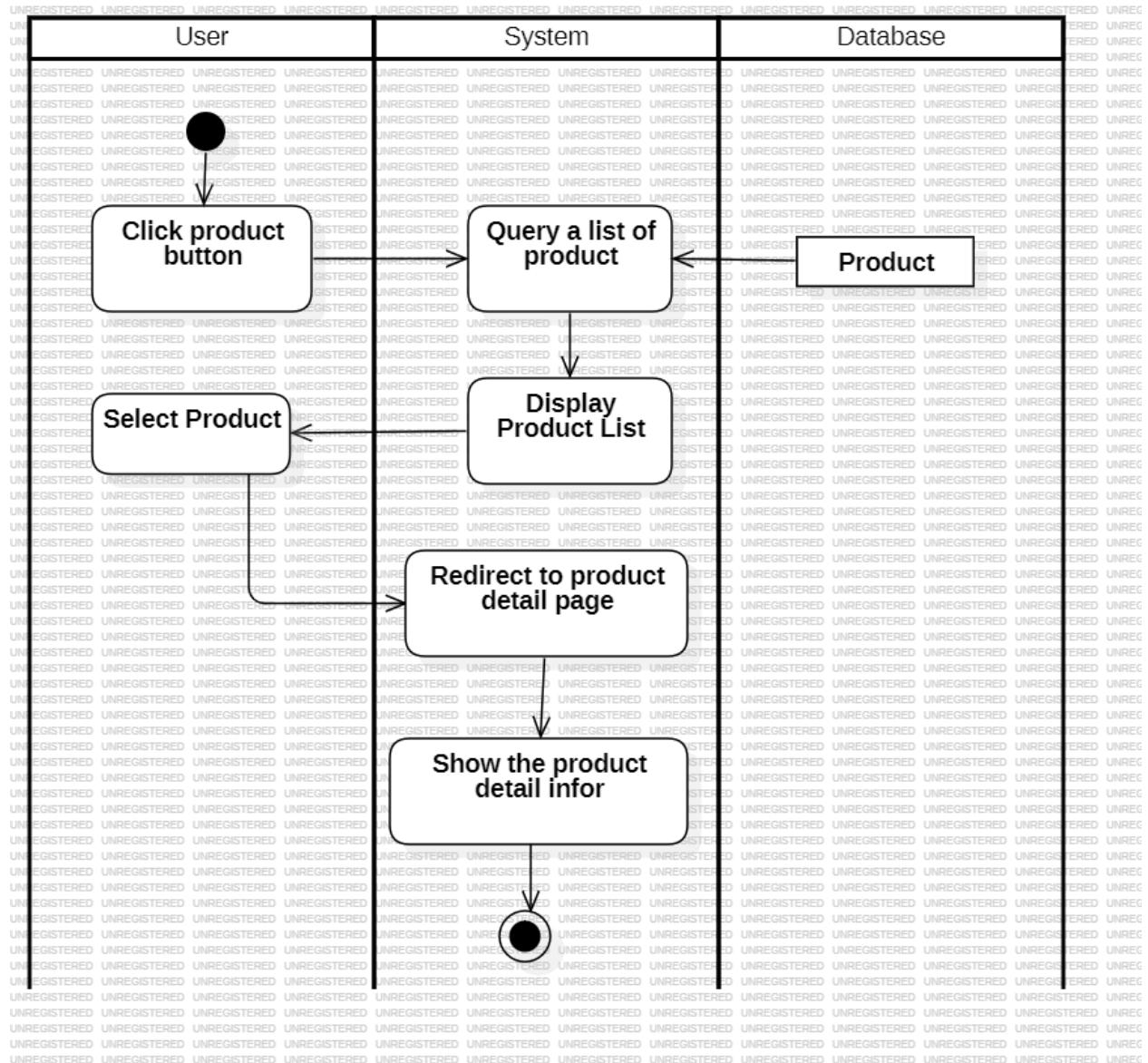
5. b System displays invalid account
due to non-existed account in
database



3.3.1.4 Use-case explore product of customer

Use case name	Explore Product as customer
Description	User wants to explore product to find product which he/she wants
Trigger	User clicks to product button
Pre-condition	<p>User's device must be connected to internet</p> <p>User's account must be existed</p> <p>User's status is sign in</p> <p>User get a list of product</p>
Post-condition	<p>User get notification of sign-in successfully.</p> <p>After log-in, automatically redirecting to homepage and here customer can use the services</p> <p>User get a list of product</p>
Basic flow	<ol style="list-style-type: none"> 1. User clicks product button in home

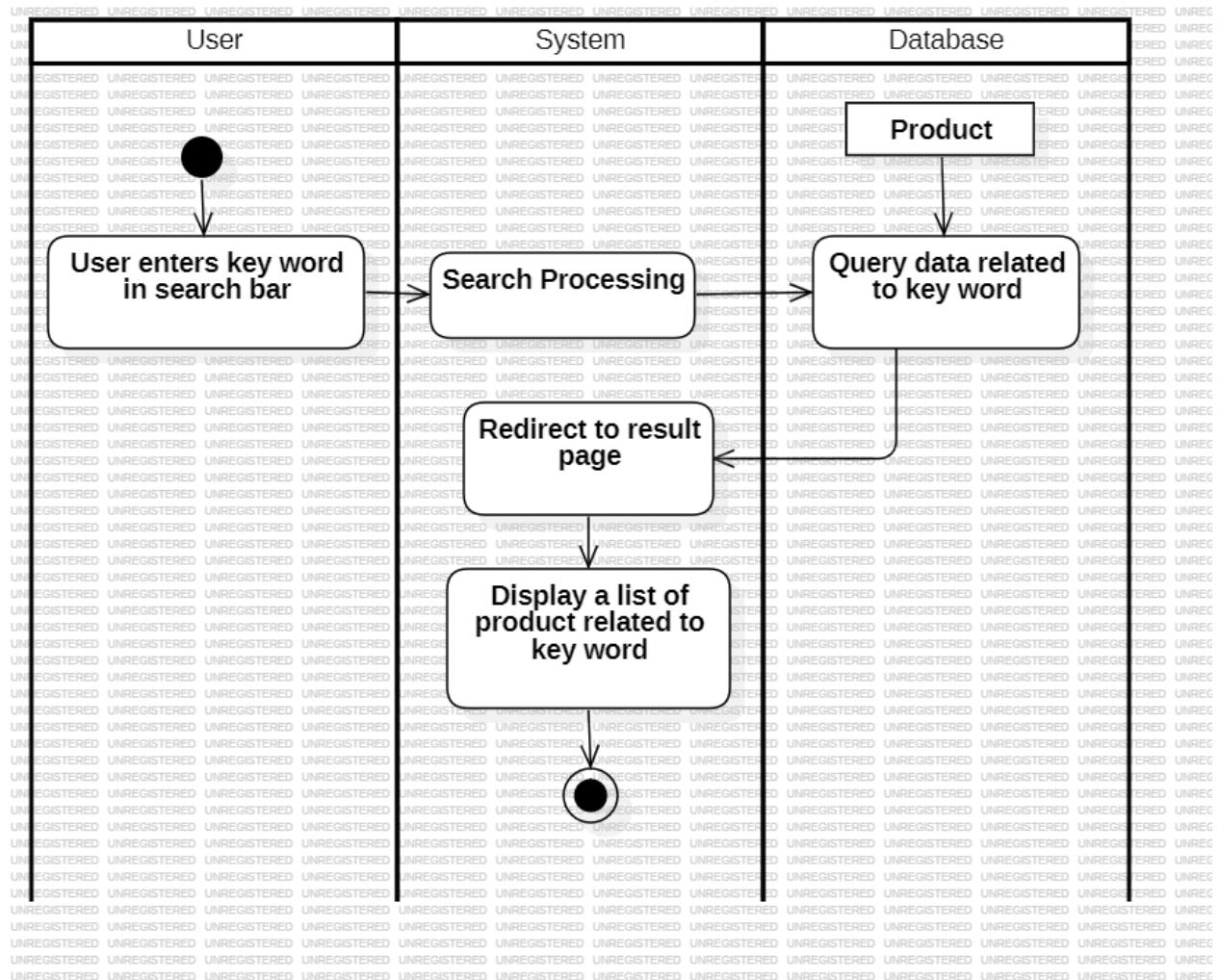
	<p>page</p> <ol style="list-style-type: none">2. System queries a list of product from product database3. System display a list of product4. User choose product5. System redirect to product detail6. System displays product detail information
Alternative flow	
Exception flow	



3.3.1.5 Use-case search product of customer

Use case name	Search Product as customer
Description	User wants to search product to find product which he/she wants
Trigger	User clicks to search bar and enter the key word to find the product which they want
Pre-condition	User's device must be connected to internet User's account must be existed User's status is sign in
Post-condition	User get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here customer can use the services Data of product page must be filter by key word

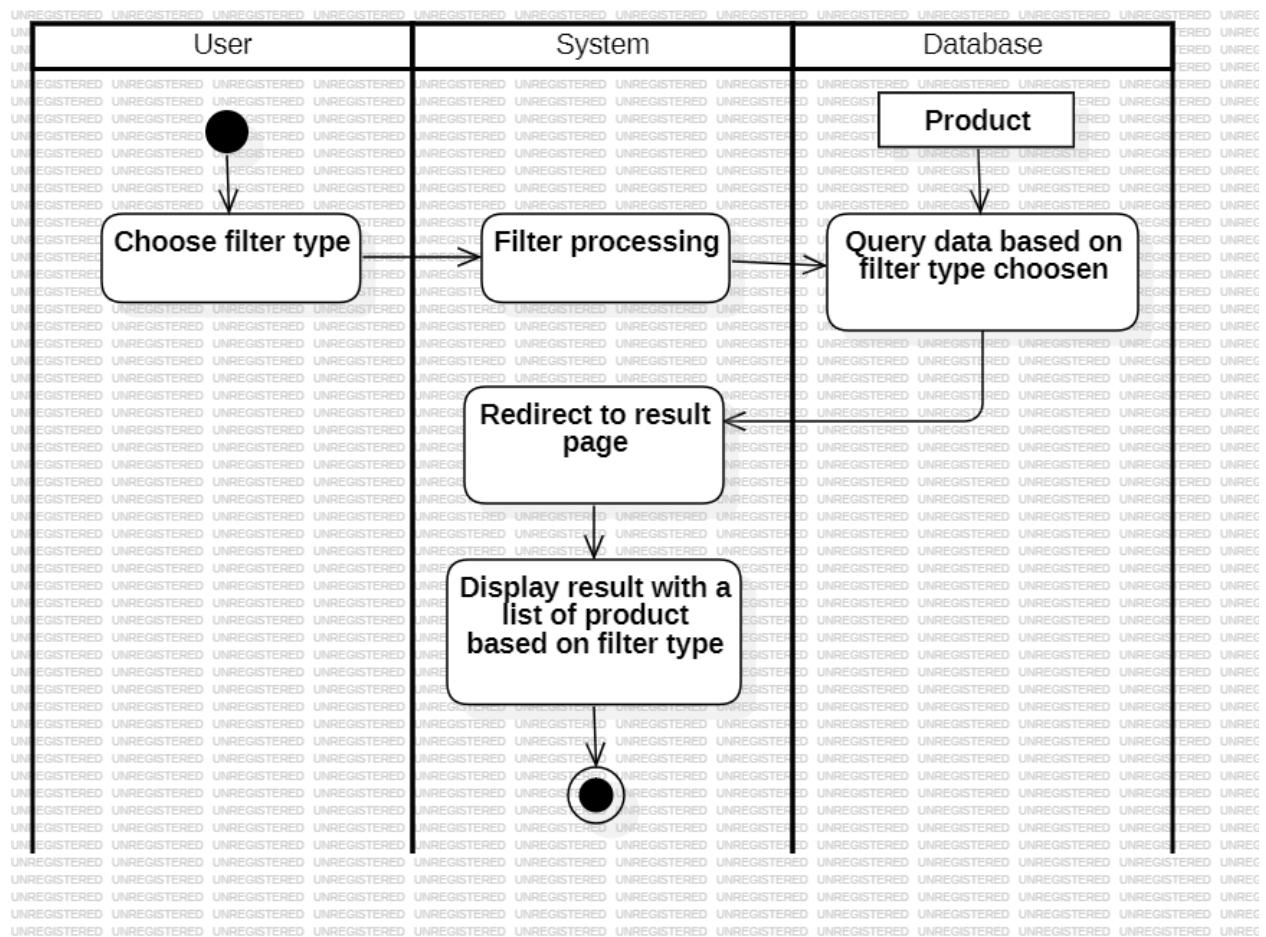
Basic flow	<ol style="list-style-type: none">1. User enters key word in search bar then click search button (with magnifying glass icon)2. System processing of searching product3. System query list of product related to key word4. System redirect user to the result page5. System display result of list of products related to key word.
Alternative flow	<p>2.aUsers enter keywords into the search bar then press the search button and then the system will display products containing the searched characters,</p> <p>5.a. The system displays the results of a list of products related to the keyword.</p>
Exception flow	<p>2.b .Users enter keywords into the search bar then press the search button and then the system displays a message that the product does not exist or has wrong characters,</p> <p>5.b . The website display please search again</p>



3.3.1.6 Use-case filter product for customer

Use case name	Filter Product as customer
Description	User wants to filter product to find product which he/she wants
Trigger	User click product button to redirect to product page
Pre-condition	User's device must be connected to internet User's account must be existed User's status is sign in
Post-condition	User get notification of sign-in successfully. After log-in, automatically redirecting to

	<p>homepage and here customer can use the services</p> <p>Data of product page must be filter by chosen types of filter</p>
Basic flow	<ol style="list-style-type: none">1. User choose filter type in product page2. System processing of filter product3. System query list of product based on filter type chosen4. System redirect user to the result page5. System display result of list of products based on filter type chosen
Alternative flow	<p>2.a. User choose filter type in product page and then the system will display products in the filter type</p> <p>5.a. The system displays the results of a list of products in the filter.</p>
Exception flow	<p>2.b .User choose filter type in product page and then the system display white page do not have product</p>



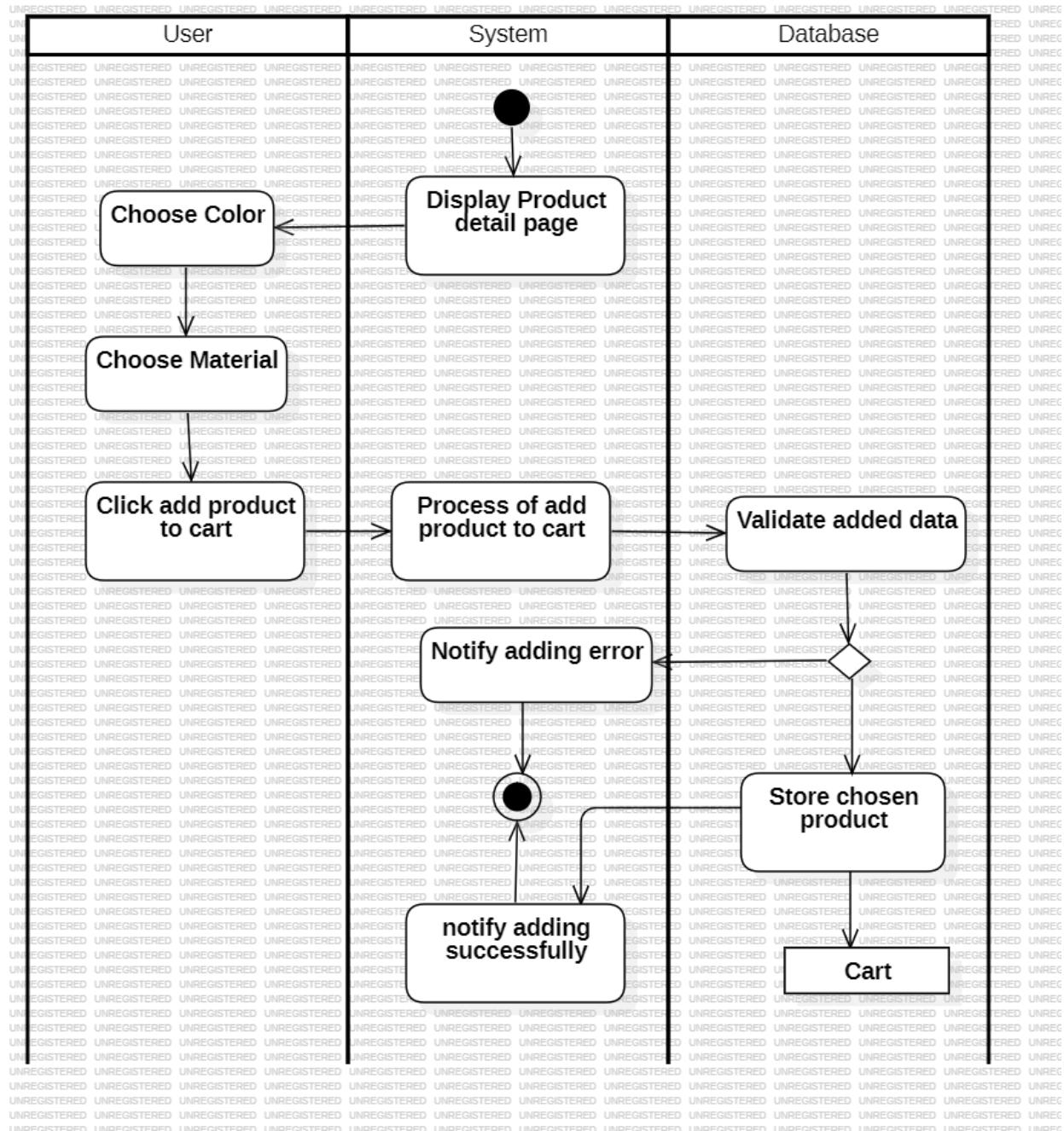
3.3.1.7 Use-case add product to cart for customer

Use case name	Add Product to Cart as Customer
Description	User wants to add product to cart

Trigger	User choose product and get in product detail
Pre-condition	<p>User's device must be connected to internet</p> <p>User's account must be existed</p> <p>User's status is sign in</p>
Post-condition	<p>User get notification of sign-in successfully.</p> <p>After log-in, automatically redirecting to homepage and here customer can use the services</p> <p>Data of product page must be filter by chosen types of filter</p>
Basic flow	<ol style="list-style-type: none"> 1. System display product detail page which one user chosen above 2. User chooses color of product 3. User chooses material of product 4. User click add product to cart 5. System execute process of add

	<p>product to cart</p> <p>6. System validate data in database of cart</p> <p>7. System store product in cart database</p> <p>8. System notify successful adding message</p>
Alternative flow	<p>4.a. User click add product to cart and website execute process of add product to cart</p> <p>8.a Website notify successful adding message</p>
Exception flow	<p>4.b User click add product to cart and website display a message user Haven't chosen material or color yet.</p> <p>8.b After User choosen done , website notify not successful adding message because can not store product in cart</p>

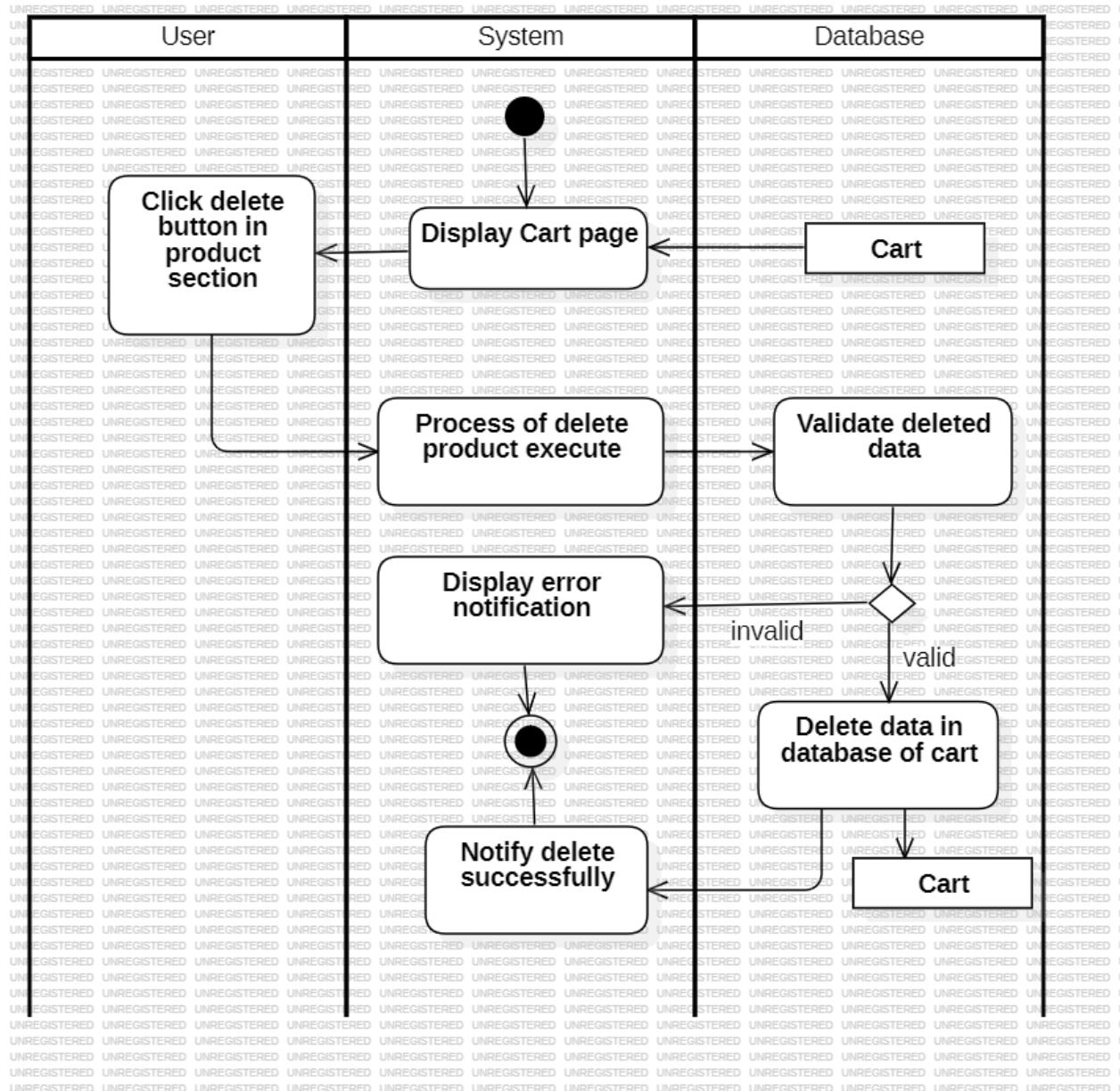
Furniture Online Store Website– Group 2



3.3.1.8 Use-case delete product from cart for customer

Use case name	Delete Product from Cart as Customer
Description	User wants to delete product from cart
Trigger	User add product to cart before
Pre-condition	User's device must be connected to internet User's account must be existed User's status is sign in
Post-condition	User get notification of sign-in successfully. User go to cart to see the list of product in cart
Basic flow	<ol style="list-style-type: none"> 1. System display cart page 2. User click delete button in product

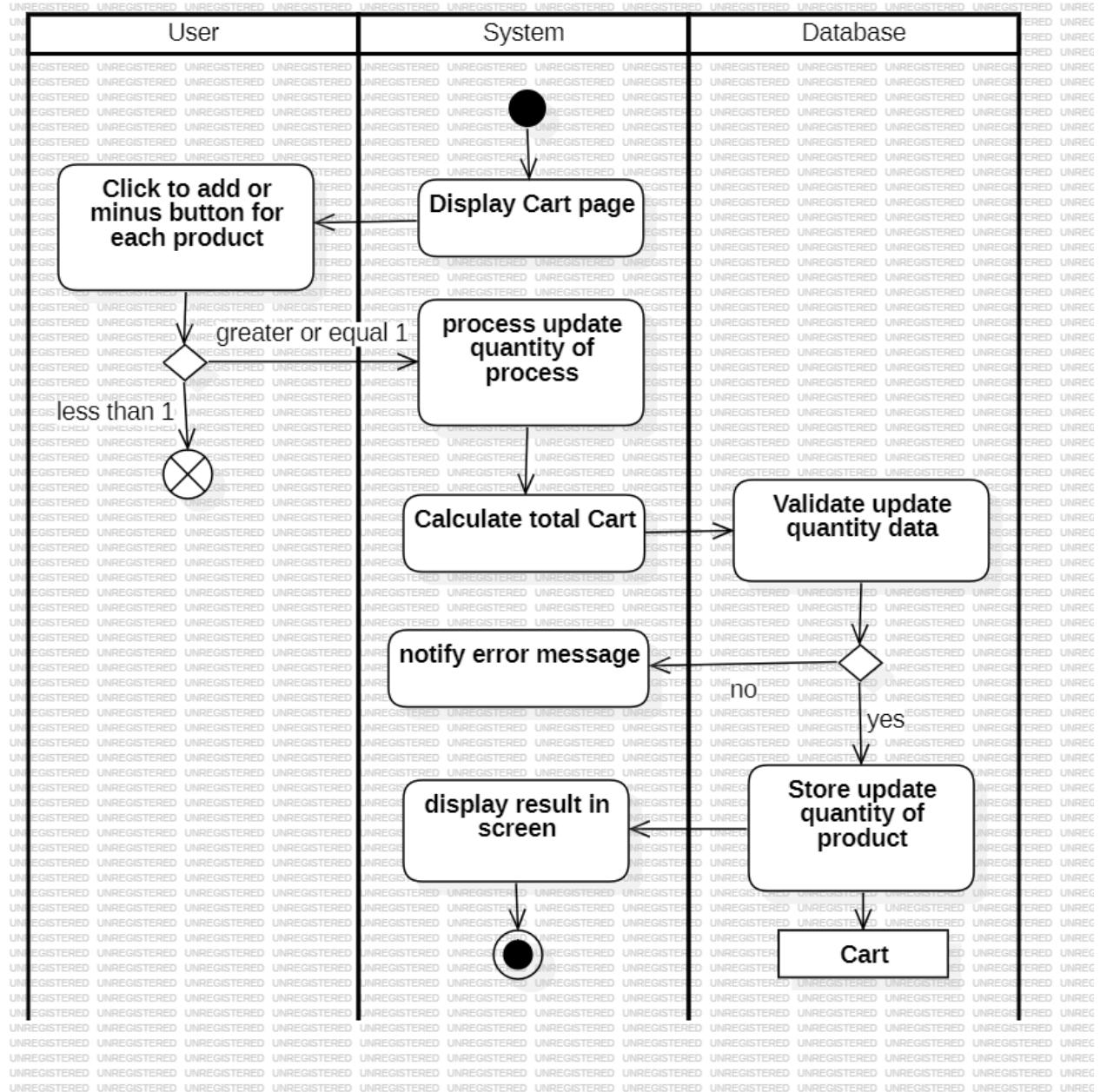
	<p>section</p> <p>3. System display process of delete product</p> <p>4. System validate data in database of cart</p> <p>5. System notifies successfully</p>
Alternative flow	<p>4. a. System displays notification delete successfull</p>
Exception flow	<p>4. b. System displays error notification</p>



3.3.1.9 Use-case Update quantity of product for customer

Use case name	Update quantity of product from Cart as Customer
Description	User wants to update quantity of product from cart
Trigger	User add product to cart before
Pre-condition	User's device must be connected to internet User's account must be existed User's status is sign in
Post-condition	User get notification of sign-in successfully. User go to cart to see the list of product in cart
Basic flow	<ol style="list-style-type: none"> 1. System displays a cart page 2. User click to add and minus button for each product

	<ol style="list-style-type: none">3. If quantity of product is greater than or equals 1, process of update quantity of product executes in system4. System calculates total of cart5. System validate update quantity of product in database of cart6. System store the update quantity of product in cart7. System display result of quantity in screen
Alternative flow	<ol style="list-style-type: none">3. a. If quantity of product is qualified , the action will be occurred in system6. a. System display successful message
Exception flow	<ol style="list-style-type: none">3. a. If quantity of product is less than 1, the action doesn't be occurred in system6. a. System display error message

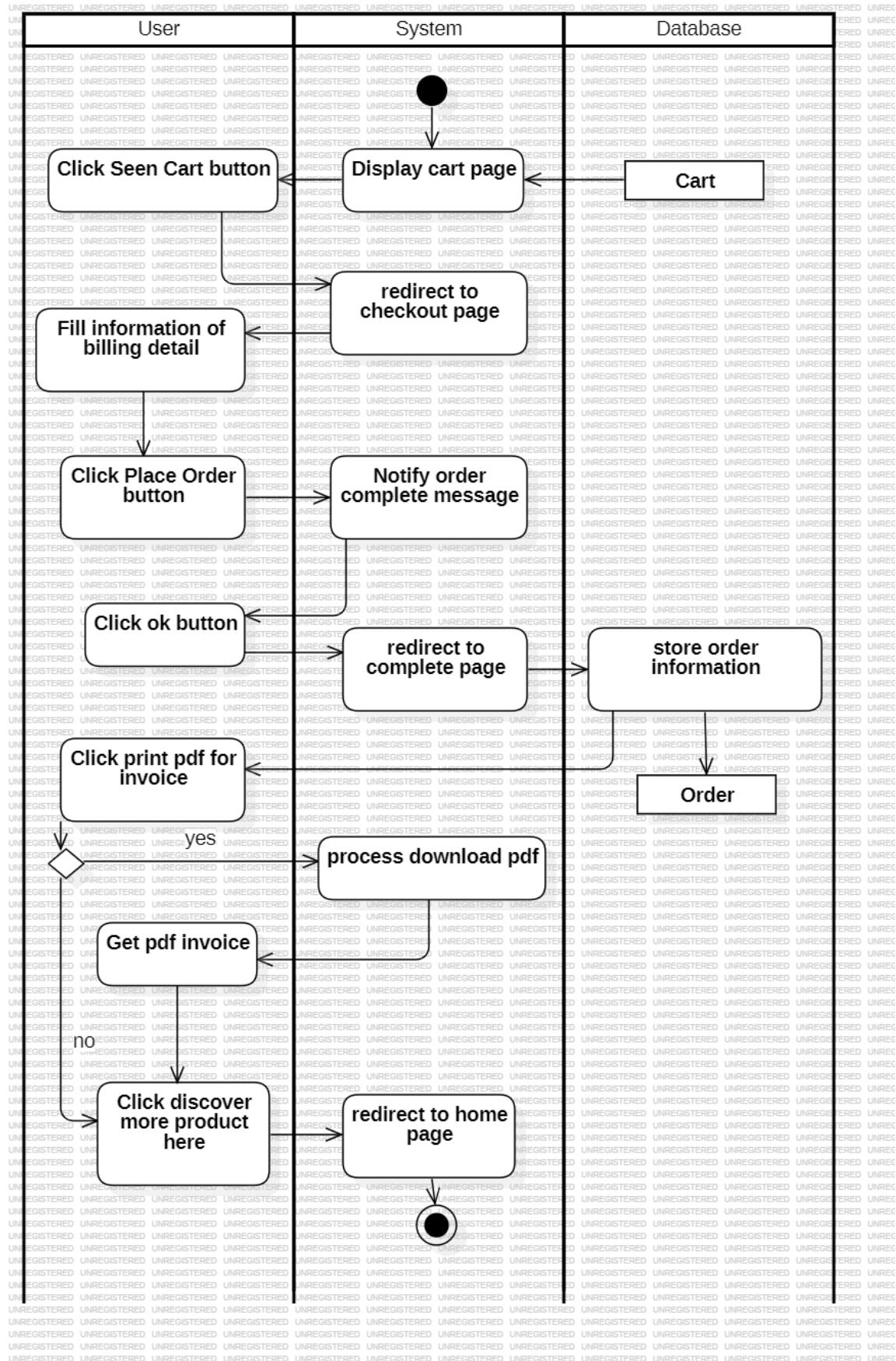


3.3.1.10 Use-case order product for customer

Use case name	Order product from Cart as Customer
Description	User wants to order product from cart
Trigger	User add product to cart before
Pre-condition	User's device must be connected to internet User's account must be existed User's status is sign in
Post-condition	User get notification of sign-in successfully. User go to cart to see the list of product in cart
Basic flow	<ol style="list-style-type: none"> 1. System displays a cart page 2. User click to seen cart button 3. System redirect to checkout page 4. User fill information of bill detail

	<ol style="list-style-type: none">5. User click place order button6. System notify order complete message7. User clicks ok button8. System redirect to complete page9. User click print invoice as pdf10. System execute process of print pdf11. User receives a pdf invoice 12. User click to discover more product13. System redirect to home page
Alternative flow	<p>3.a User fill information of bill detail to website and then the system notify move to page order complete message.</p> <p>7.a System redirect to complete page, this page display all orders of users</p>
Exception flow	<p>3.b User fill information of bill detail to website and then the system notify wrong information format.</p> <p>7.b System display back to list product page.</p>

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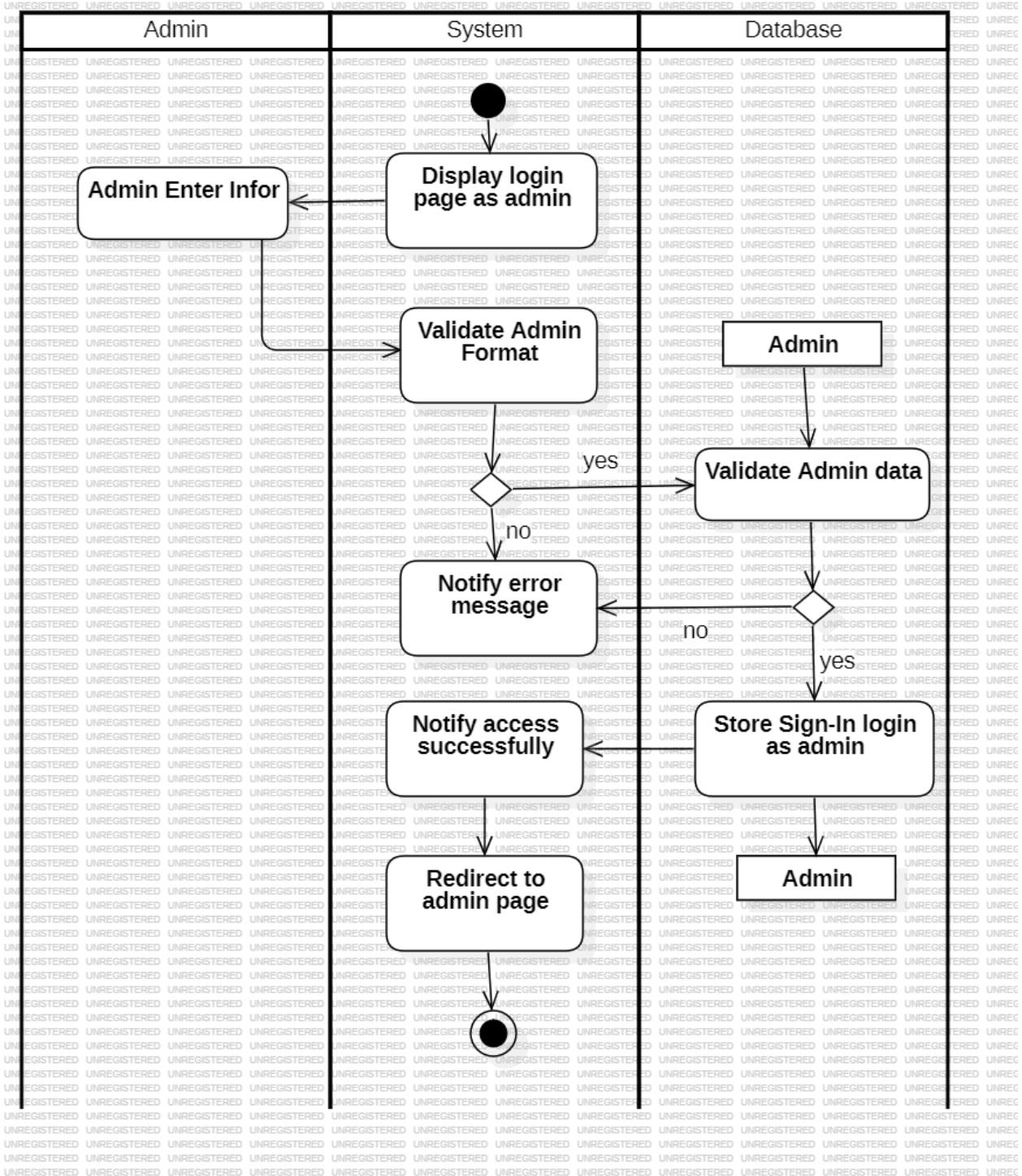


3.3.2 Use-case Specification and activity diagram for Admin

3.3.2.1 User – case login as admin

Use case name	Sign – in as admin
Description	Admin uses existed account to log in the system
Trigger	Admin clicks to sign-in button
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services

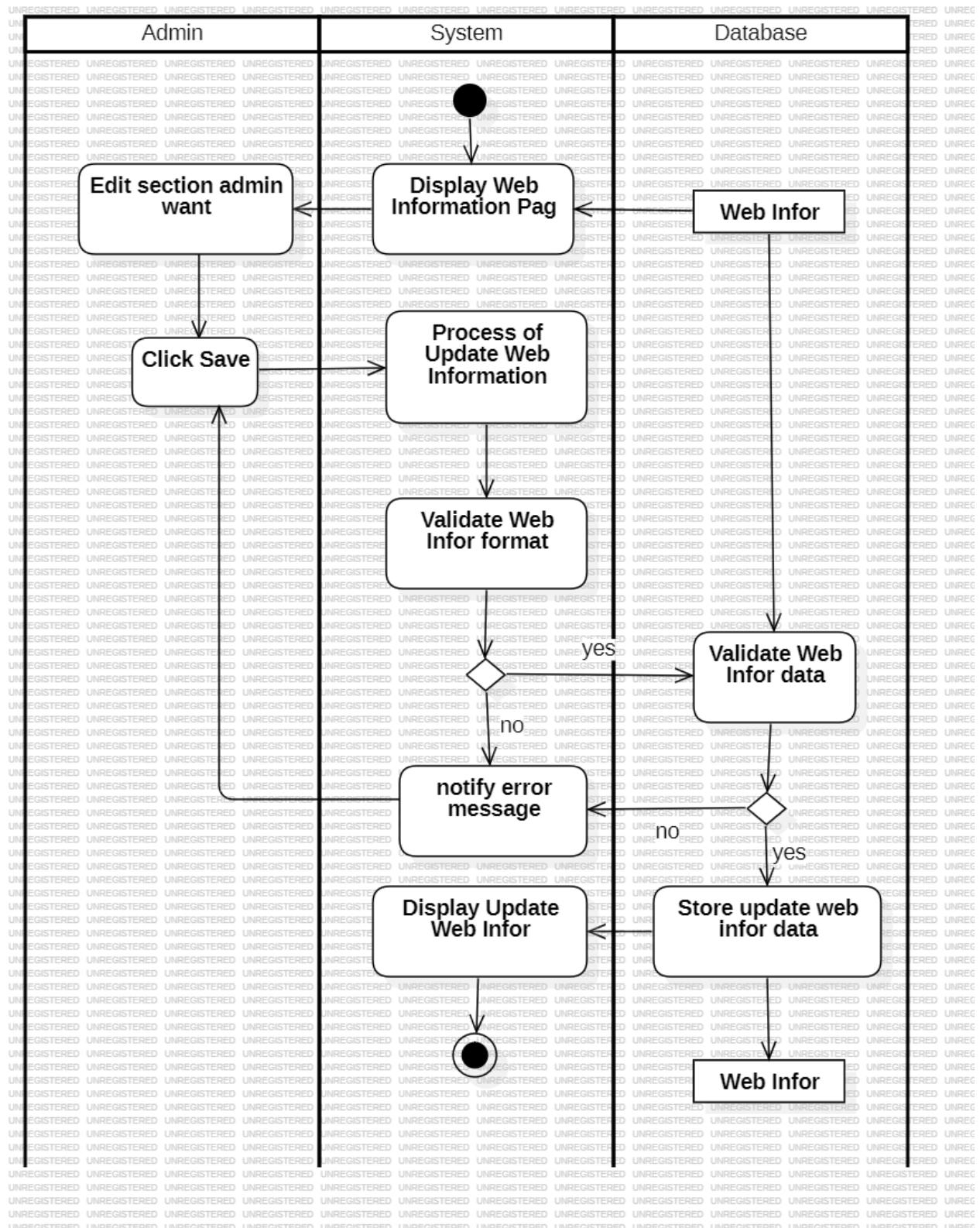
Basic flow	<ol style="list-style-type: none">1. System display sign-in page for admin2. Admin enters email & password and click confirm3. System validate email & password in the right format4. System validates email & password data with exist email & password in database of admin5. System stores sign in status6. System display successful sign-in and redirect to homepage
Alternative flow	<ol style="list-style-type: none">3. a. System validate email & password in the right format4. a. System validates email & password data with exist email & password in database of admin
Exception flow	<ol style="list-style-type: none">3. b. System display invalid information due to wrong format of email or password4.b System displays invalid account



3.3.2.2 Use-case update web information as admin

Use case name	Update web information as admin
Description	Admin wants to update web information
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click Web information section

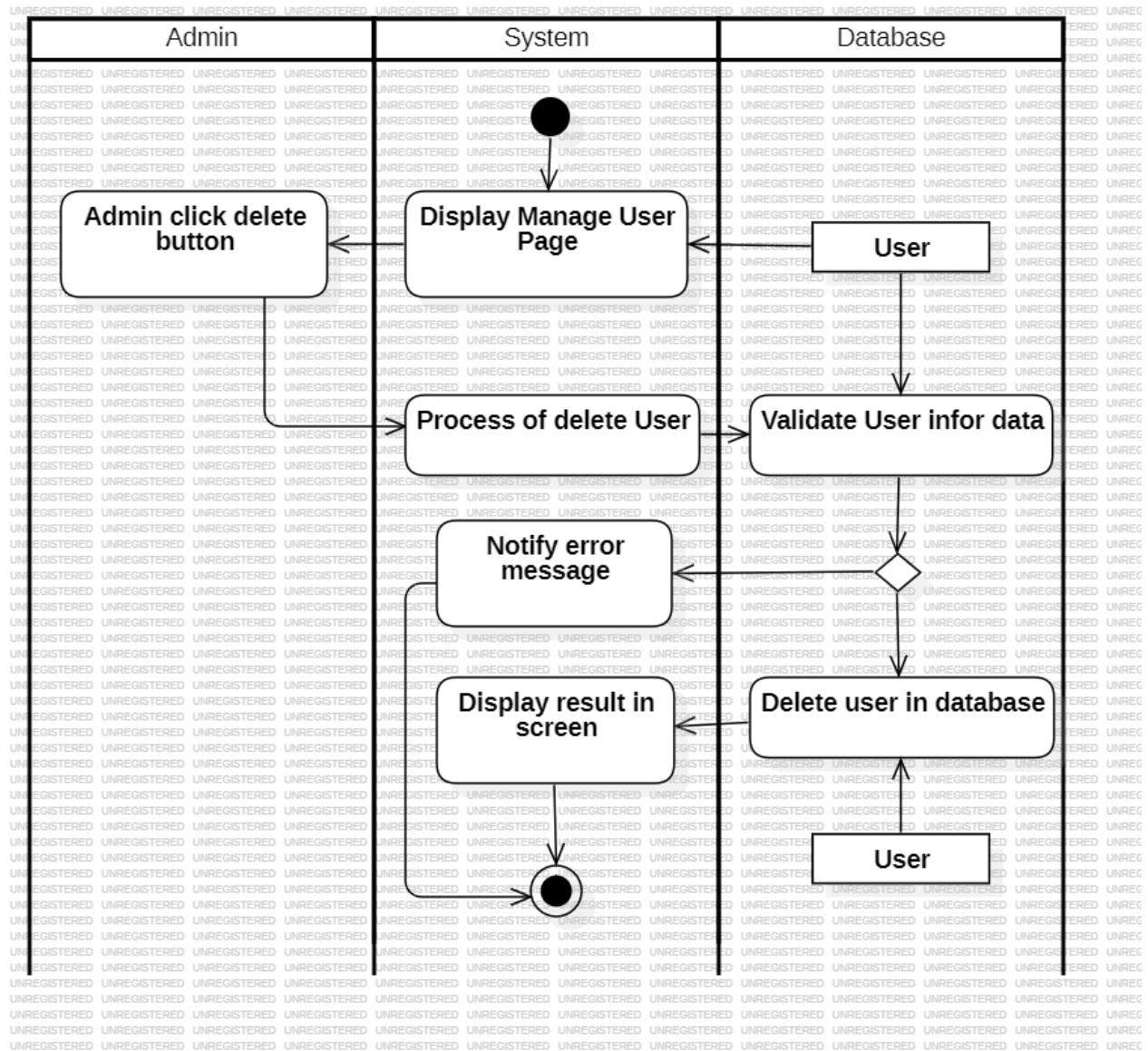
Basic flow	<ol style="list-style-type: none">1. System display Web Information page2. Admin enters changing information for web3. Admin clicks to save button4. System validate update web information page5. System validate update web information data6. System stores update web information7. System Display update web information
Alternative flow	<ol style="list-style-type: none">4.a System validate update successfull web information page
Exception flow	<ol style="list-style-type: none">4. b. System display invalid information due to wrong format of update web information data4. b. System displays invalid information due to wrong data



3.3.2.3 Use case delete User

Use case name	Delete user as admin
Description	Admin wants to delete user
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click Manager User

Basic flow	<ol style="list-style-type: none">1. System display manage user page2. Admin click delete button3. System executes process of delete user4. System validate information data5. System delete user in database6. System display result in screen
Alternative flow	<ol style="list-style-type: none">1. System display delete user in database successful
Exception flow	<ol style="list-style-type: none">4. a. System notify error message



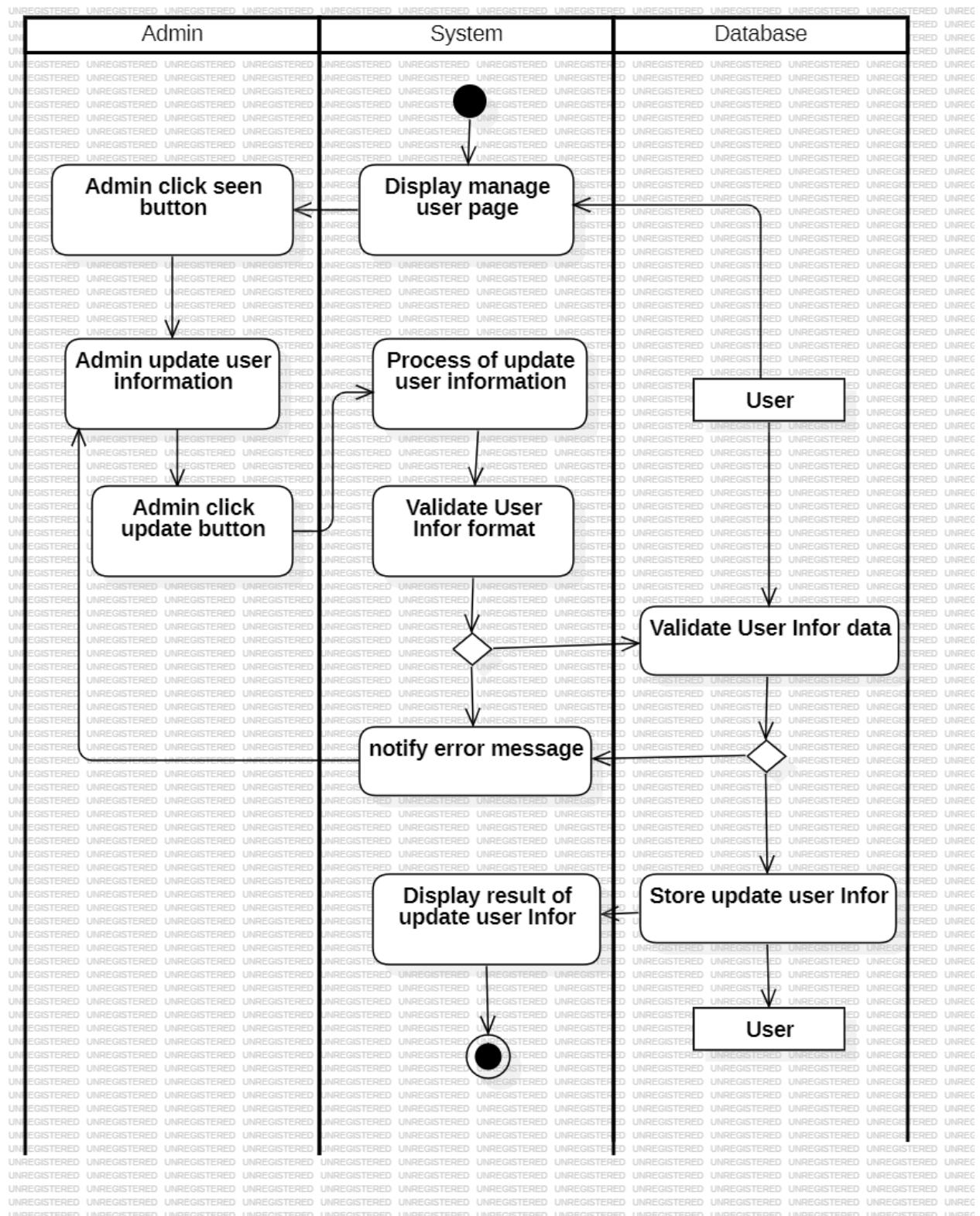
3.3.2.4 Use case update user as admin

Use case name	Update user as admin

Description	Admin wants to update user
Trigger	Admin sign in admin's system before
Pre-condition	<p>Admin's device must be connect to internet</p> <p>Admin's account must be existed</p>
Post-condition	<p>Admin get notification of sign-in successfully.</p> <p>After log-in, automatically redirecting to homepage and here admin can use admin's services</p> <p>Admin click manage user section</p>
Basic flow	<ol style="list-style-type: none"> 1. System display manage user page 2. Admin click seen button for user he/she want to change 3. System validate update user format 4. System validate update user data in database of user 5. System store update user

	information in database of user 6. System display result of update user in screen
Alternative flow	3.a. System validate update user format successfull.
Exception flow	3. b. System display error message due to wrong format 4. b System displays invalid information due to wrong data

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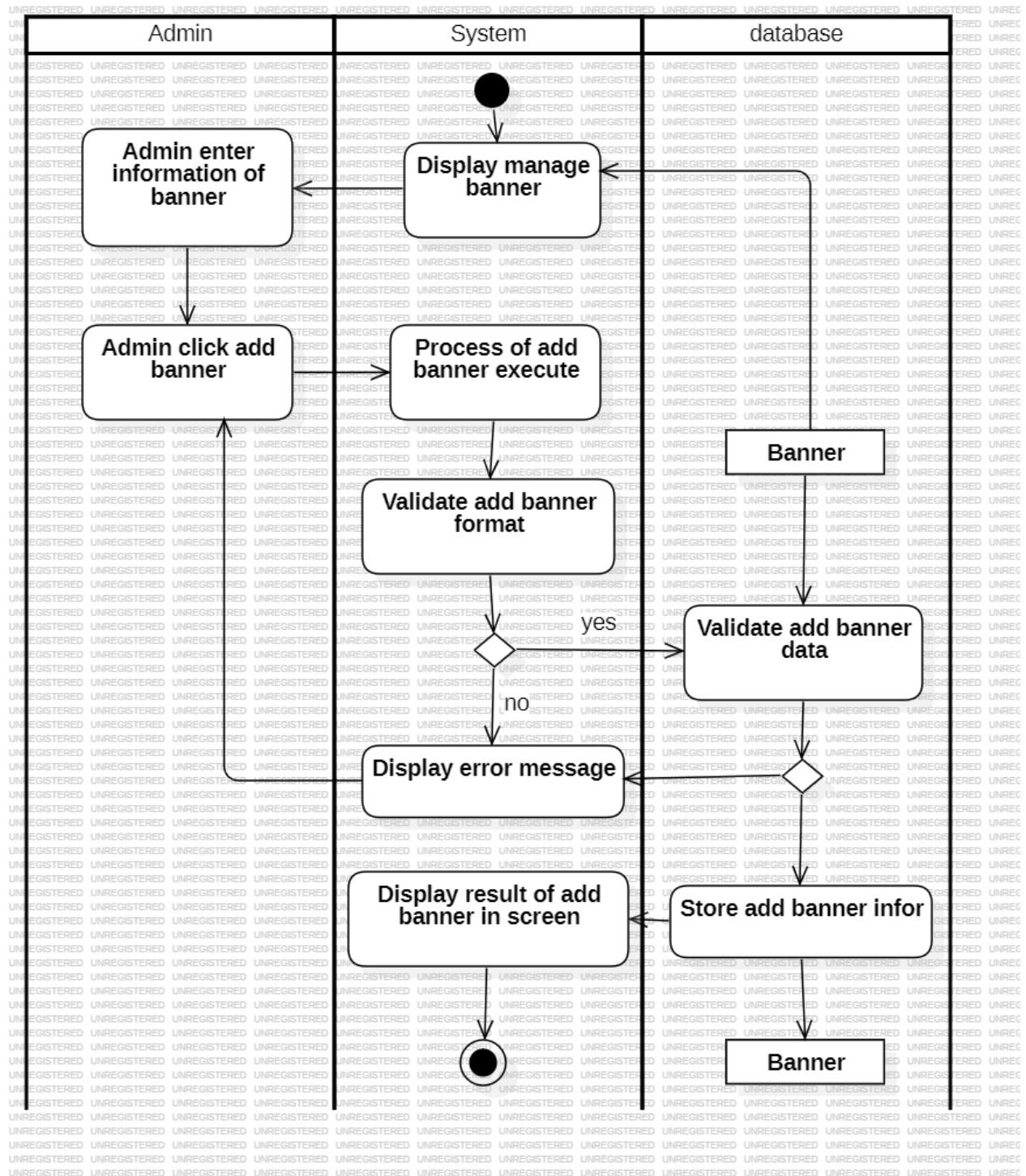


3.3.2.5 Use case add banner as admin

Use case name	Add banner as admin
Description	Admin wants to add banner
Trigger	Admin sign in admin's system before
Pre-condition	<p>Admin's device must be connect to internet</p> <p>Admin's account must be existed</p>
Post-condition	<p>Admin get notification of sign-in successfully.</p> <p>After log-in, automatically redirecting to homepage and here admin can use admin's services</p> <p>Admin click manage banner section</p>
Basic flow	<ol style="list-style-type: none"> 1. System display manage banner

	<p>page</p> <ol style="list-style-type: none"> 2. Admin enter information of banner 3. Admin click add banner button 4. System executes process of add banner 5. System validate banner added format 6. System validates banner added data in banner database 7. System store add banner information 8. System display result in screen
Alternative flow	<p>3.a. System validate add banner successfull.</p>
Exception flow	<p>4.b. System display error message due to wrong format 5.b. System displays invalid information due to wrong data</p>

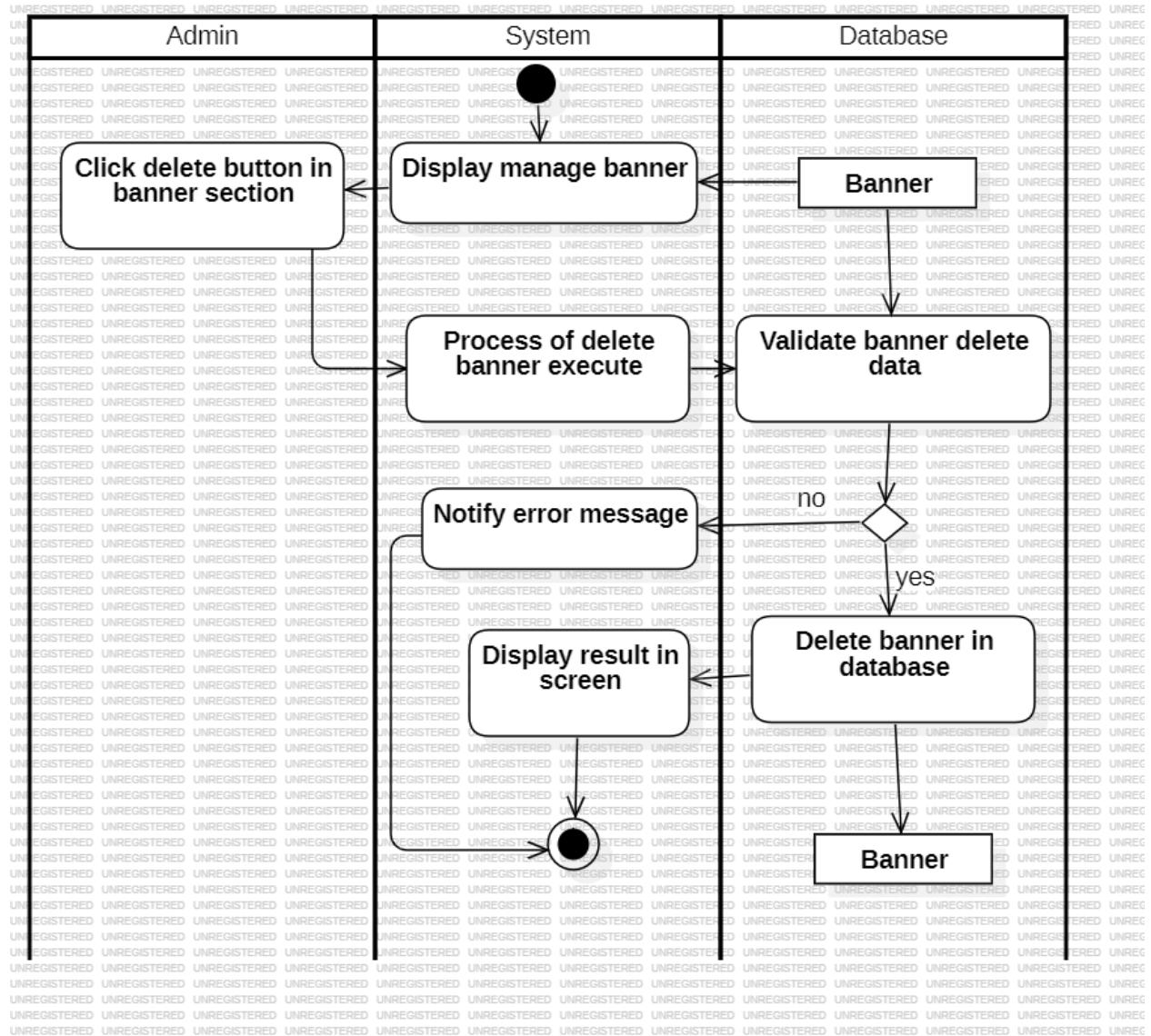
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3.3.2.6 User case delete banner as admin

Use case name	delete banner as admin
Description	Admin wants to delete banner
Trigger	Admin sign in admin's system before
Pre-condition	<p>Admin's device must be connect to internet</p> <p>Admin's account must be existed</p>
Post-condition	<p>Admin get notification of sign-in successfully.</p> <p>After log-in, automatically redirecting to homepage and here admin can use admin's services</p> <p>Admin click manage banner section</p>
Basic flow	<ol style="list-style-type: none"> 1. System display manage banner page 2. Admin click delete button in banner section

	<ol style="list-style-type: none">3. System execute delete banner process4. System validate delete banner data5. System delete banner in database of banner6. System display result in screen
Alternative flow	<ol style="list-style-type: none">4. a. System display message delete successul
Exception flow	<ol style="list-style-type: none">4. b. System display error message due to wrong data



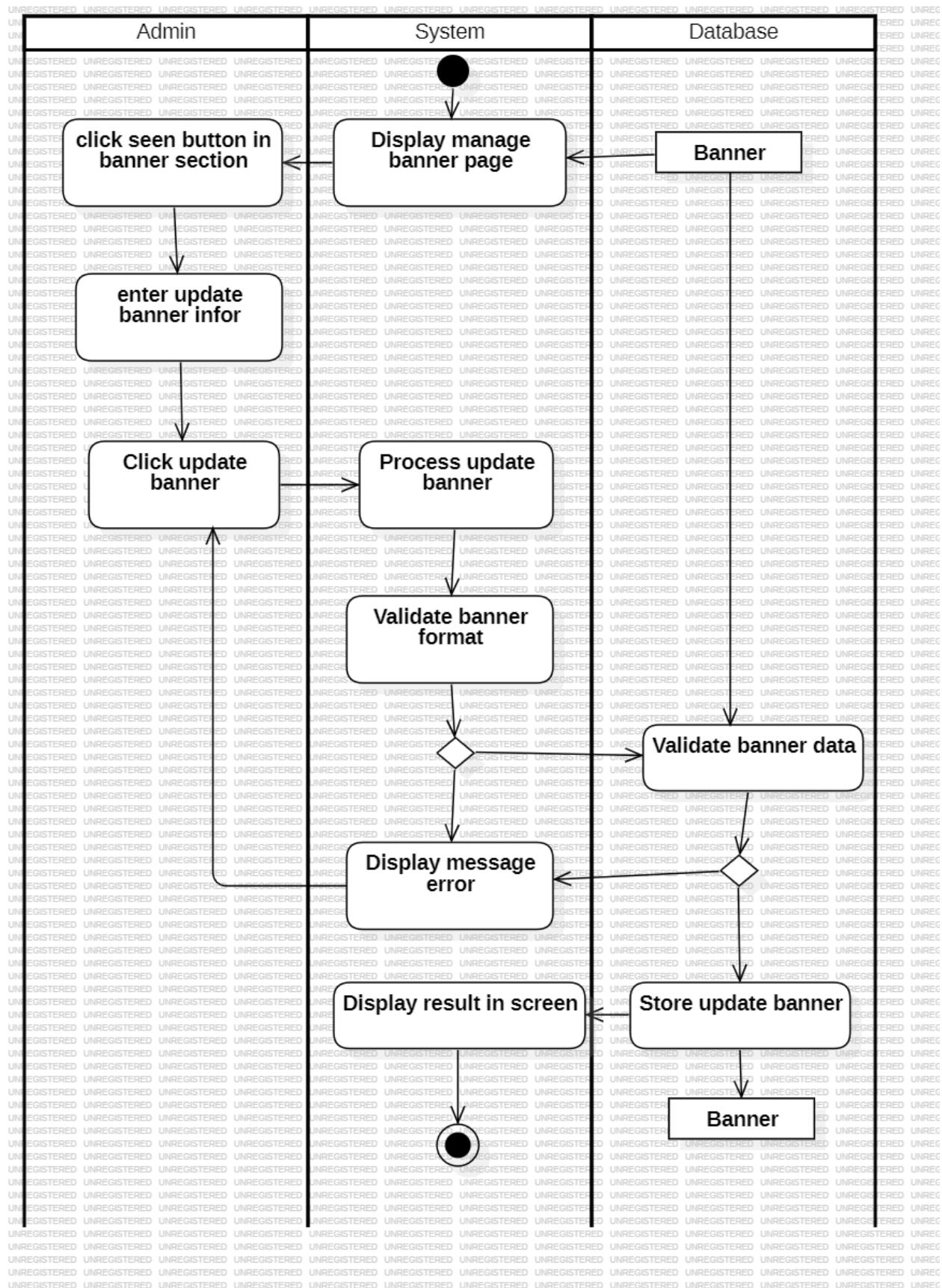
3.3.2.7 Use-case update banner as admin

Use case name	Update banner as admin
Description	Admin wants to update banner

Trigger	Admin sign in admin's system before
Pre-condition	<p>Admin's device must be connect to internet</p> <p>Admin's account must be existed</p>
Post-condition	<p>Admin get notification of sign-in successfully.</p> <p>After log-in, automatically redirecting to homepage and here admin can use admin's services</p> <p>Admin click manage banner section</p>
Basic flow	<ol style="list-style-type: none"> 1. System display manage banner page 2. Admin click seen button in banner section 3. Admin enter information of banner 4. Admin click update banner button 5. System executes process of update banner

	<ol style="list-style-type: none">6. System validate banner update format7. System validates banner update data in banner database8. System store update banner information9. System display result in screen
Alternative flow	<ol style="list-style-type: none">4. a. System display message update successful
Exception flow	<ol style="list-style-type: none">4. a. System display error message due to wrong format5. a. System displays invalid information due to wrong data

Furniture Online Store Website– Group 2



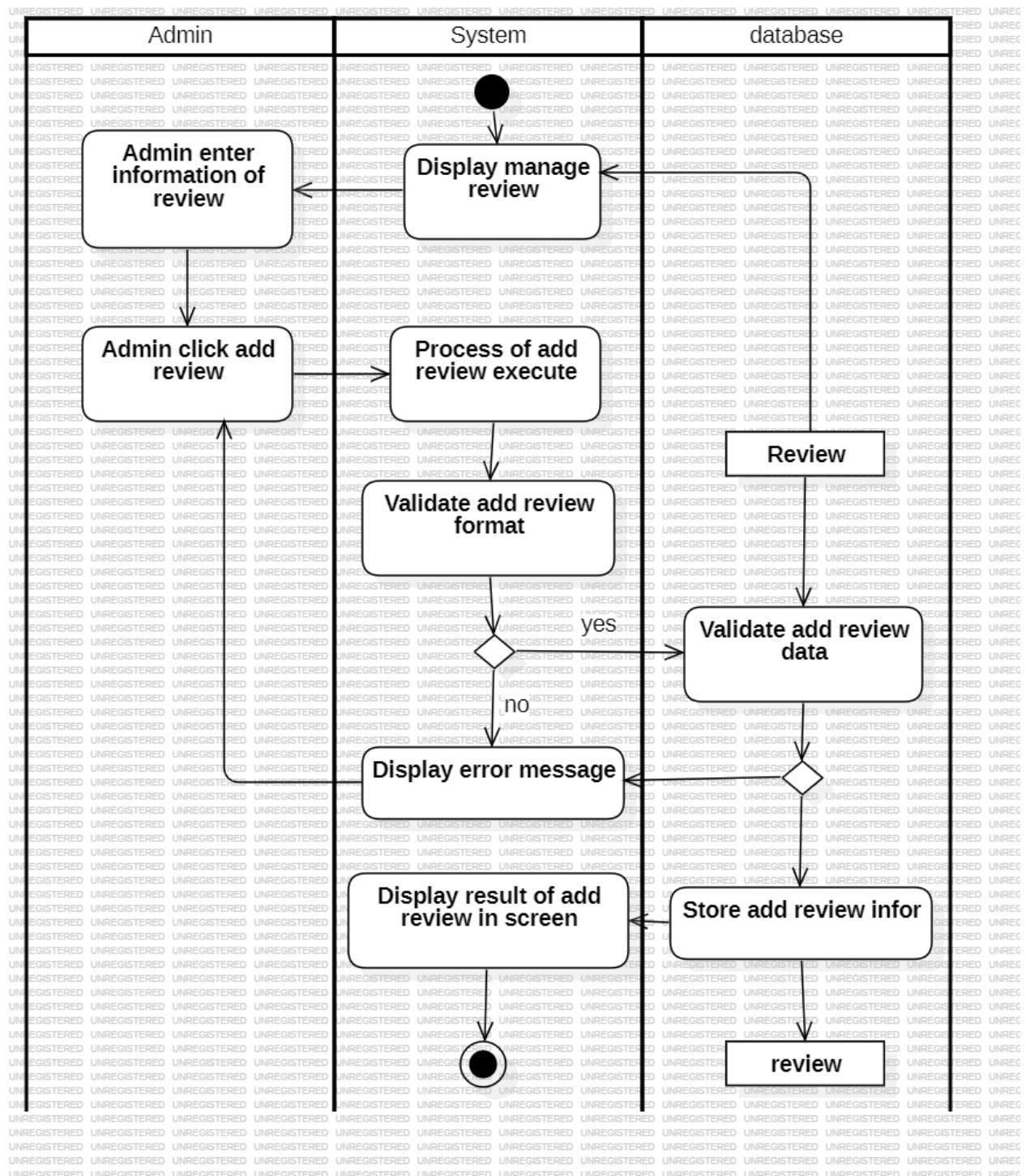
3.3.2.8 Use case manage review

3.3.2.8.1 Use case add review as admin

Use case name	Add review as admin
Description	Admin wants to add review
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage review section
Basic flow	<ol style="list-style-type: none"> 1. System display manage review page 2. Admin enter information of review 3. Admin click add review button 4. System executes process of add review 5. System validate review added format 6. System validates review added data in banner database 7. System store add review

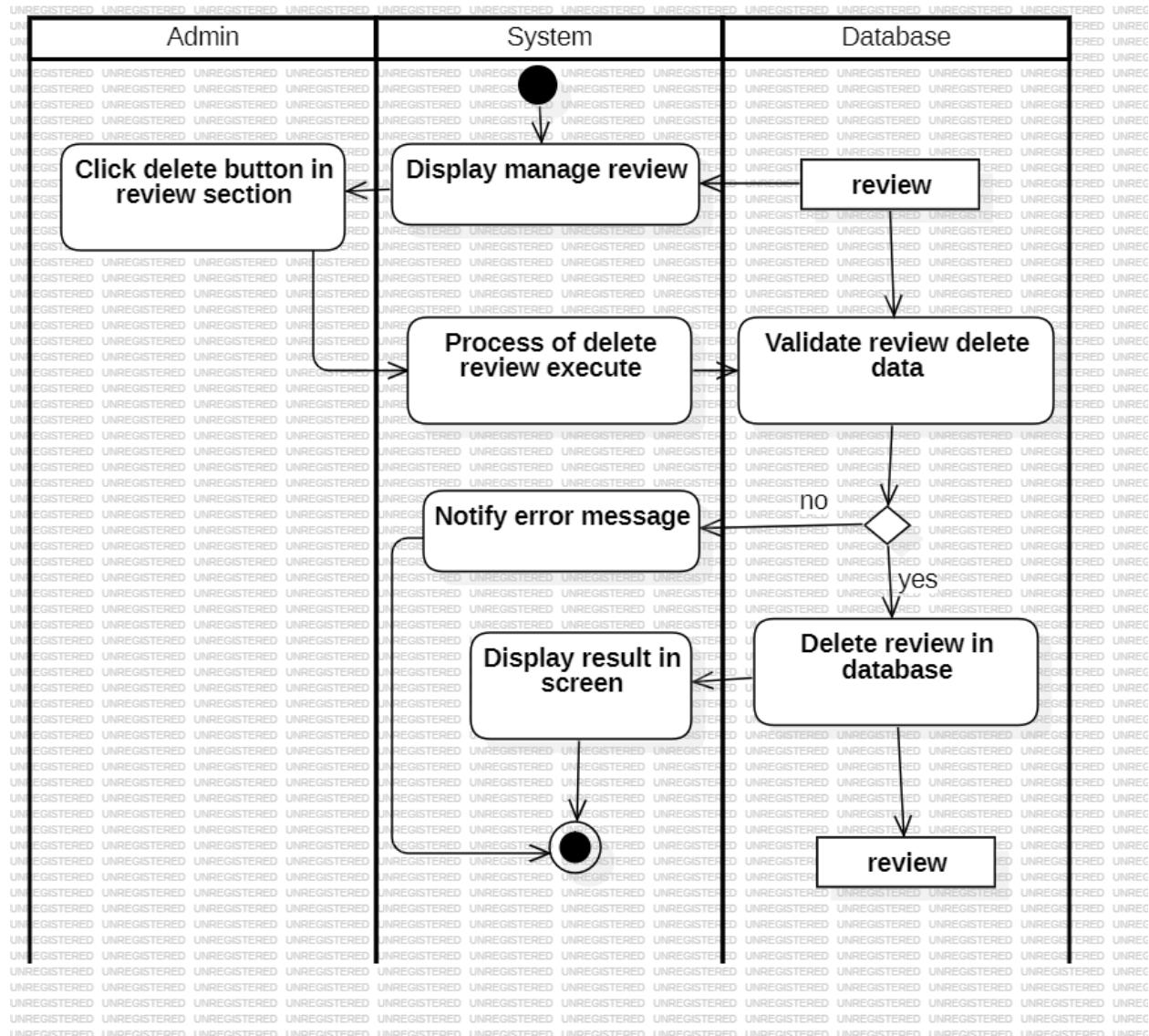
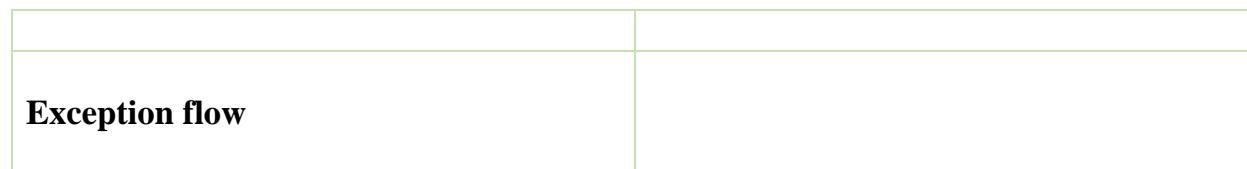
	information 8. System display result in screen
Alternative flow	4. a. System display error message due to wrong format 5. a. System displays invalid information due to wrong data
Exception flow	

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3.3.2.8.2 Use case delete review as admin

Use case name	delete review as admin
Description	Admin wants to delete review
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage review section
Basic flow	<ol style="list-style-type: none"> 1. System display manage review page 2. Admin click delete button in review section 3. System execute delete banner process 4. System validate delete review data 5. System delete banner in database of review 6. System display result in screen
Alternative flow	<p>4. a. System display error message due to wrong data</p>

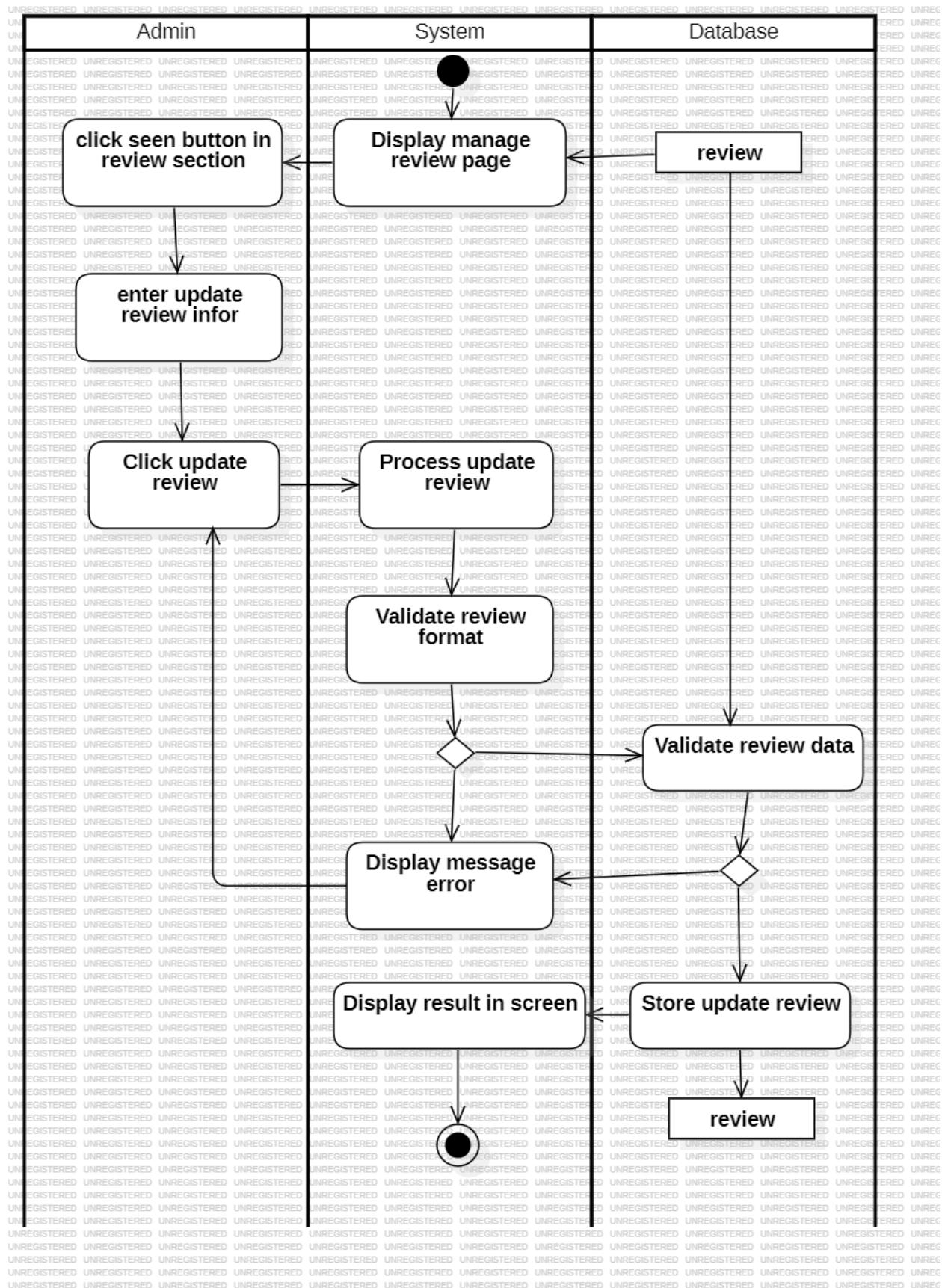


3.3.2.8.3 Use case update review as admin

Use case name	Update banner as admin
Description	Admin wants to update review
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage review section
Basic flow	<ol style="list-style-type: none"> 1. System display manage review page 2. Admin click seen button in review section 3. Admin enter information of review 4. Admin click update banner button 5. System executes process of update review 6. System validate review update format 7. System validates review update data in review database 8. System store update review information

	9. System display result in screen
Alternative flow	4. a. System display error message due to wrong format 5. a. System displays invalid information due to wrong data
Exception flow	

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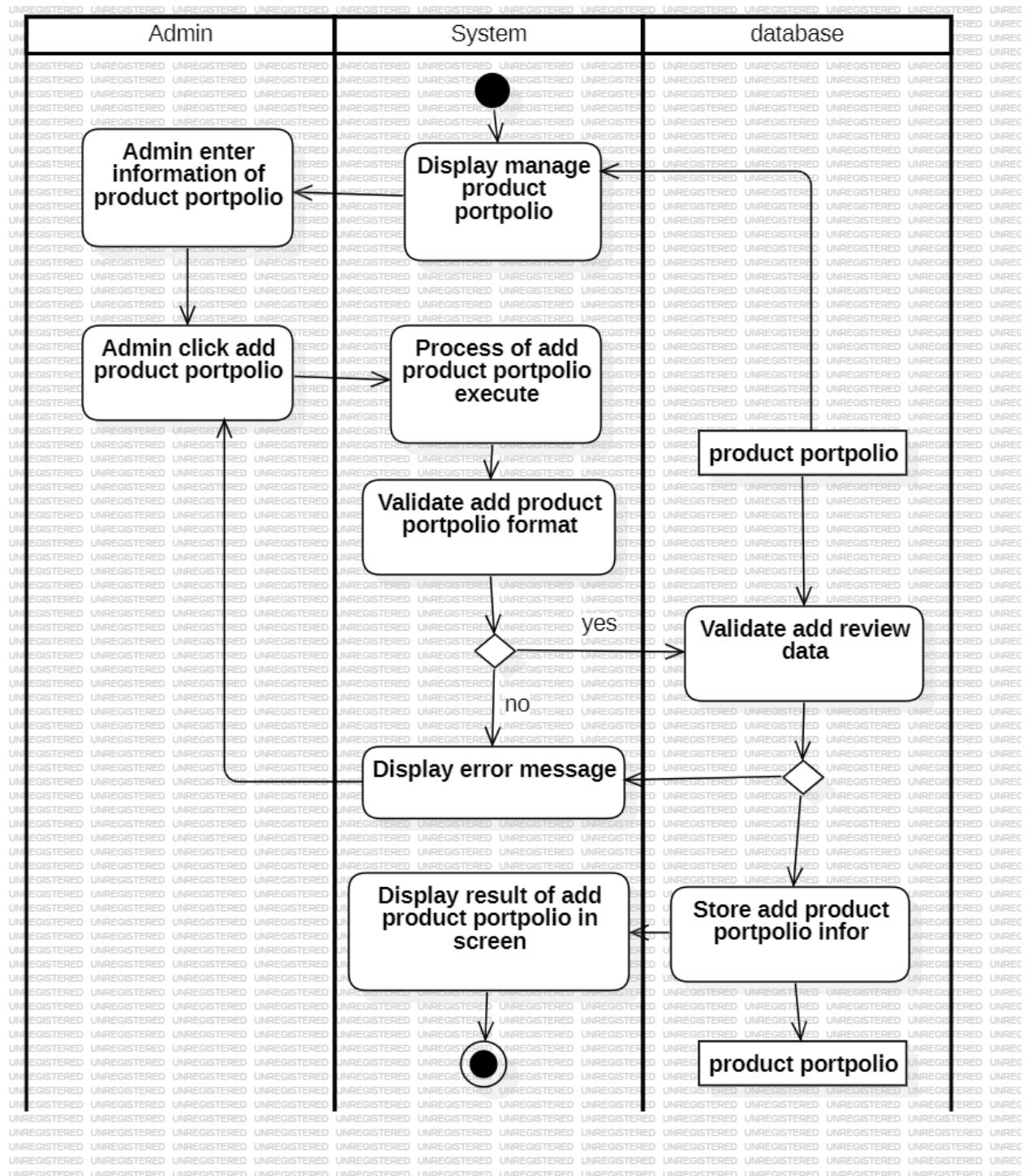
3.3.2.9 Use case manage product

3.3.2.9.1 Use case add product portfolio as admin

Use case name	Add product portfolio as admin
Description	Admin wants to add product portfolio
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage product portfolio section
Basic flow	<ol style="list-style-type: none"> 1. System display manage product portfolio page 2. Admin enter information of product portfolio 3. Admin click add product portfolio button 4. System executes process of add product portfolio 5. System validate banner added

	<p>format</p> <ol style="list-style-type: none">6. System validates product portfolio added data in banner database7. System store add product portfolio information8. System display result in screen
Alternative flow	<ol style="list-style-type: none">4. a. System display error message due to wrong format5. a. System displays invalid information due to wrong data
Exception flow	

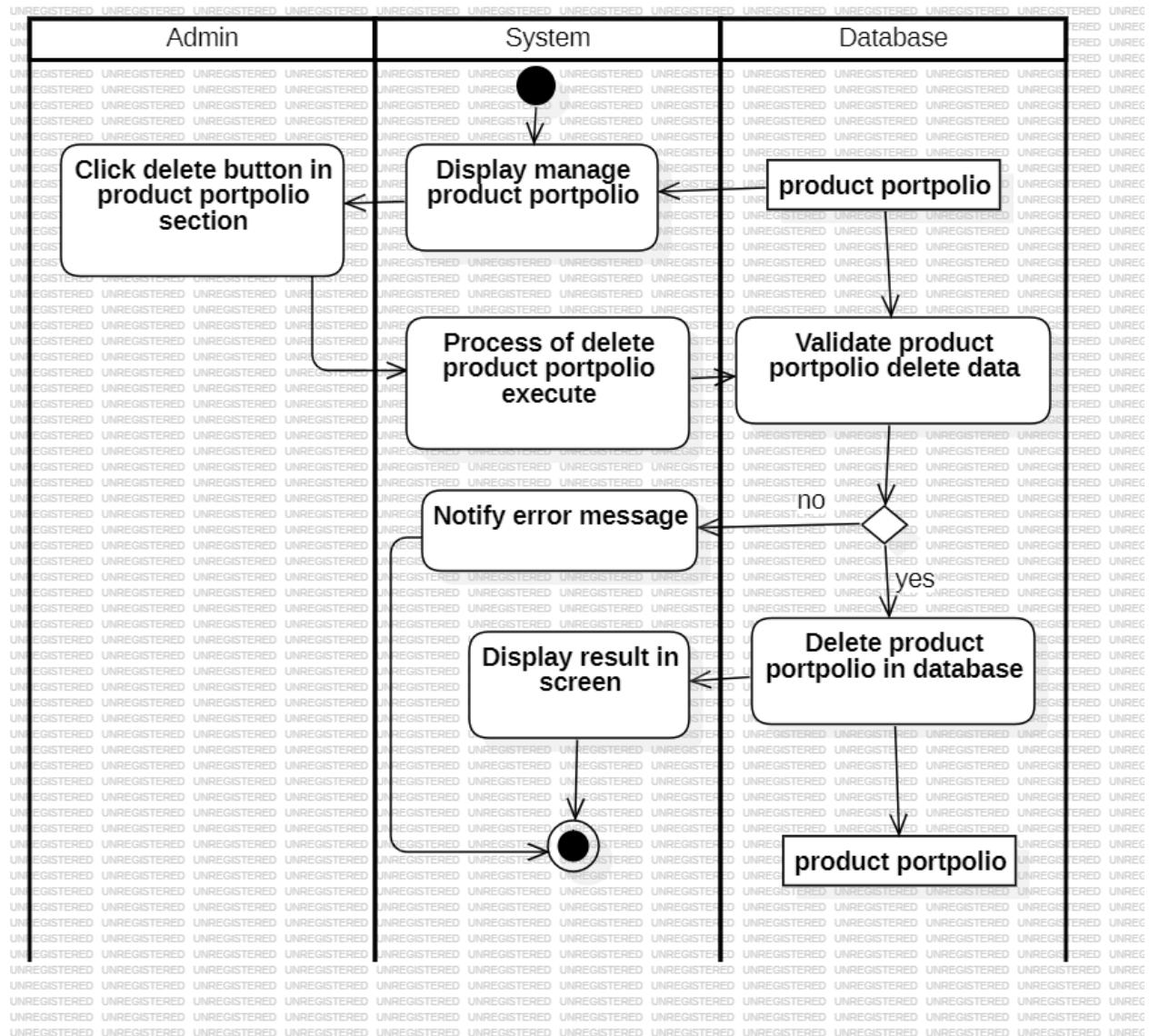
Furniture Online Store Website– Group 2



3.3.2.9.2 Use case delete product portfolio as admin

Use case name	delete product portfolio as admin
Description	Admin wants to delete product portfolio
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage product portfolio section
Basic flow	<ol style="list-style-type: none"> 9. System display manage product portfolio page 10. Admin click delete button in product portfolio section 11. System execute delete product portfolio process 12. System validate delete product portfolio data 13. System delete product portfolio in database of banner 14. System display result in screen

Alternative flow	4. a. System display error message due to wrong data
Exception flow	

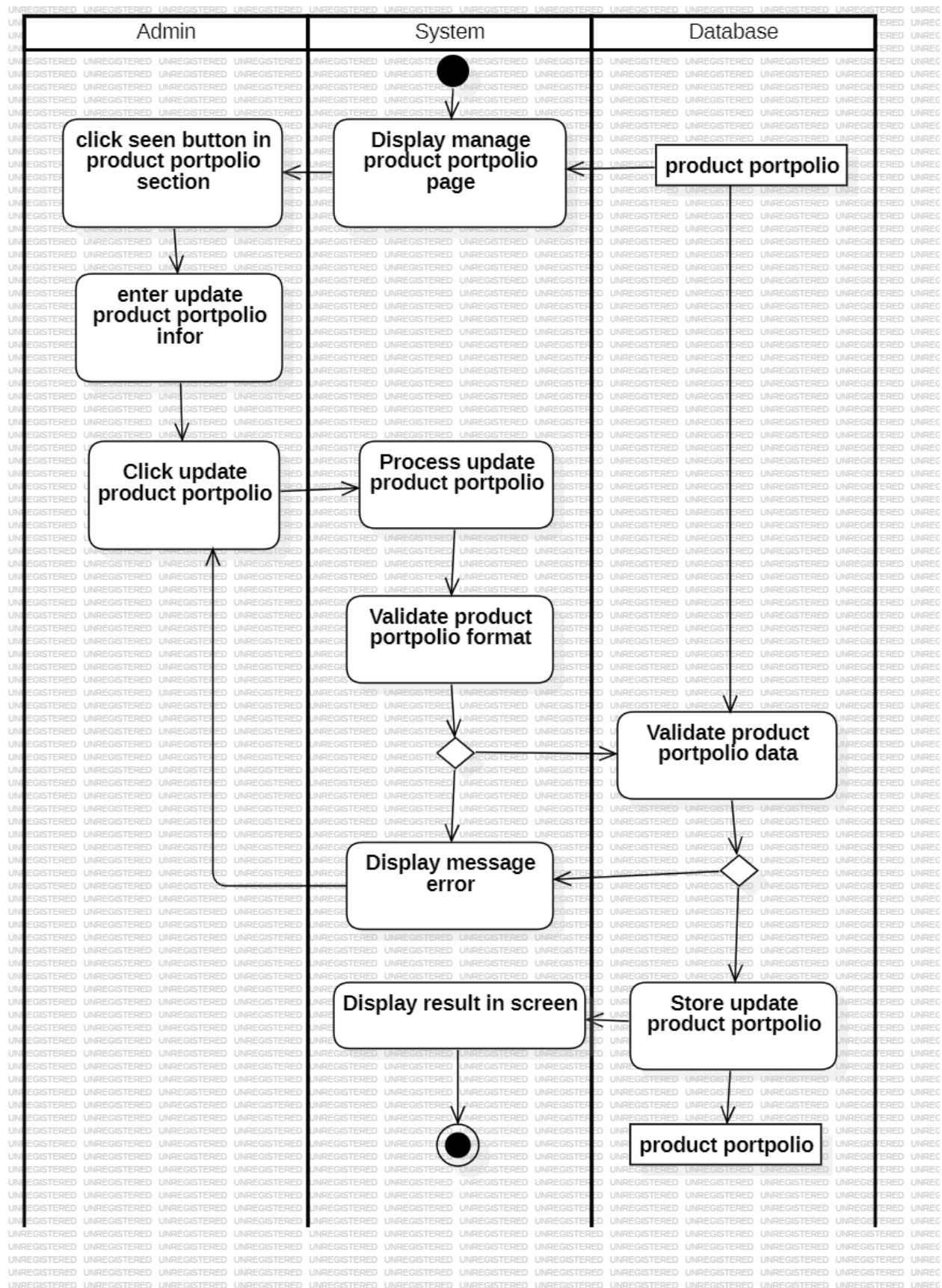


3.3.2.9.3 Use case Update product portfolio as admin

Use case name	Update product portfolio as admin
Description	Admin wants to update product portfolio
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage product portfolio section
Basic flow	15. System display manage product portfolio page 16. Admin click seen button in product portfolio section 17. Admin enter information of product portfolio 18. Admin click update product portfolio button 19. System executes process of update product portfolio 20. System validate product portfolio update format

	<ol style="list-style-type: none">21. System validates product portfolio update data in banner database22. System store update product portfolio information23. System display result in screen
Alternative flow	<ol style="list-style-type: none">4. a. System display error message due to wrong format5. a. System displays invalid information due to wrong data
Exception flow	

Furniture Online Store Website– Group 2

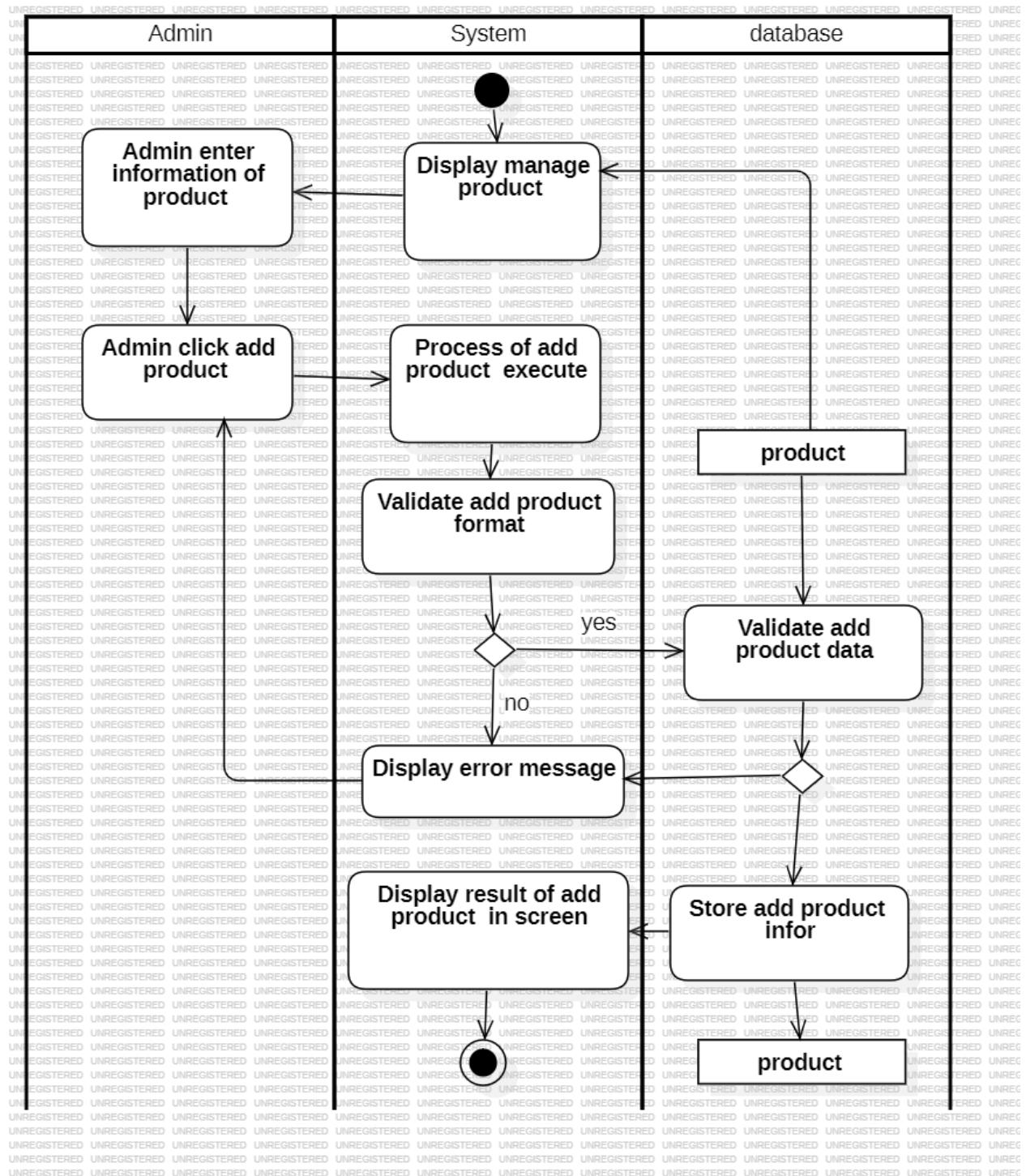


3.3.2.10 Use case manage product

3.3.2.10.1 Use case add product to list as admin

Use case name	Add banner as admin
Description	Admin wants to add product to list
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage list of product section
Basic flow	<ol style="list-style-type: none"> 1. System display manage list of product page 2. Admin enter information of product to list 3. Admin click add product to list button 4. System executes process of add product to list 5. System validate product to list

	<p>added format</p> <ol style="list-style-type: none">6. System validates product to list added data in banner database7. System store add product to list information8. System display result in screen
Alternative flow	<ol style="list-style-type: none">4. a. System display error message due to wrong format5. a. System displays invalid information due to wrong data
Exception flow	



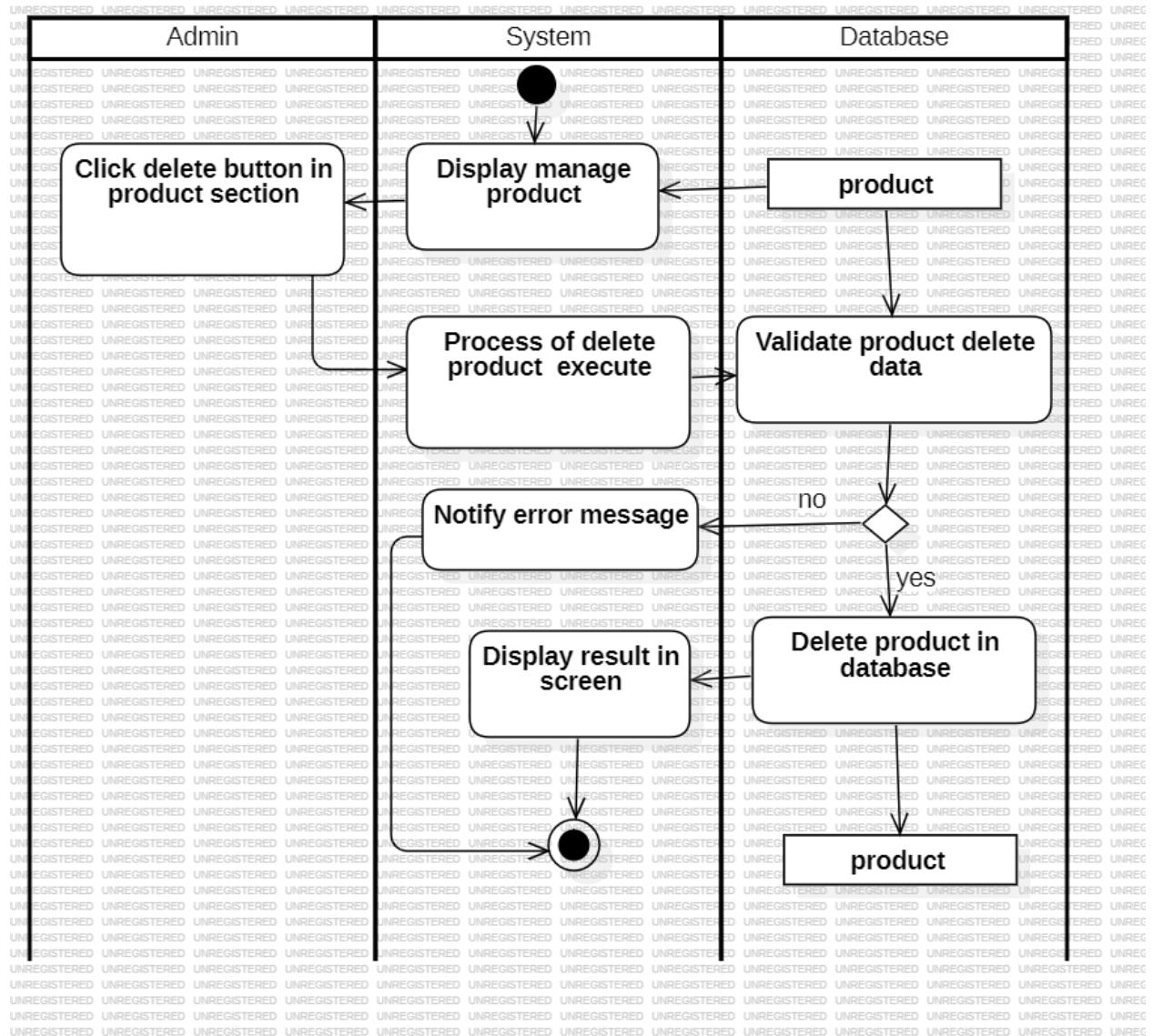
3.3.2.10.2 Use case delete product from list as admin

Use case name

delete product from list as admin

Description	Admin wants to delete product from list
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage list of product section
Basic flow	<ul style="list-style-type: none"> 9. System display manage product from list page 10. Admin click delete button in product section 11. System execute delete product from list process 12. System validate delete product from list data 13. System delete banner in database of product from list 14. System display result in screen
Alternative flow	<ul style="list-style-type: none"> 4. a. System display error message due to wrong data

Exception flow



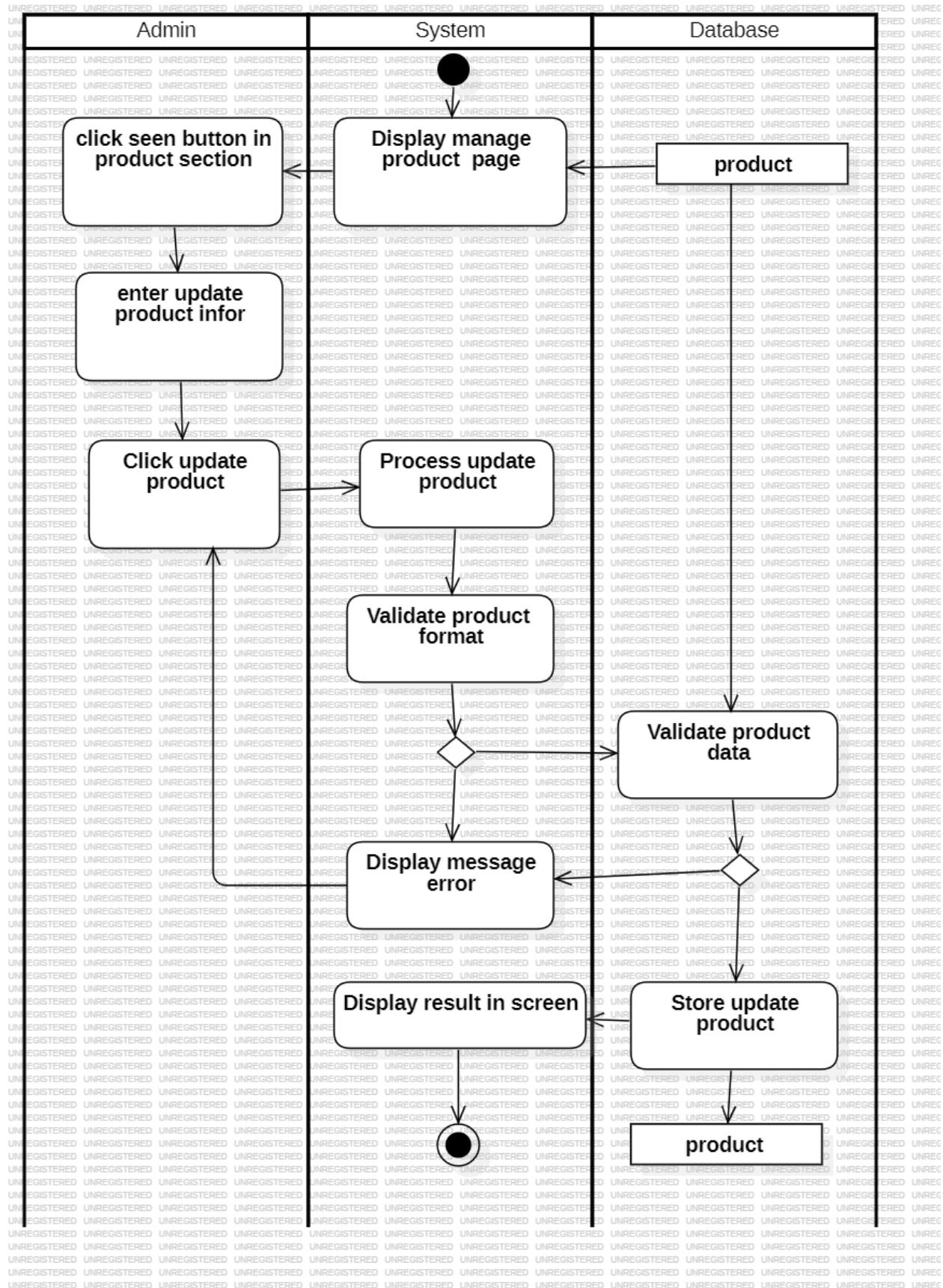
3.3.2.10.3 Use case update product from list as admin

Use case name	Update product from list as admin
Description	Admin wants to update product from list

Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage list of product section
Basic flow	<p>15. System display manage list of product page</p> <p>16. Admin click seen button in product from list section</p> <p>17. Admin enter information of product from list</p> <p>18. Admin click update product from list button</p> <p>19. System executes process of update product from list</p> <p>20. System validate product from list update format</p> <p>21. System validates product from list update data in banner database</p> <p>22. System store update product from list information</p> <p>23. System display result in screen</p>
Alternative flow	4. a. System display error message due to wrong format

	5. a. System displays invalid information due to wrong data
Exception flow	

Furniture Online Store Website— Group 2



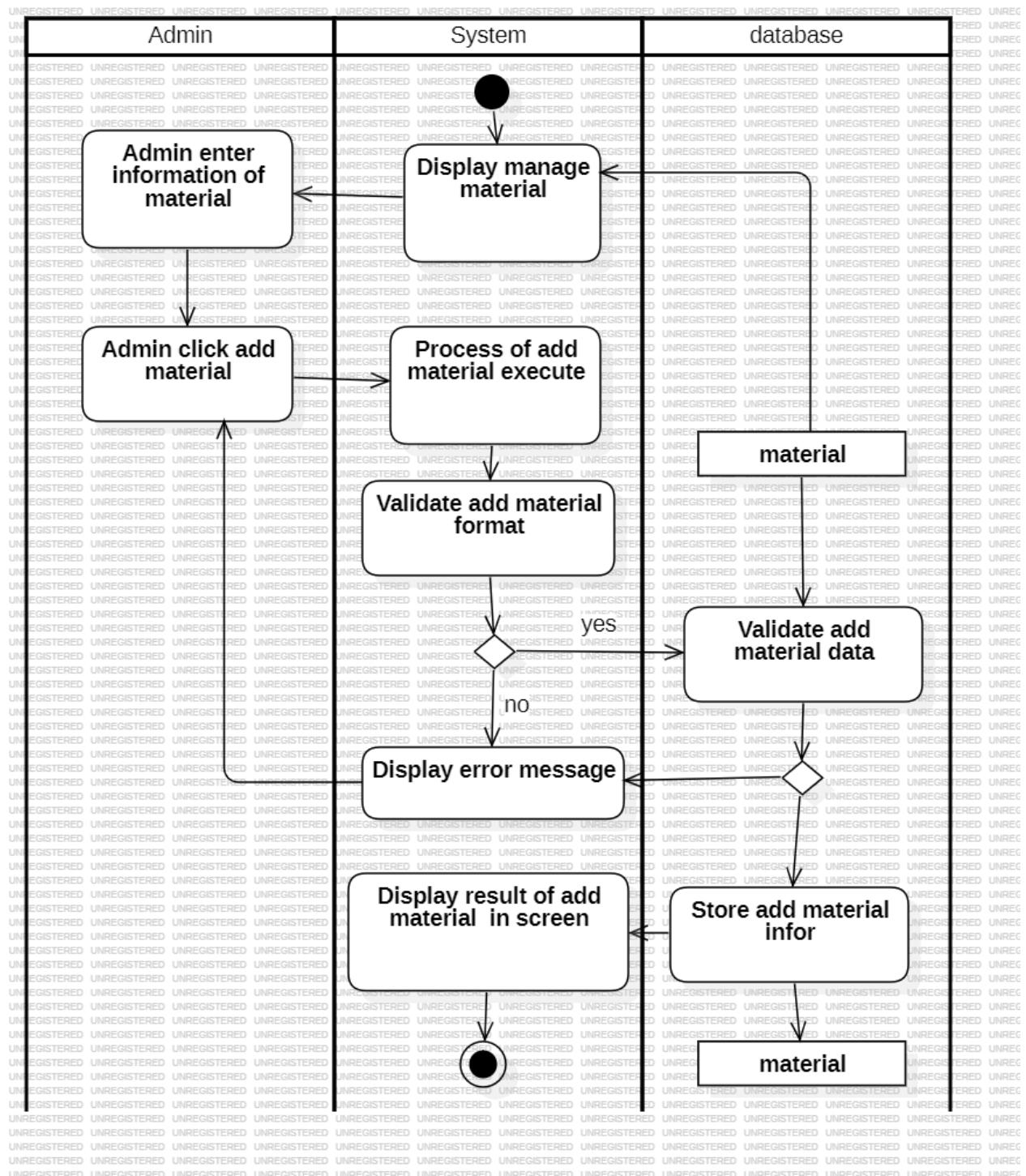
3.3.2.11 Use case manage material

3.3.2.11.1 Use case add Material as admin

Use case name	Add Material as admin
Description	Admin wants to add Material
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage Material section
Basic flow	<ol style="list-style-type: none"> 1. System display manage Material page 2. Admin enter information of Material 3. Admin click add Material button 4. System executes process of add Material 5. System validate Material added format 6. System validates Material added data in banner database

	<ul style="list-style-type: none">7. System store add Material information8. System display result in screen
Alternative flow	<ul style="list-style-type: none">4. a. System display error message due to wrong format5. a. System displays invalid information due to wrong data
Exception flow	

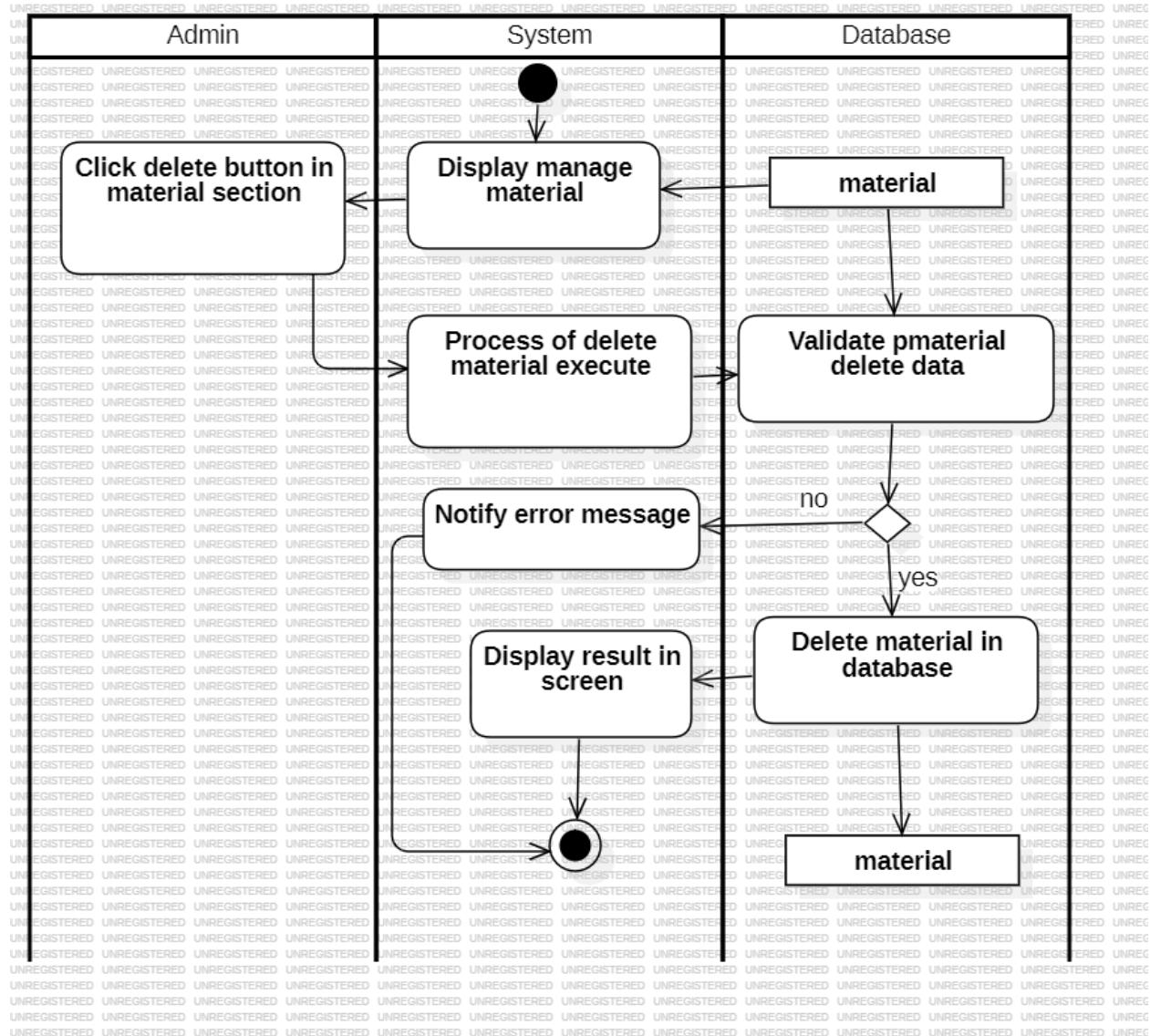
Furniture Online Store Website– Group 2



3.3.2.11.2 Use case delete Material as admin

Use case name	delete Material as admin
Description	Admin wants to delete Material
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage Material section
Basic flow	<p>9. System display manage Material page</p> <p>10. Admin click delete button in Material section</p> <p>11. System execute delete Material process</p> <p>12. System validate delete Material data</p> <p>13. System delete banner in database of Material</p> <p>14. System display result in screen</p>
Alternative flow	4. a. System display error message due

	to wrong data
Exception flow	



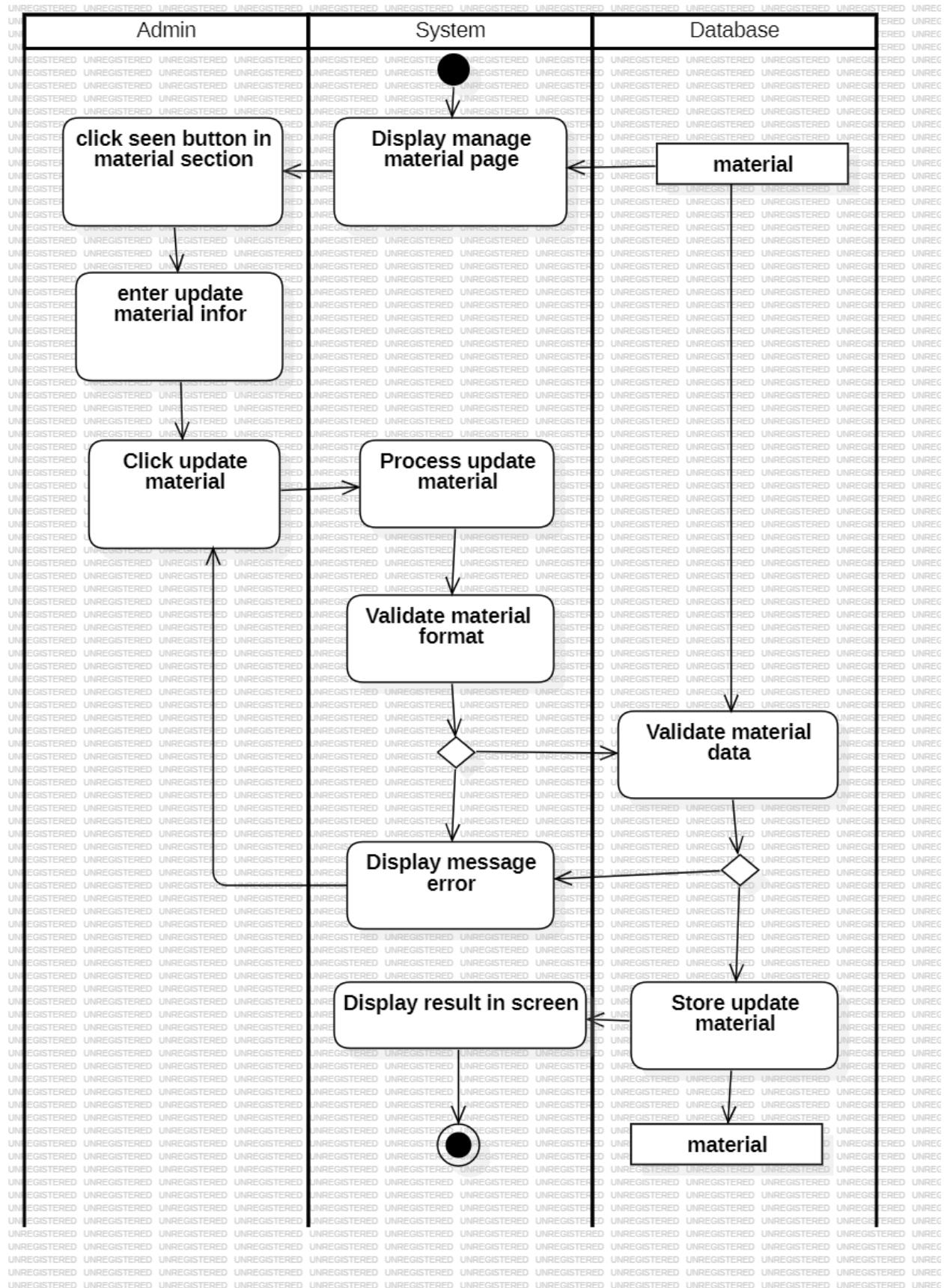
3.3.2.11.3 Use case update material as admin

Use case name	Update Material as admin
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Description	Admin wants to update Material
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage Material section
Basic flow	<p>15. System display manage Material page</p> <p>16. Admin click seen button in Material section</p> <p>17. Admin enter information of Material</p> <p>18. Admin click update Material button</p> <p>19. System executes process of update Material</p> <p>20. System validate Material update format</p> <p>21. System validates Material update data in banner database</p> <p>22. System store update Material information</p> <p>23. System display result in screen</p>

Alternative flow	4. a. System displays error message due to wrong format 5. a. System displays invalid information due to wrong data
Exception flow	

Furniture Online Store Website– Group 2

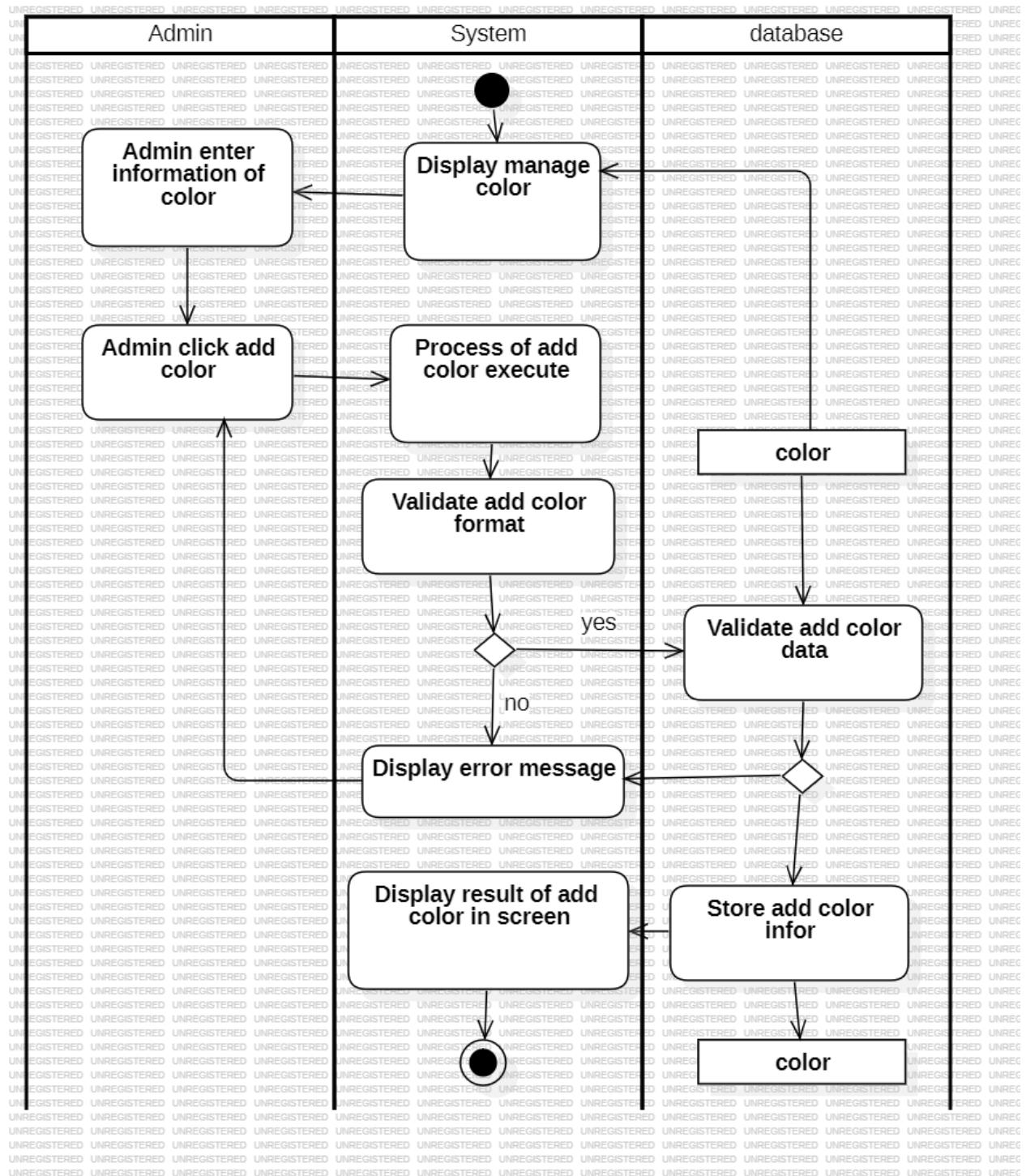


3.3.2.12 Use case manage Color

3.3.2.12.1 Use case add Color as admin

Use case name	Add Color as admin
Description	Admin wants to add Color
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage Color section
Basic flow	<ol style="list-style-type: none"> 1. System display manage Color page 2. Admin enter information of Color 3. Admin click add Color button 4. System executes process of add Color 5. System validate Color added format 6. System validates Color added data in banner database 7. System store add Color information 8. System display result in screen

Alternative flow	4. a. System display error message due to wrong format 5. a. System displays invalid information due to wrong data
Exception flow	

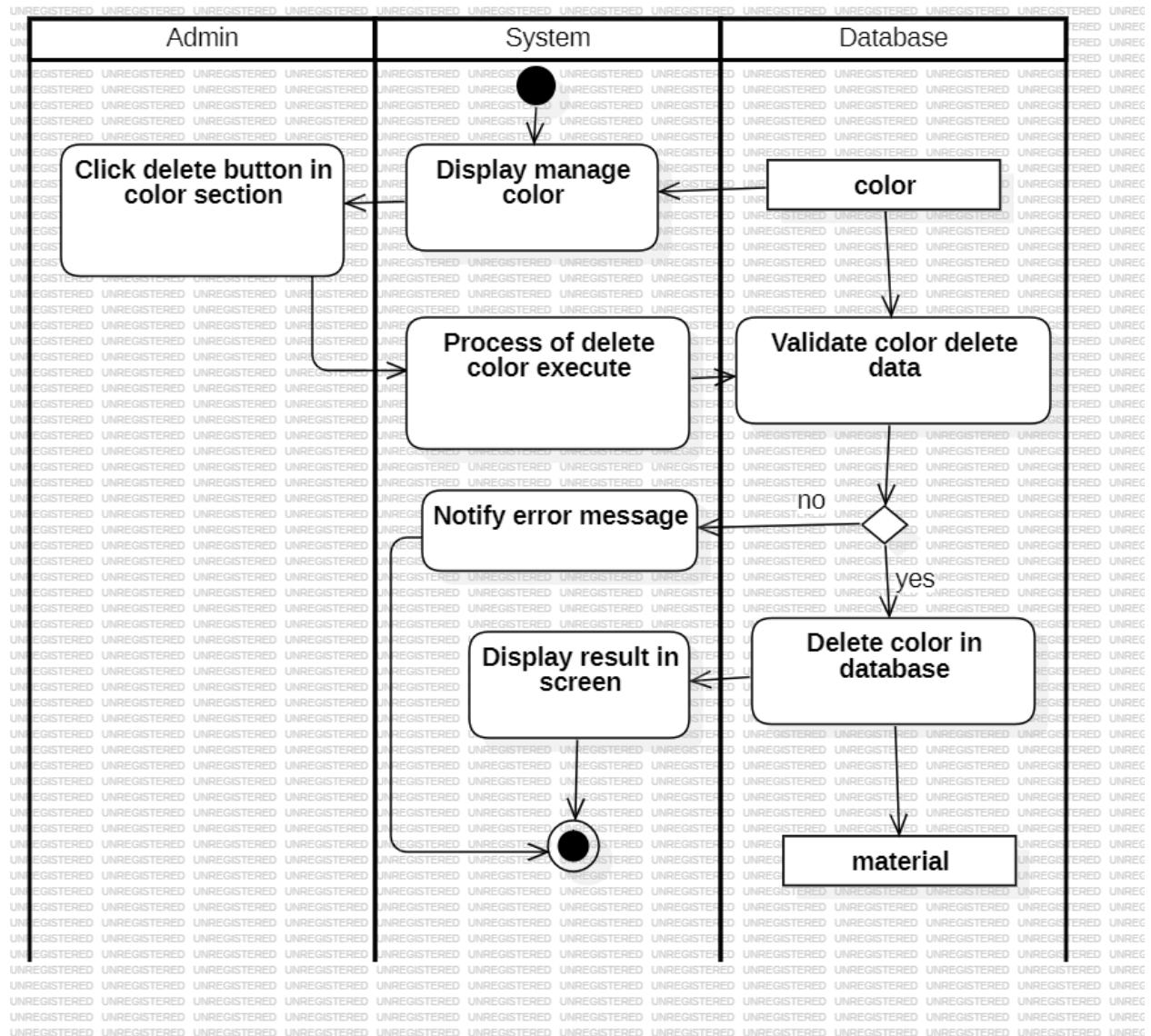


3.3.2.12.2 Use case delete color as admin

Use case name

delete Color as admin

Description	Admin wants to delete banner
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage Color section
Basic flow	<ul style="list-style-type: none"> 9. System display manage Color page 10. Admin click delete button in Color section 11. System execute delete Color process 12. System validate delete Color data 13. System delete banner in database of Color 14. System display result in screen
Alternative flow	<ul style="list-style-type: none"> 4. a. System display error message due to wrong data
Exception flow	

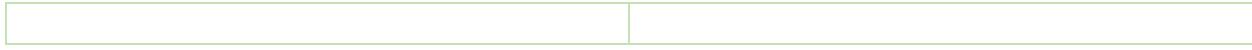


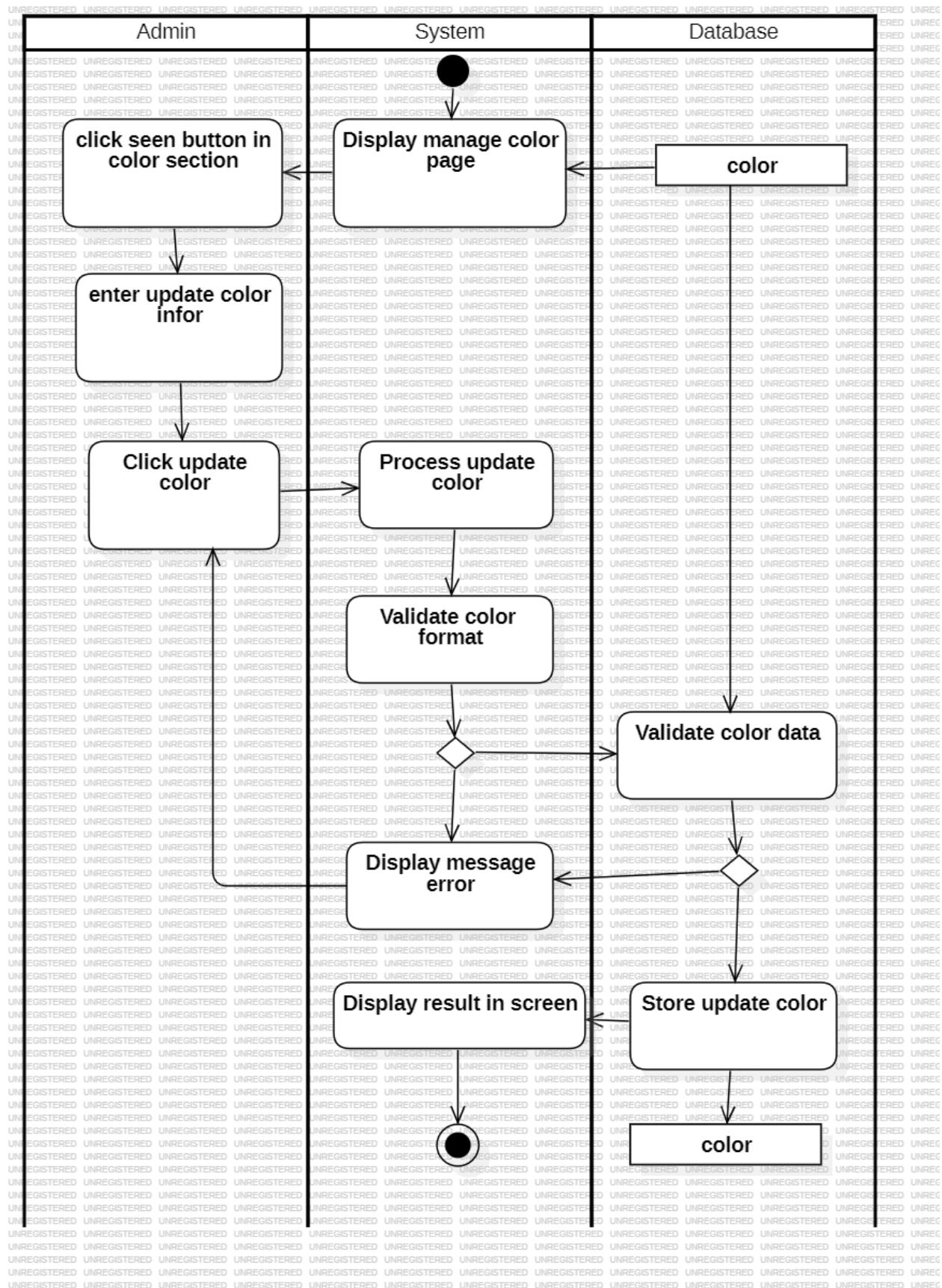
3.3.2.12.3 Use case update color as admin

Use case name	Update Color as admin
Description	Admin wants to update Color
Trigger	Admin sign in admin's system before

Pre-condition	<p>Admin's device must be connect to internet Admin's account must be existed</p>
Post-condition	<p>Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage Color section</p>
Basic flow	<p>15. System display manage Color page 16. Admin click seen button in Color section 17. Admin enter information of Color 18. Admin click update Color button 19. System executes process of update Color 20. System validate Color update format 21. System validates Color update data in Color database 22. System store update Color information 23. System display result in screen</p>
Alternative flow	<p>4. a. System display error message due to wrong format 5. a. System displays invalid information due to wrong data</p>
Exception flow	

Furniture Online Store Website– Group 2



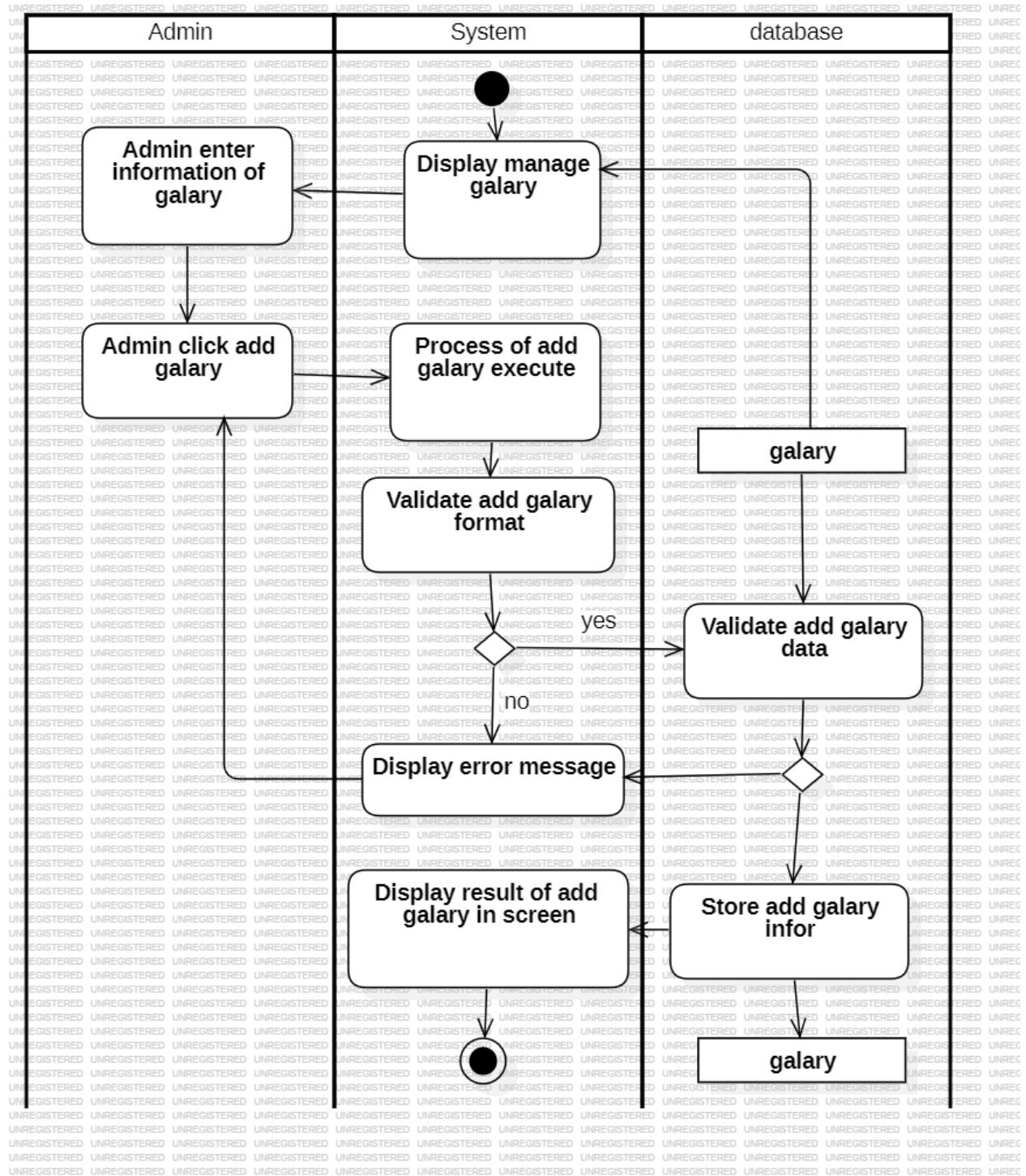


3.3.2.13 Use case manage gallery

3.3.2.13.1 Use case add gallery as admin

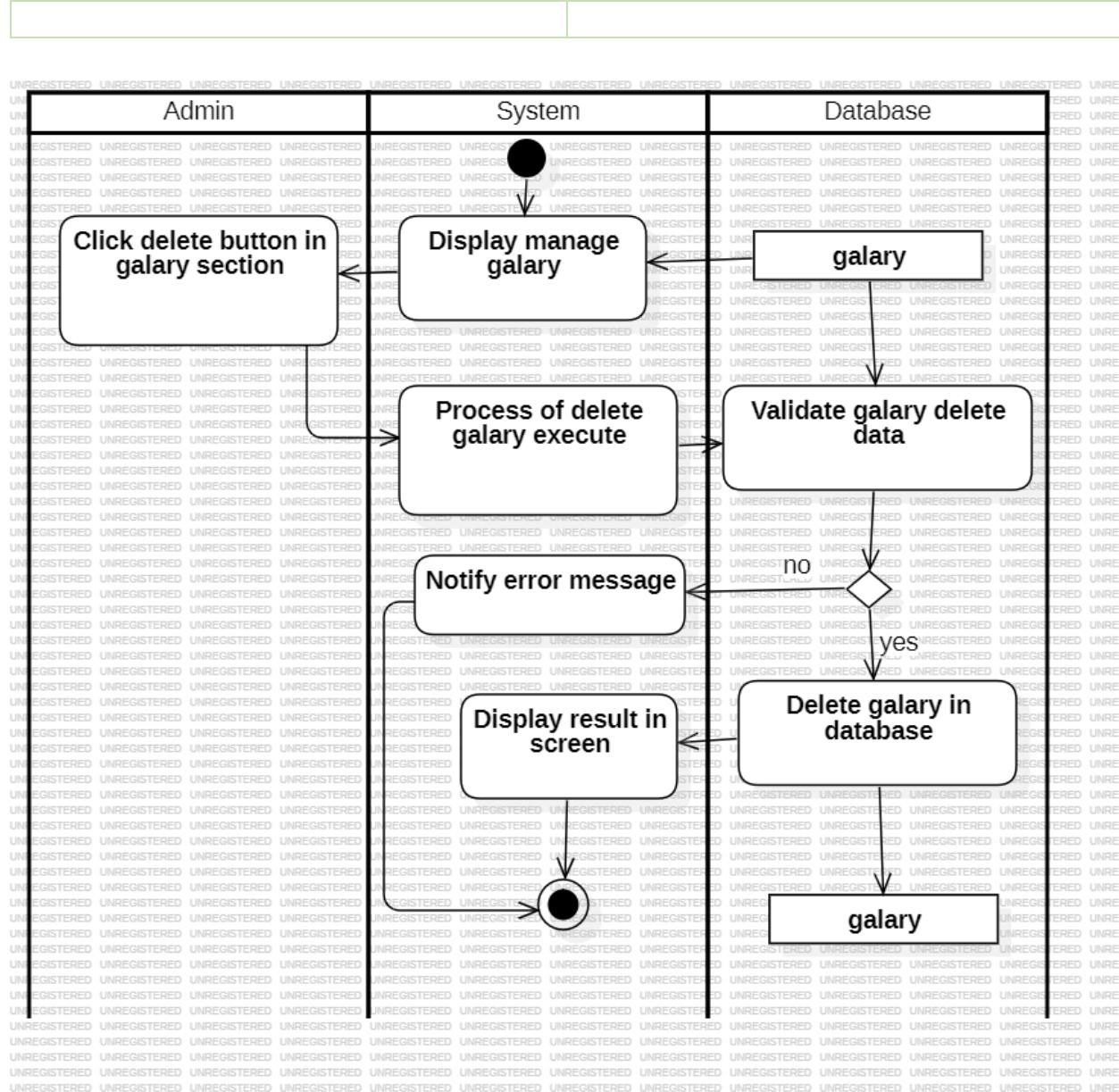
Use case name	Add gallery as admin
Description	Admin wants to add gallery
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage gallery section
Basic flow	24. System display manage gallery page 25. Admin enter information of gallery 26. Admin click add gallery button 27. System executes process of add gallery 28. System validate gallery added format 29. System validates Color added data in banner database

	30. System store add gallery information 31. System display result in screen
Alternative flow	4. a. System display error message due to wrong format 5. a. System displays invalid information due to wrong data
Exception flow	



3.3.2.13.2 Use case delete salary as admin

Use case name	delete gallery as admin
Description	Admin wants to delete gallery
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage gallery section
Basic flow	32. System display manage gallery page 33. Admin click delete button in gallery section 34. System execute delete gallery process 35. System validate delete gallery data 36. System delete banner in database of gallery 37. System display result in screen
Alternative flow	4. a. System display error message due to wrong data
Exception flow	

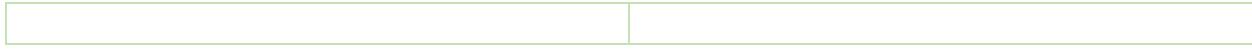


3.3.2.13.3 Use case update salary as admin

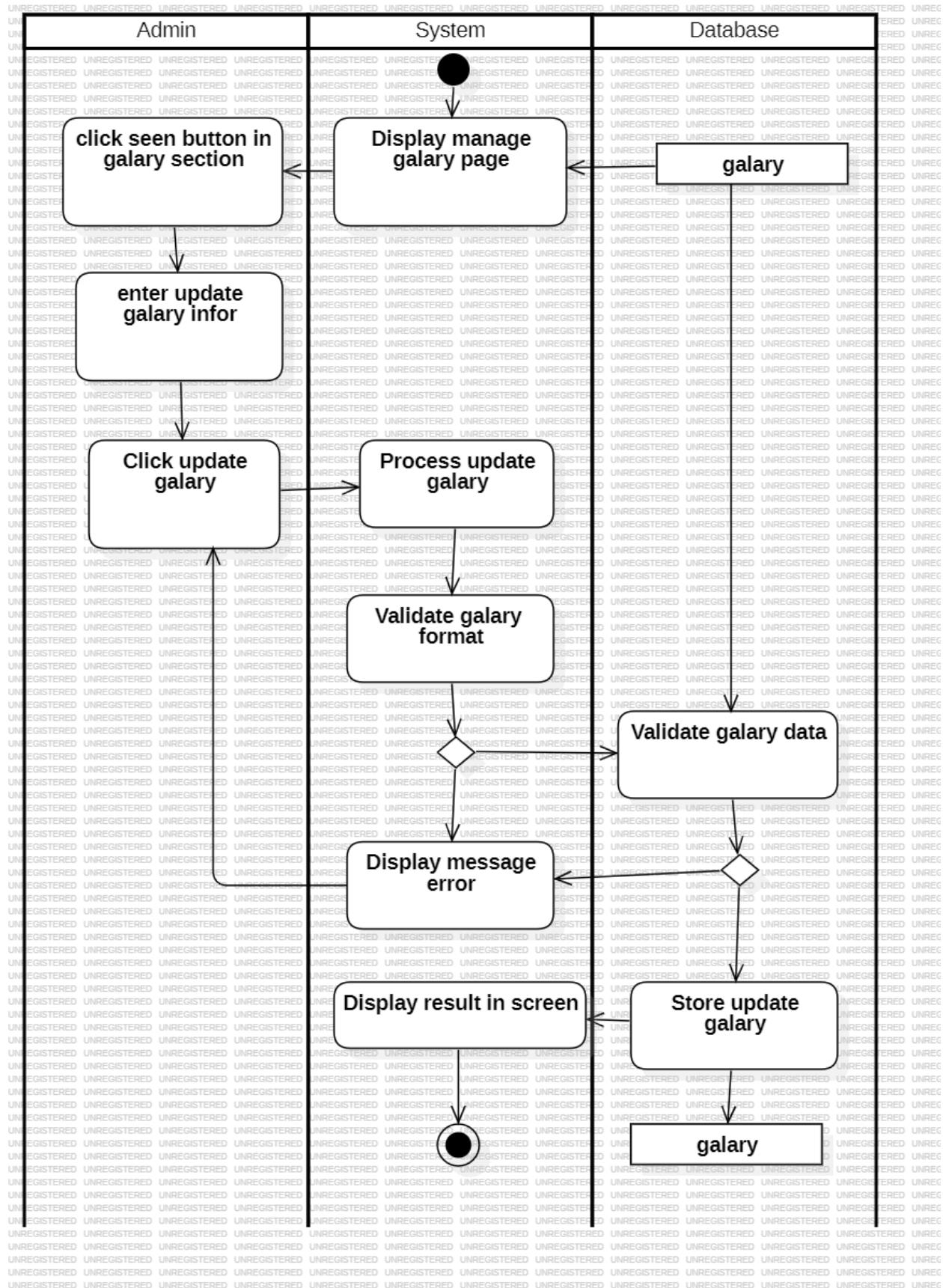
Use case name	Update salary as admin
Description	Admin wants to update salary
Trigger	Admin sign in admin's system before

Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage gallery section
Basic flow	38. System display manage gallery page 39. Admin click seen button in gallery section 40. Admin enter information of gallery 41. Admin click update gallery button 42. System executes process of update gallery 43. System validate gallery update format 44. System validates gallery update data in Color database 45. System store update gallery information 46. System display result in screen
Alternative flow	4. a. System display error message due to wrong format 5. a. System displays invalid information due to wrong data
Exception flow	

Furniture Online Store Website– Group 2



Furniture Online Store Website— Group 2

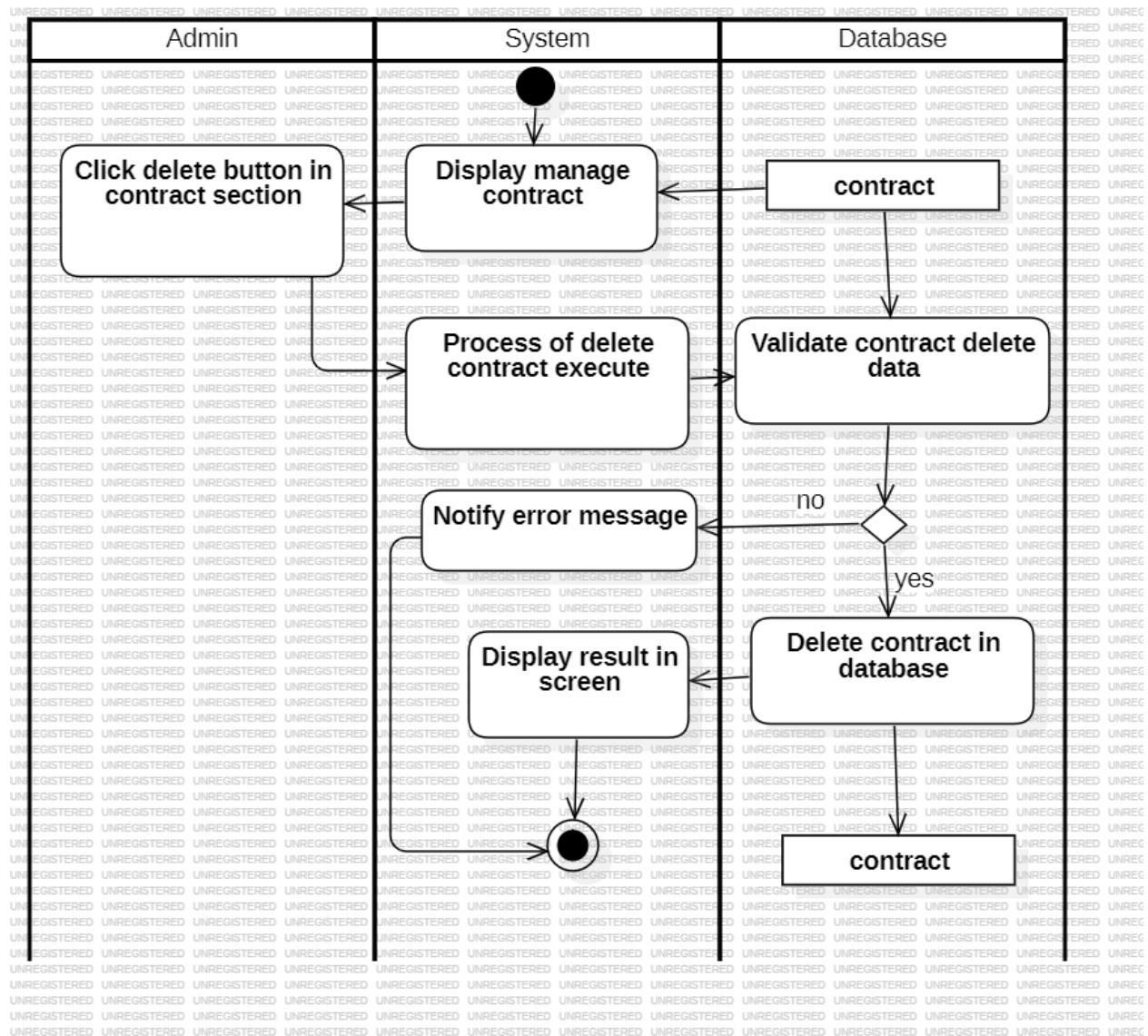


3.3.2.14 Use case manage contract

3.3.2.14.1 Use case delete contract order as admin

Use case name	delete Color as admin
Description	Admin wants to delete contract
Trigger	Admin sign in admin's system before
Pre-condition	Admin's device must be connect to internet Admin's account must be existed
Post-condition	Admin get notification of sign-in successfully. After log-in, automatically redirecting to homepage and here admin can use admin's services Admin click manage contract section
Basic flow	47. System display manage contract page 48. Admin click delete button in contract section 49. System execute delete contract process 50. System validate delete contract data 51. System delete banner in database of contract

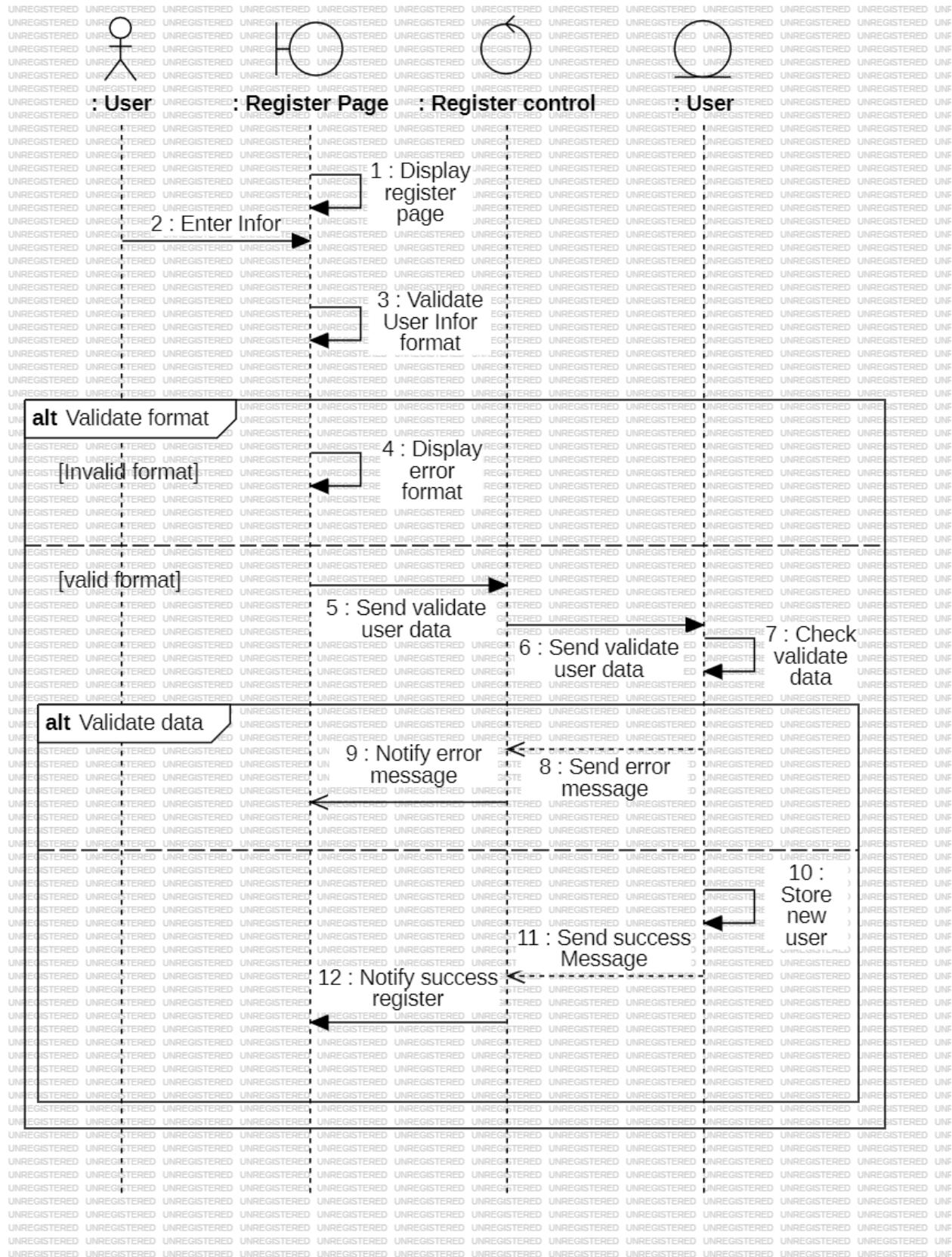
	52. System display result in screen
Alternative flow	4. a. System display error message due to wrong data
Exception flow	



3.4 Sequence Diagram and Class Diagram

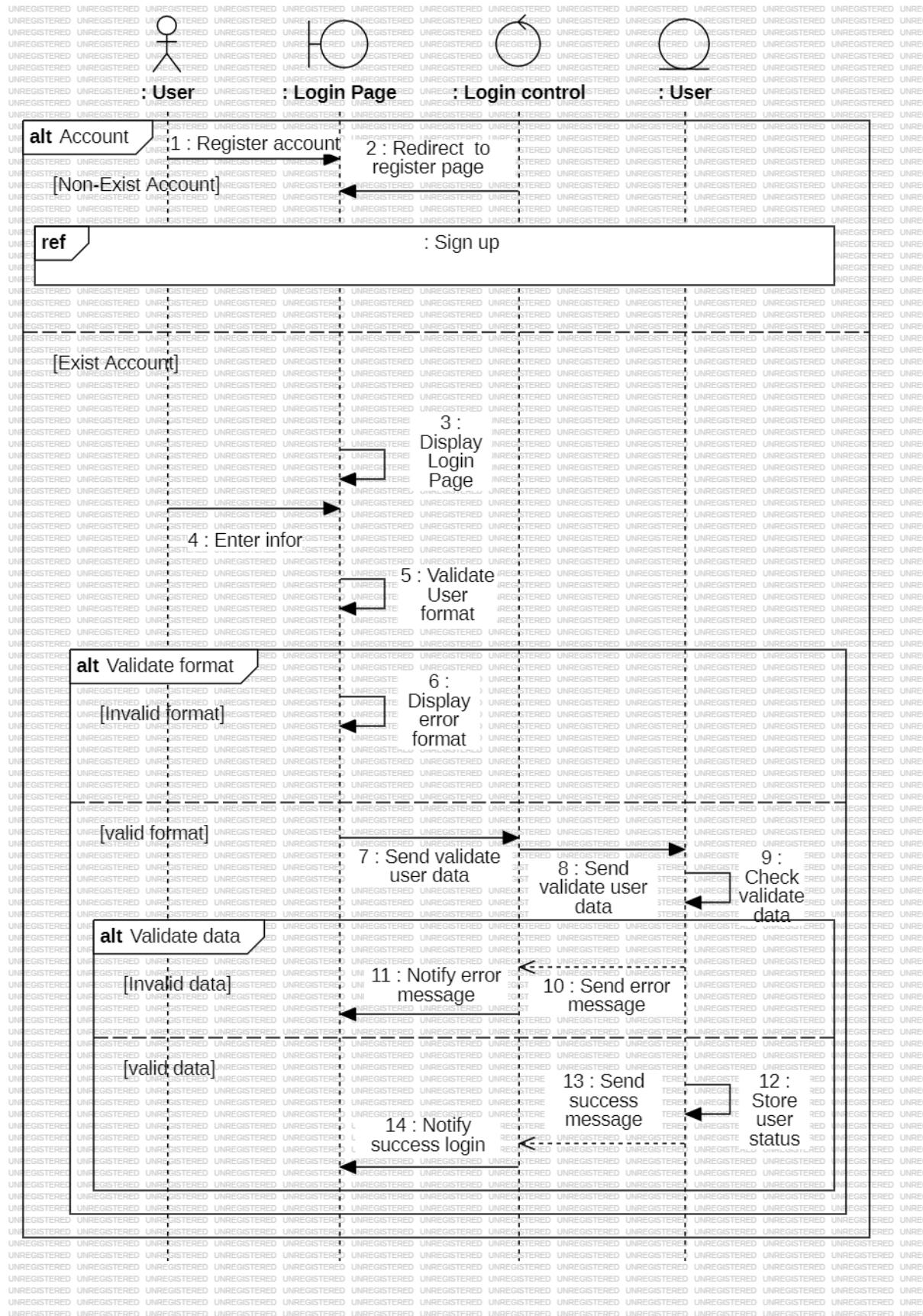
3.4.1 Sequence Diagram for User

3.4.1.1 Sequence Diagram for Register of user



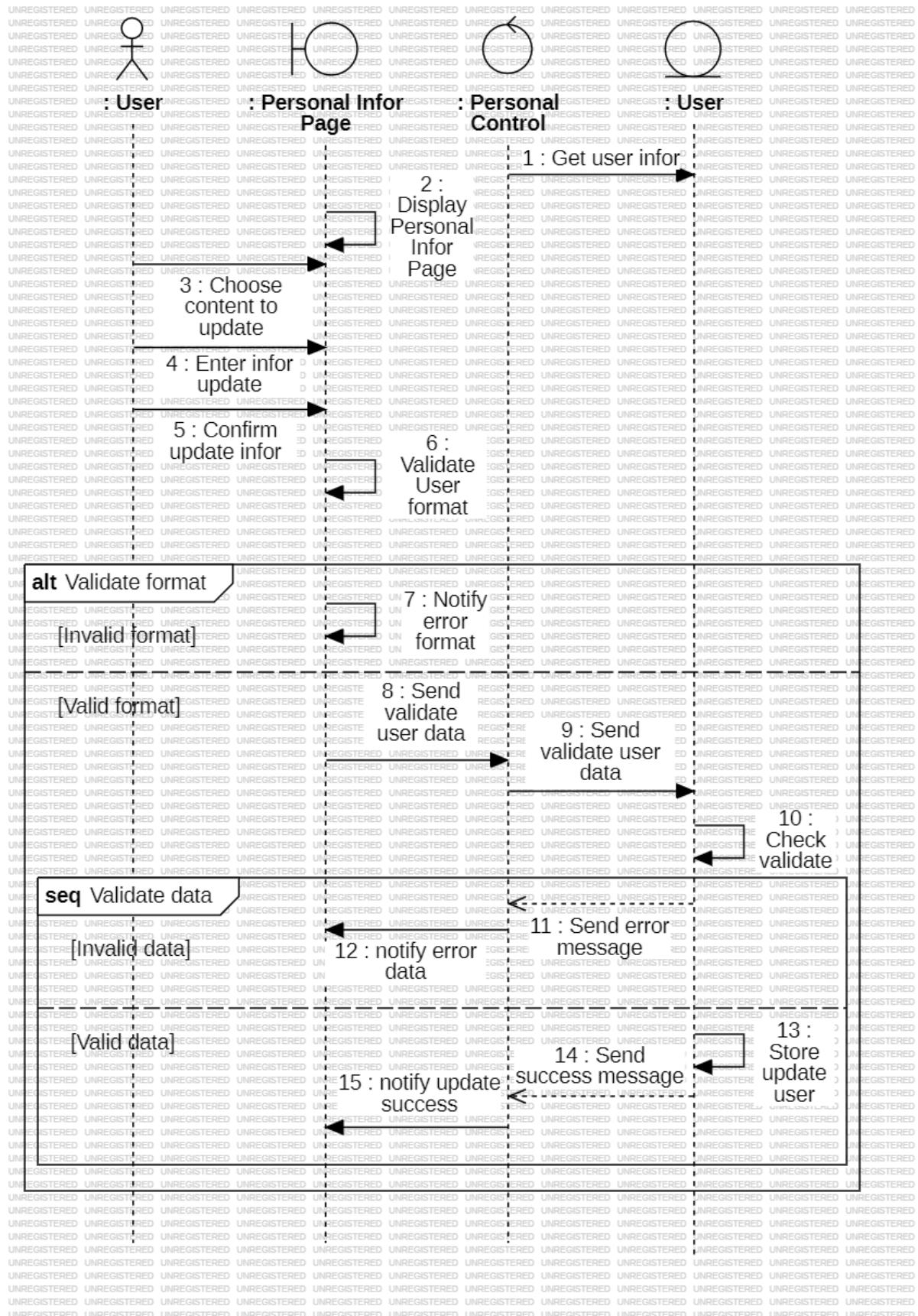
3.4.1.2 Sequence diagram for Login for User

Furniture Online Store Website– Group 2

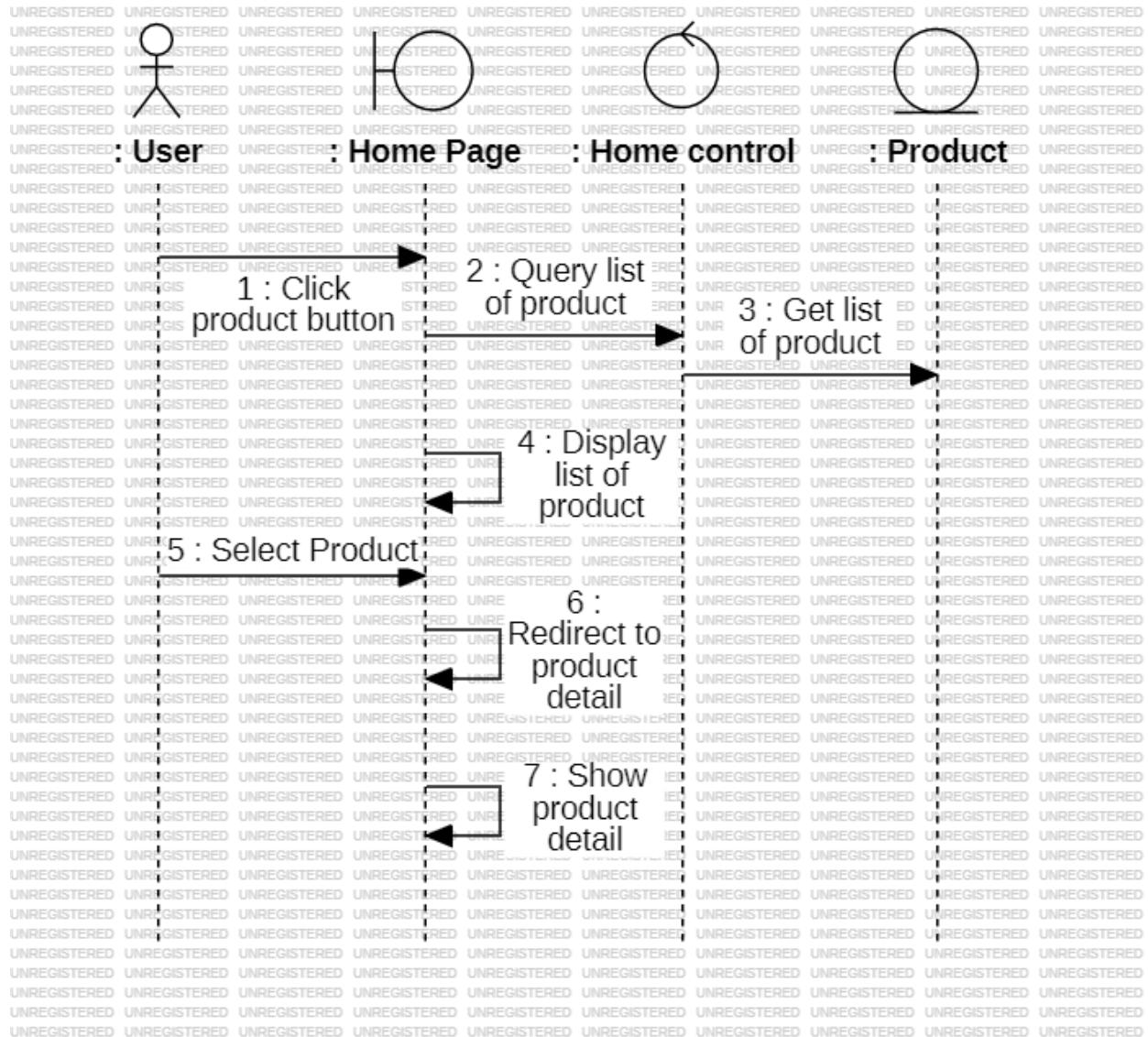


3.4.1.3 Sequence diagram for update user as user

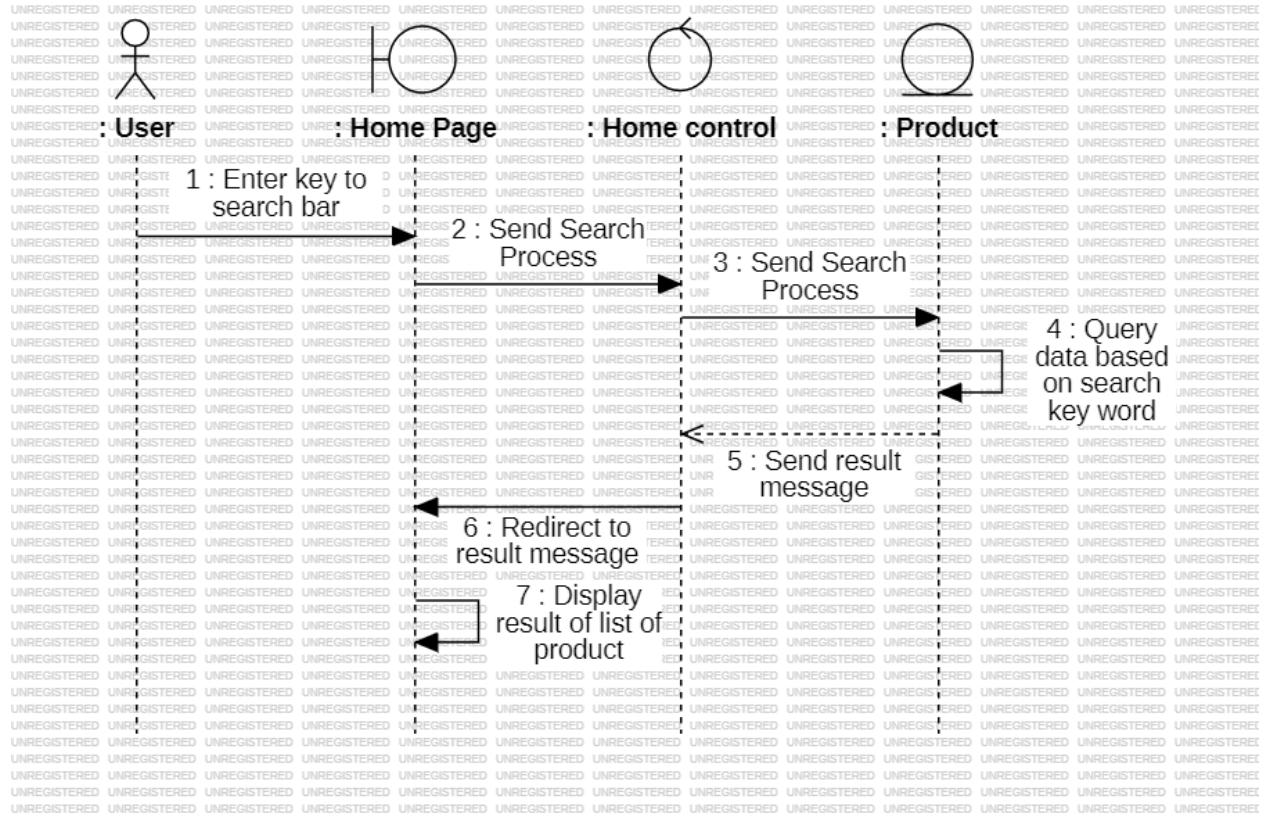
Furniture Online Store Website– Group 2



3.4.1.4 Sequence diagram for explore product

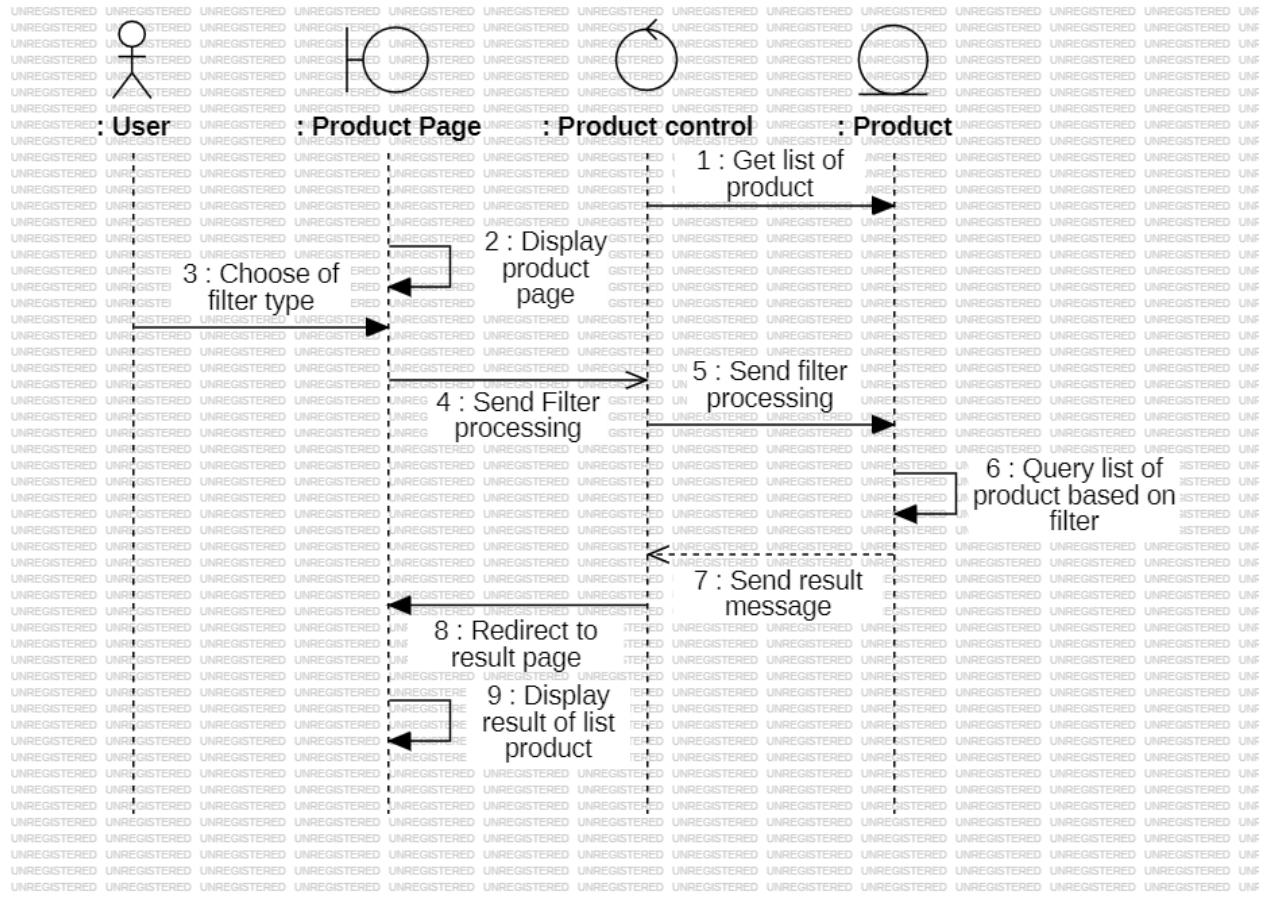


3.4.1.5 Sequence diagram for search product



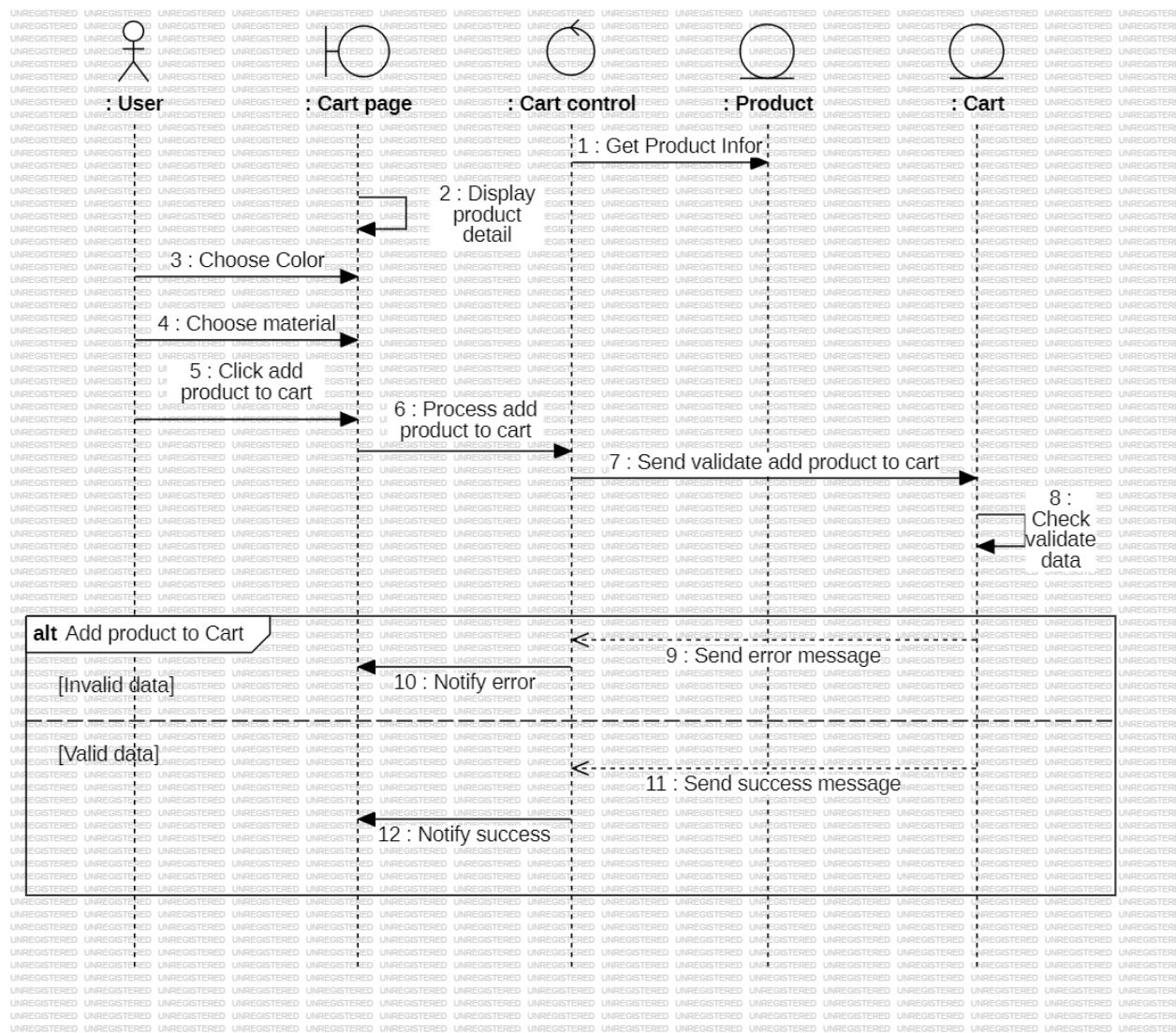
3.4.1.6 Sequence diagram for filter product

Furniture Online Store Website– Group 2



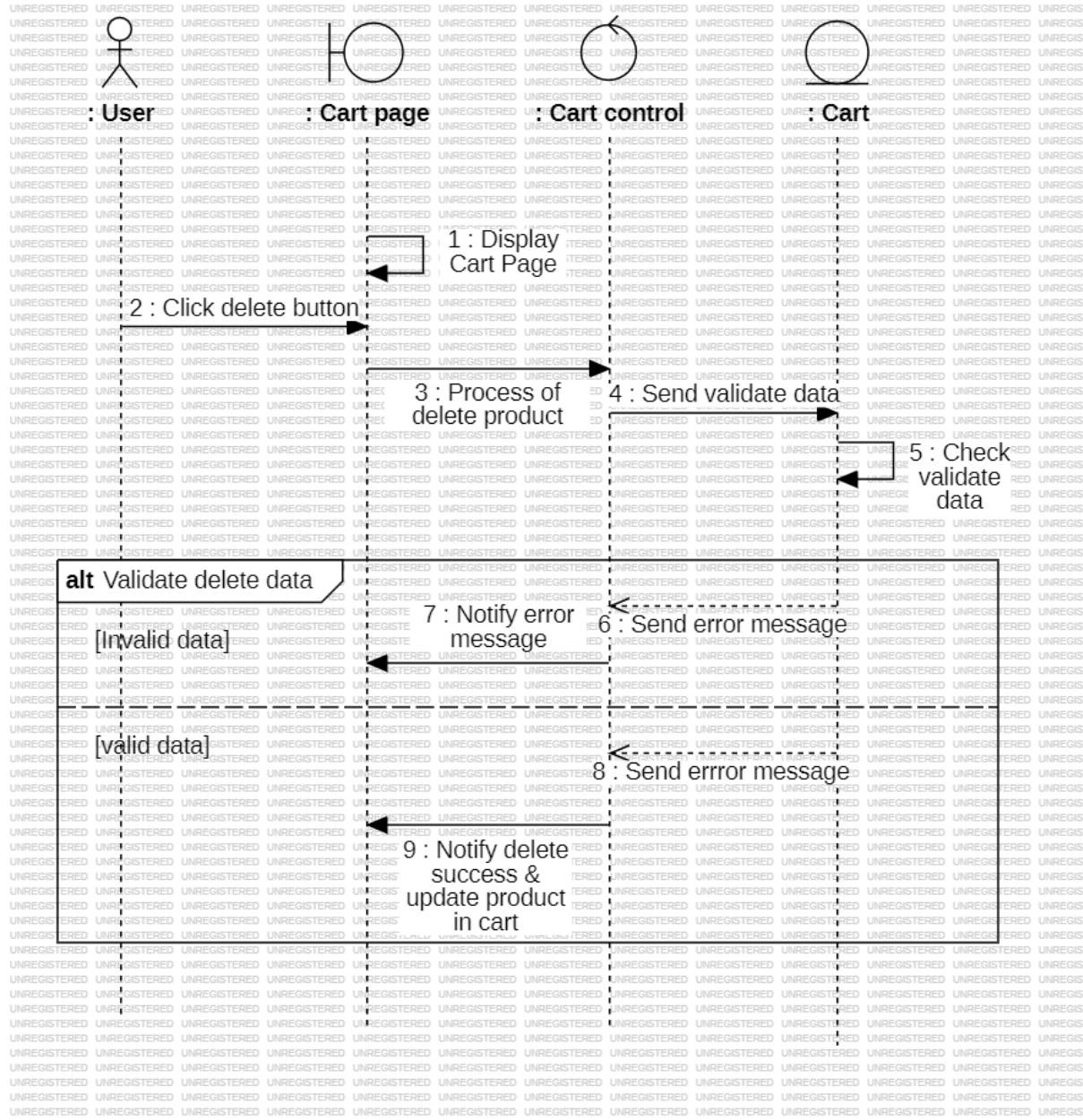
3.4.1.7 Sequence diagram for add product to cart as customer

Furniture Online Store Website— Group 2



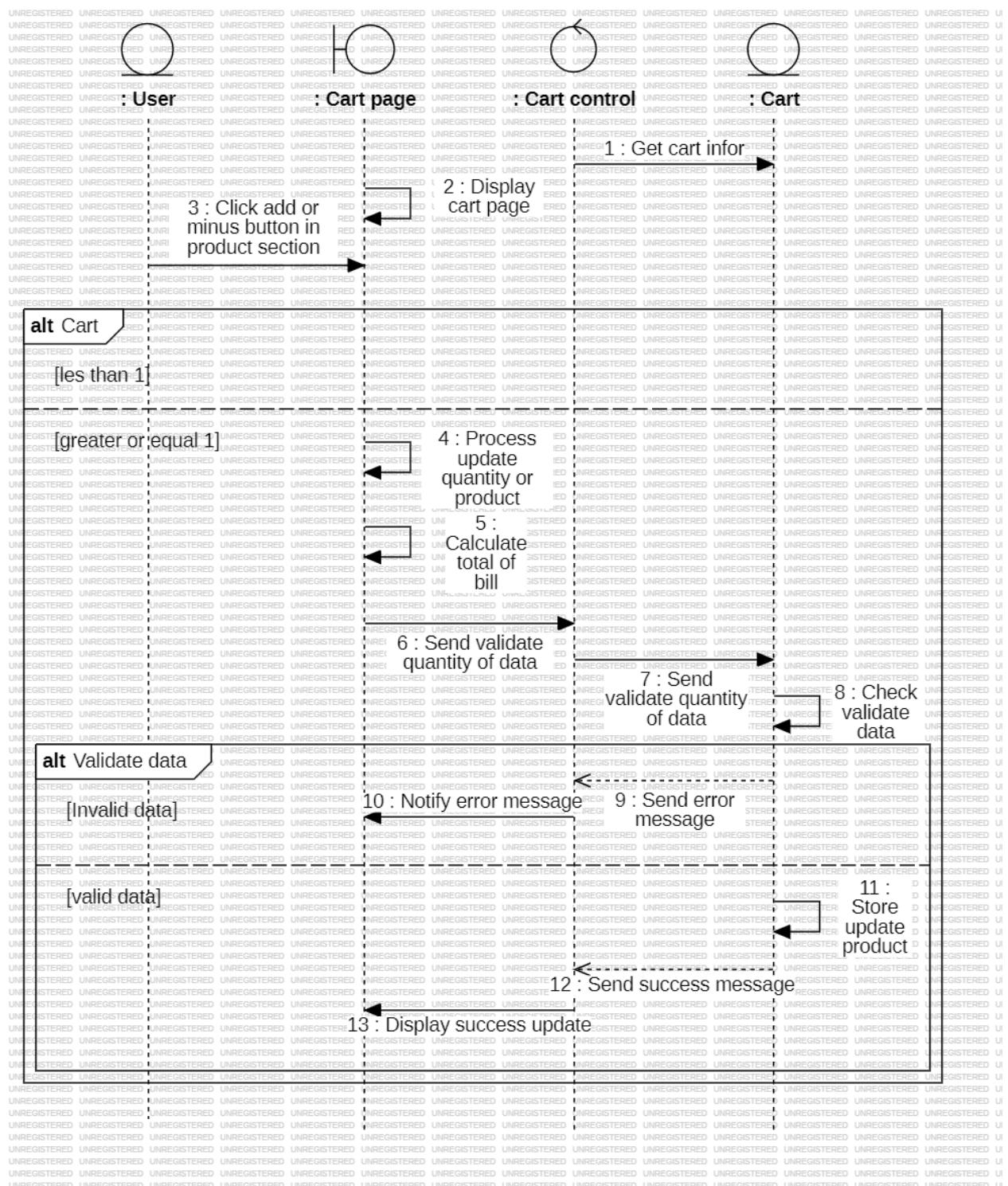
3.4.1.8 Sequence diagram for delete product from cart as customer

Furniture Online Store Website— Group 2

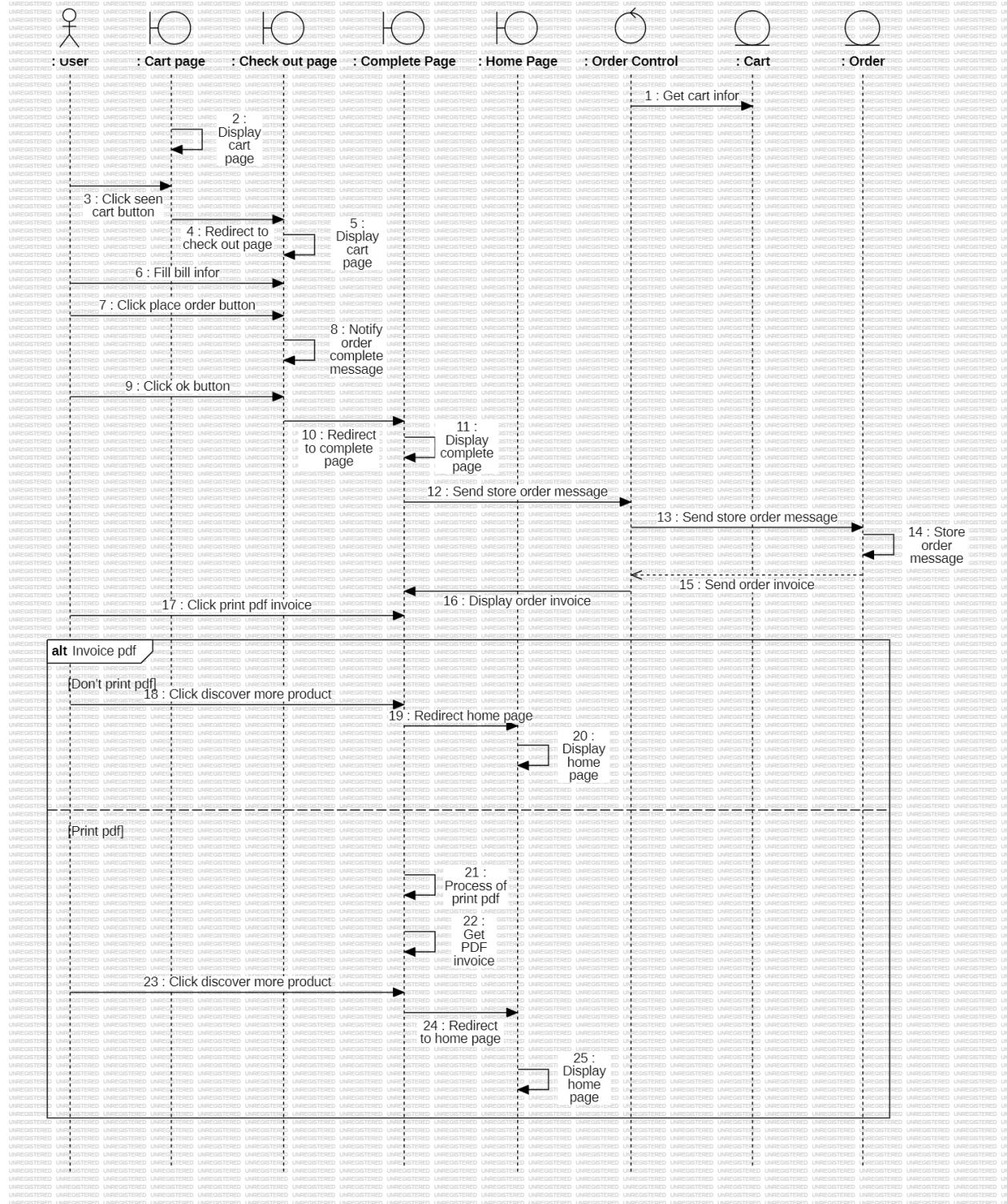


3.4.1.9 Sequence diagram for update product to cart for User

Furniture Online Store Website– Group 2

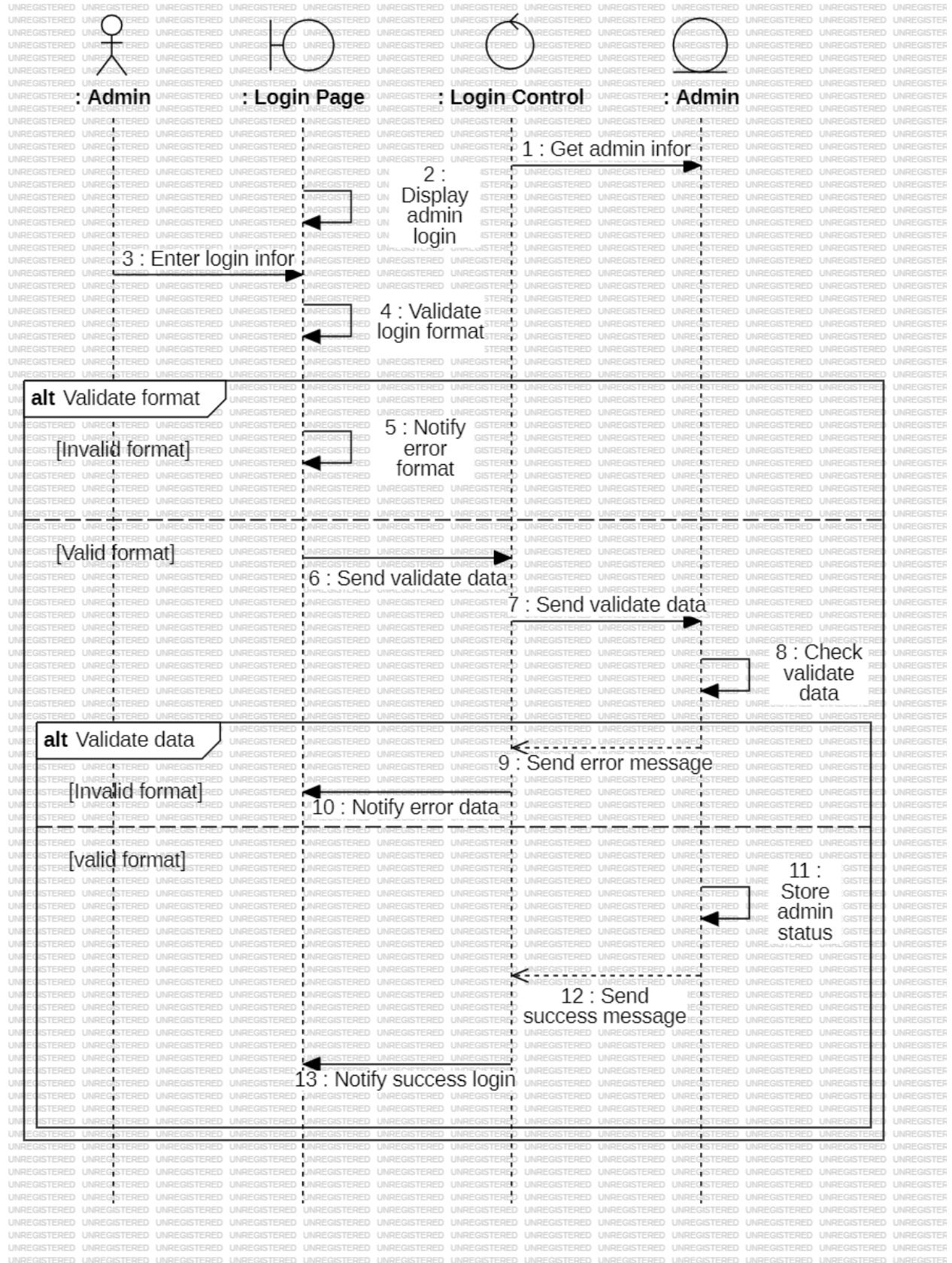


3.4.1.10 Sequence diagram for order product as customer



3.4.2 Sequence diagram for admin

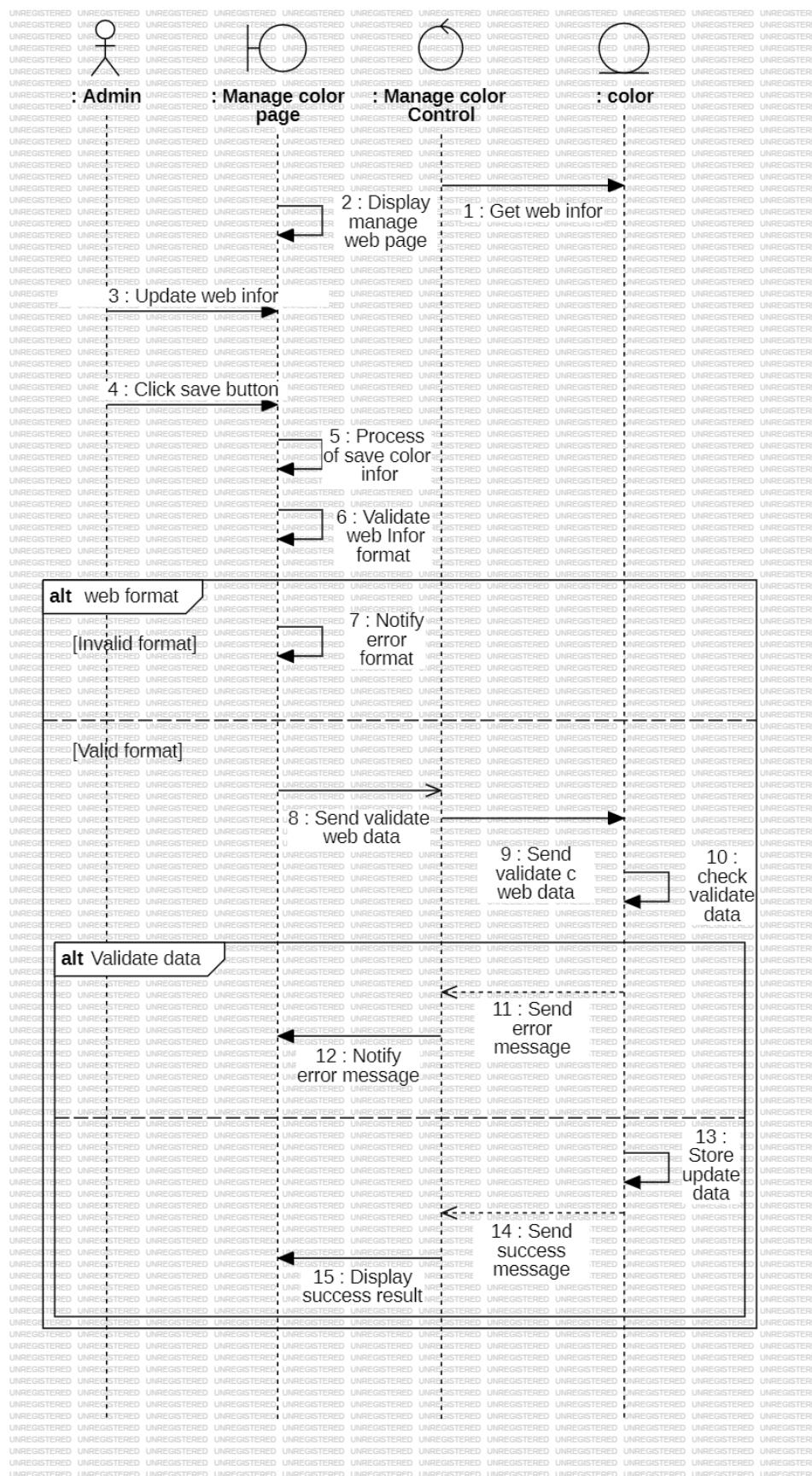
3.4.2.1 Sequence diagram for login as admin



3.4.2.2 Sequence diagram for manage web information

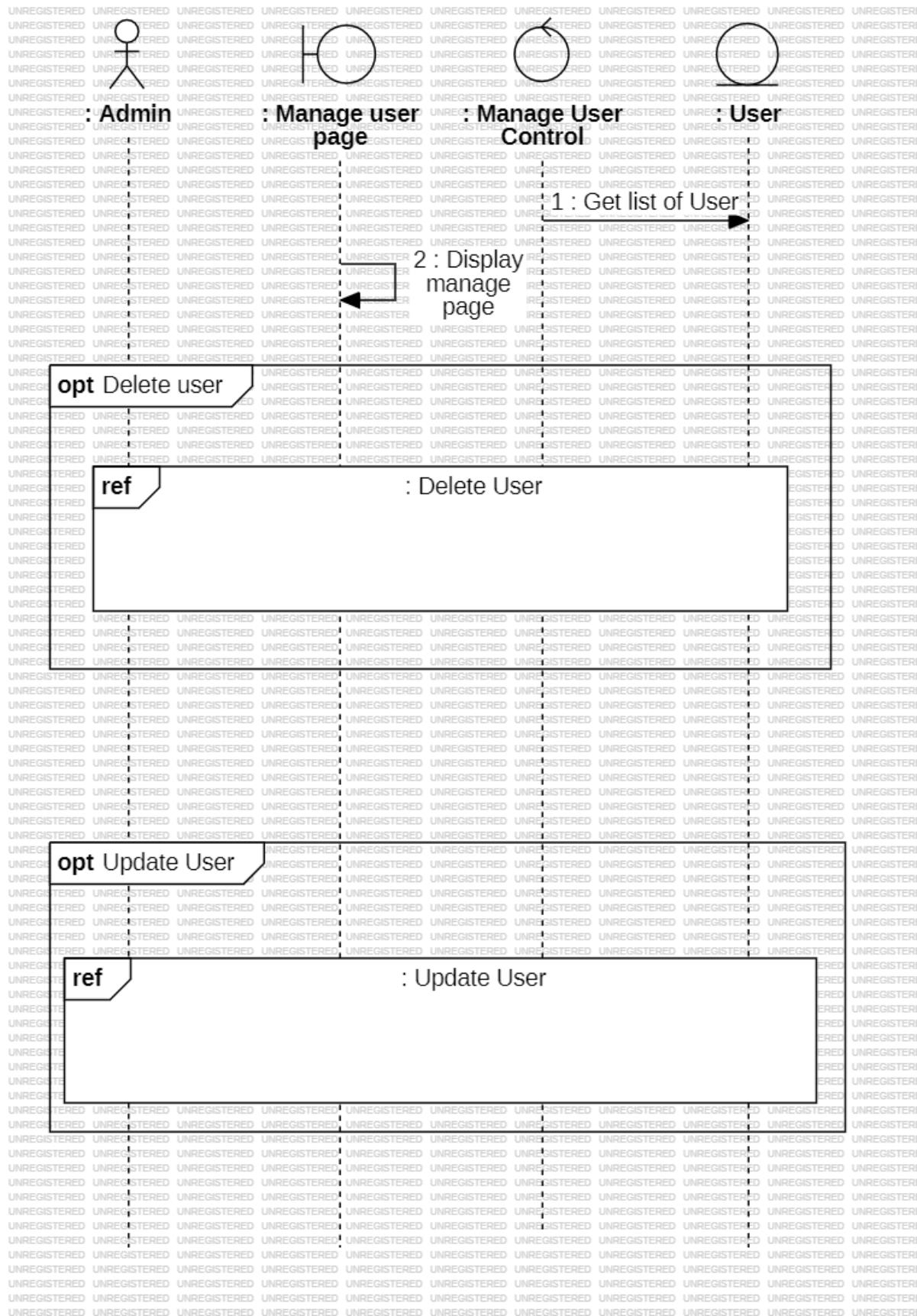
3.4.2.2.1 Sequence diagram for update web information

Furniture Online Store Website– Group 2



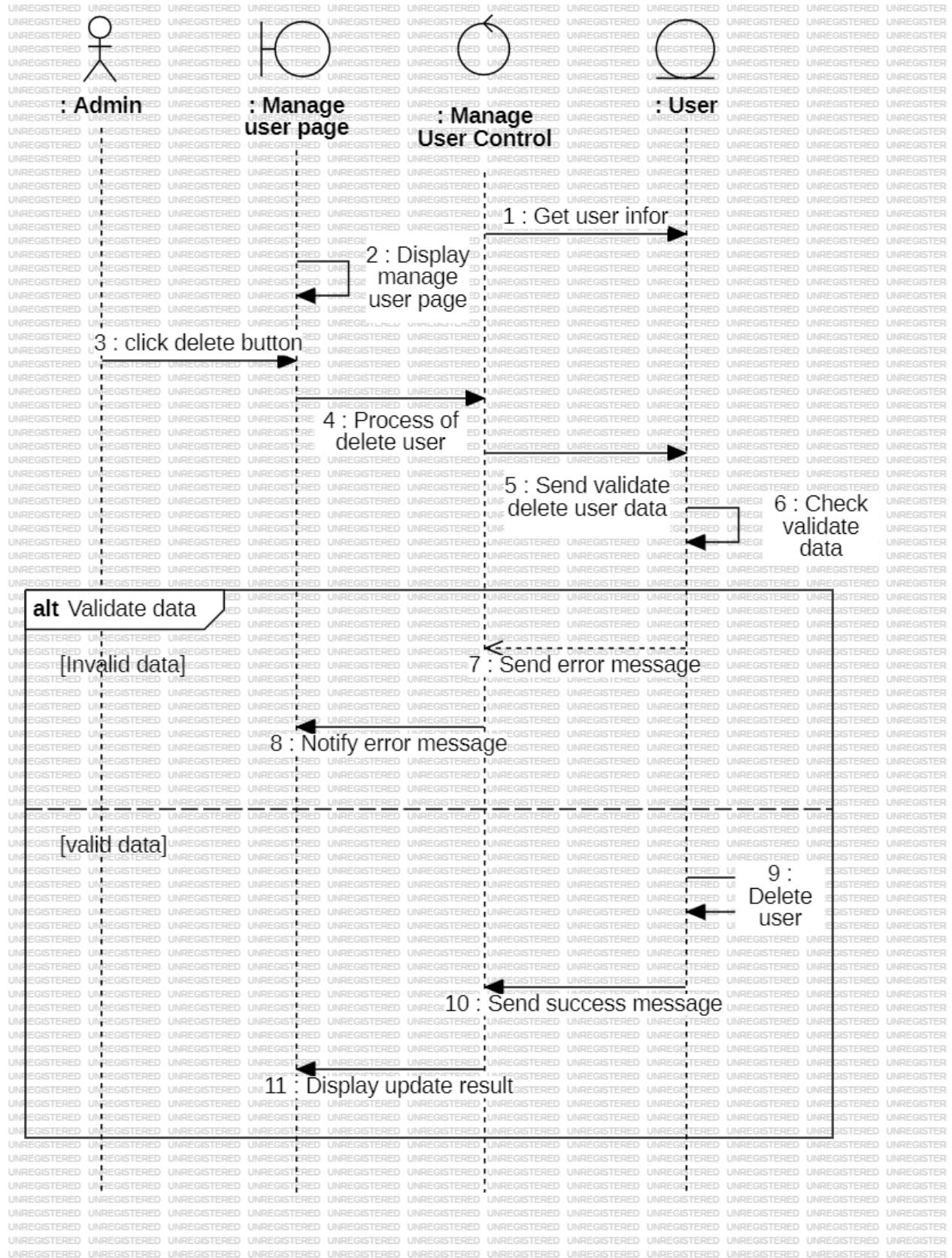
3.4.2.3 Sequence diagram for manage user

Furniture Online Store Website– Group 2



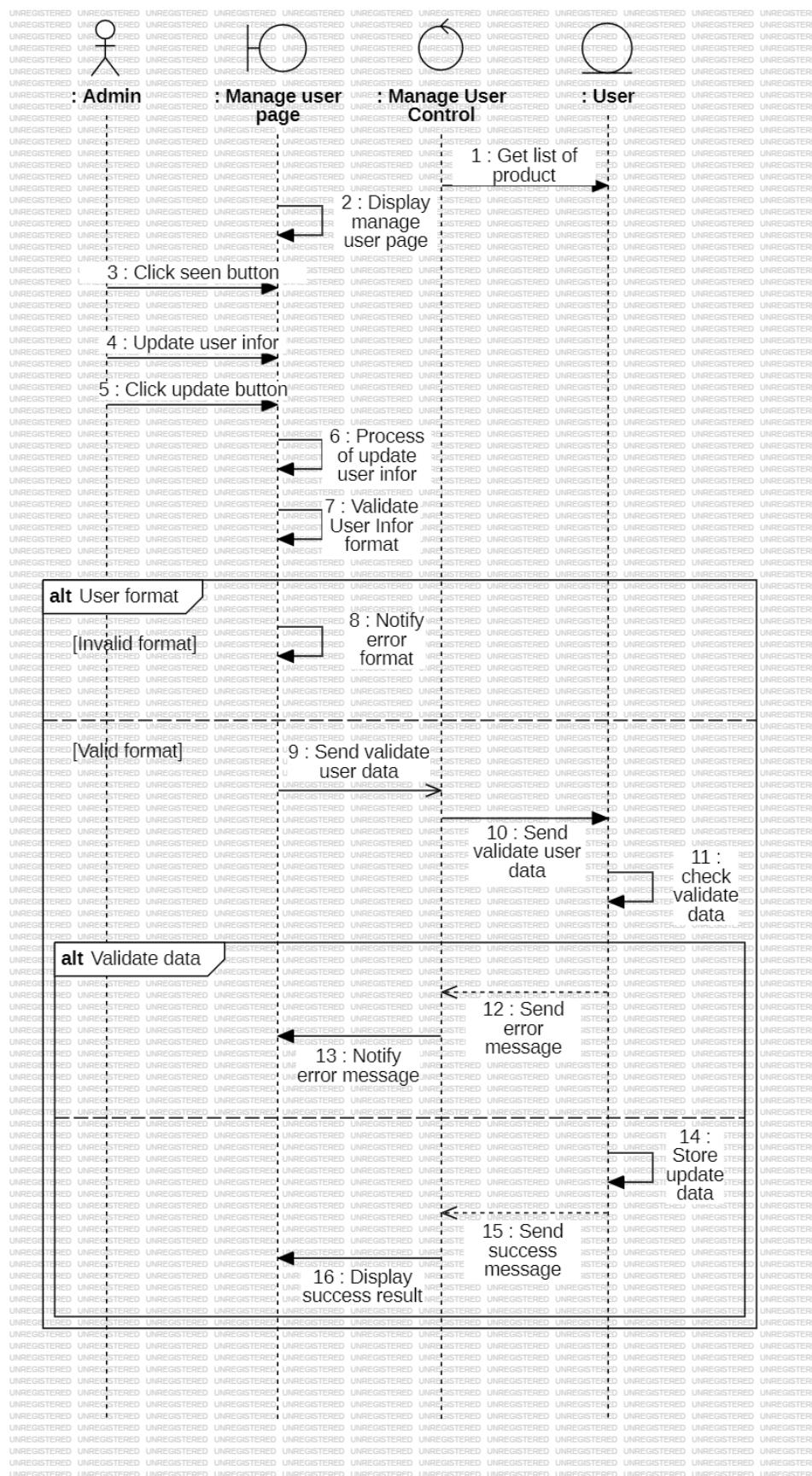
3.4.2.3.1 Sequence diagram for delete user

Furniture Online Store Website— Group 2



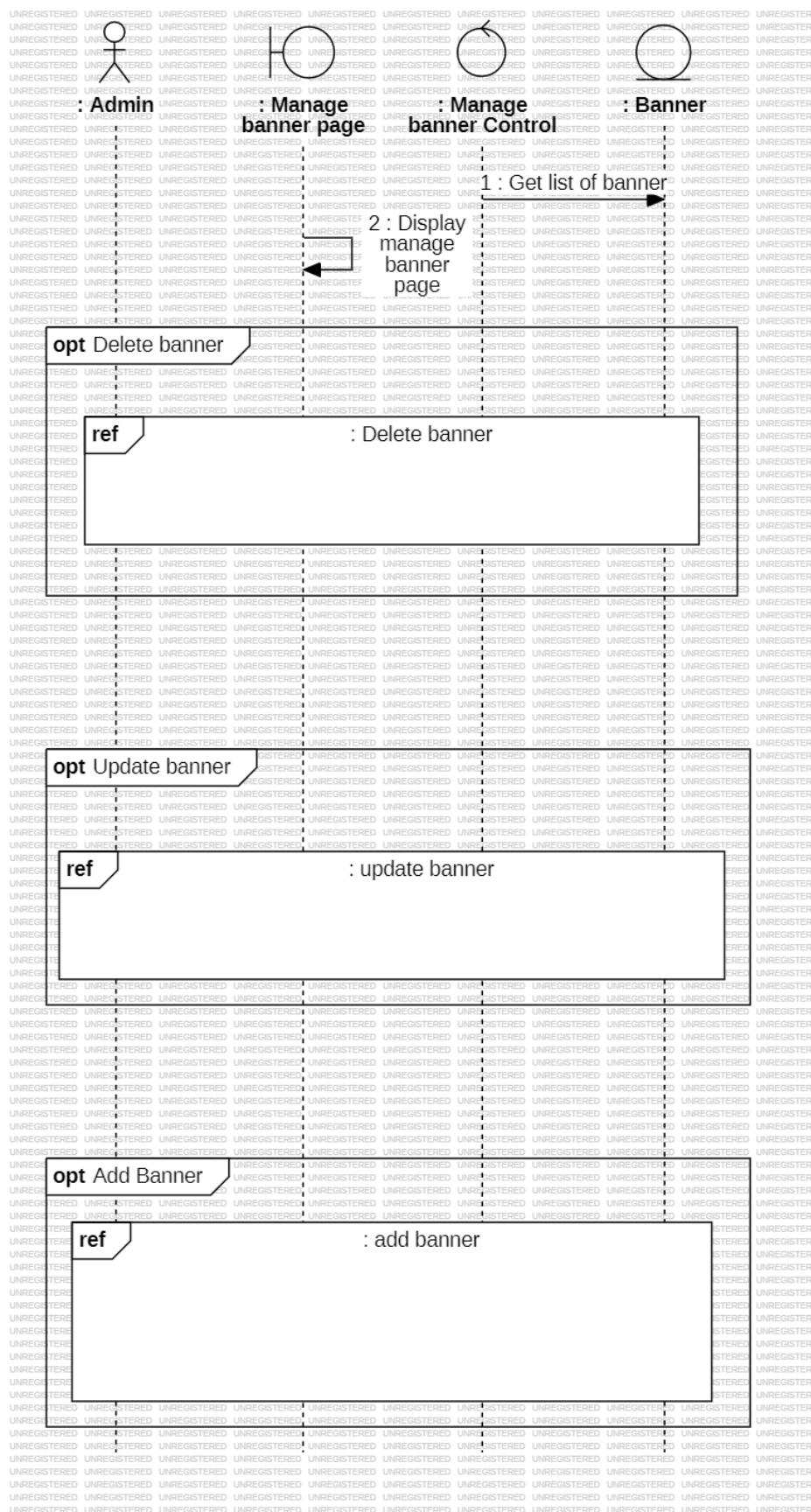
3.4.2.3.2 Sequence diagram for update user

Furniture Online Store Website– Group 2



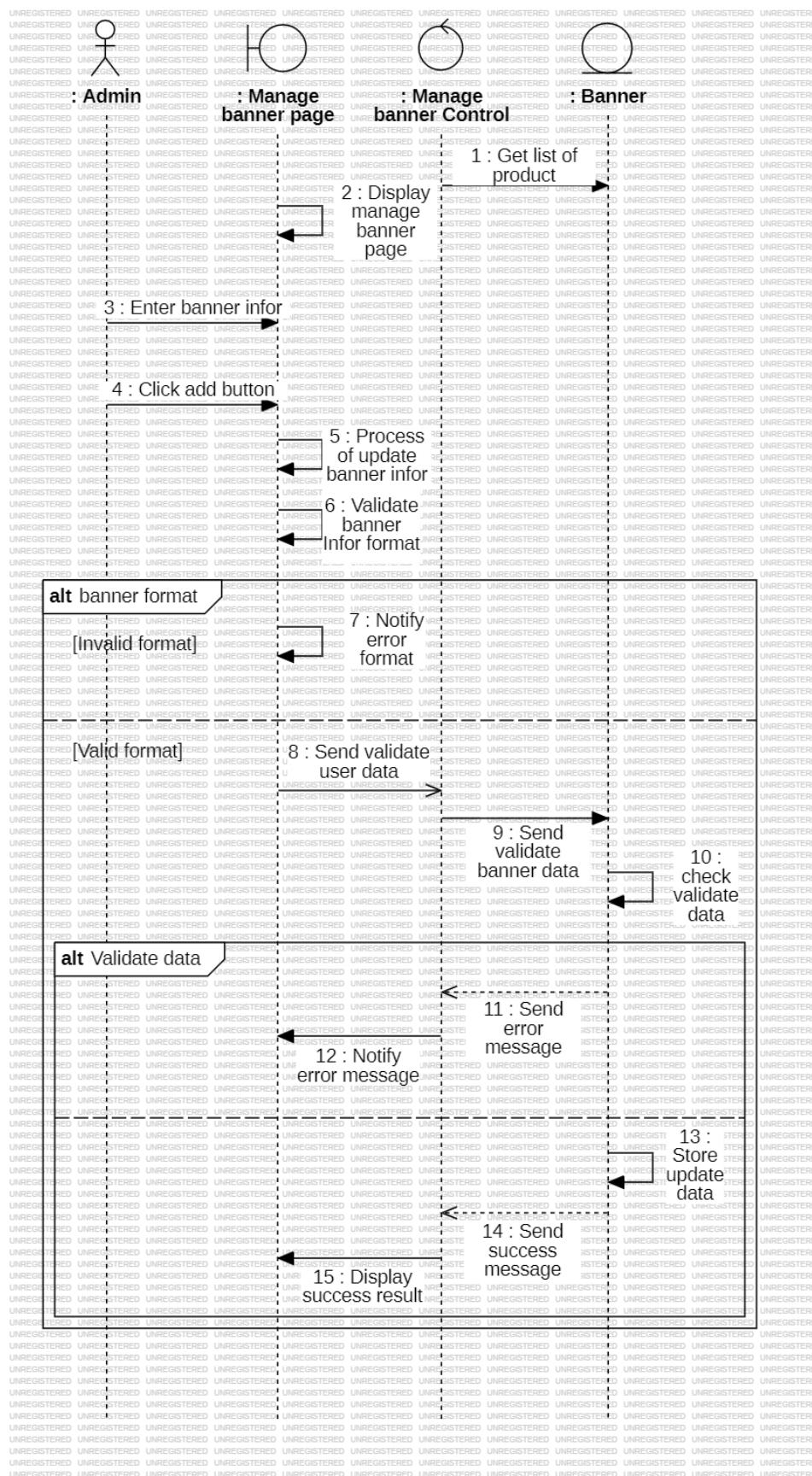
3.4.2.4 Sequence diagram for manage banner

Furniture Online Store Website– Group 2

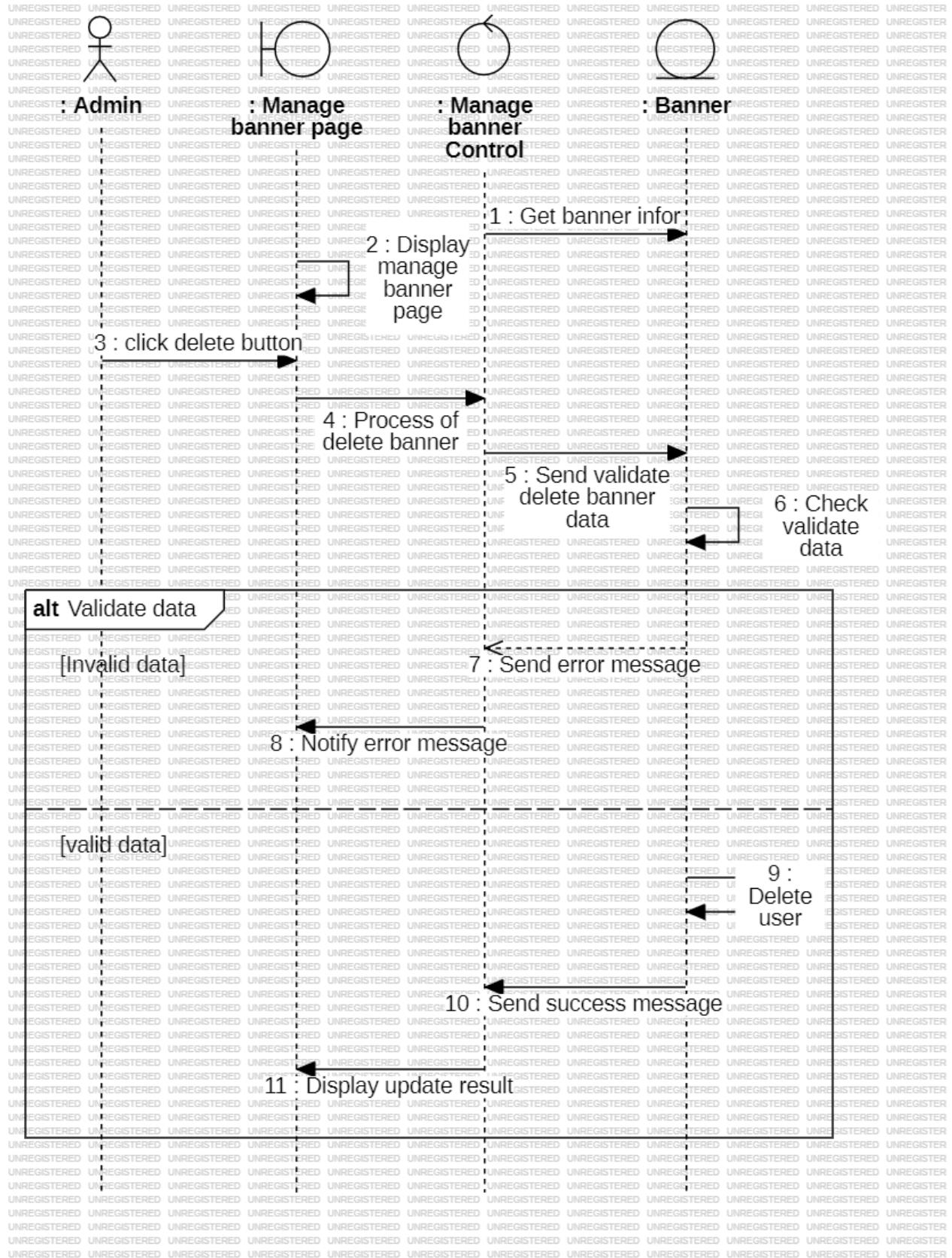


3.4.2.4.1 Sequence diagram for add banner

Furniture Online Store Website– Group 2

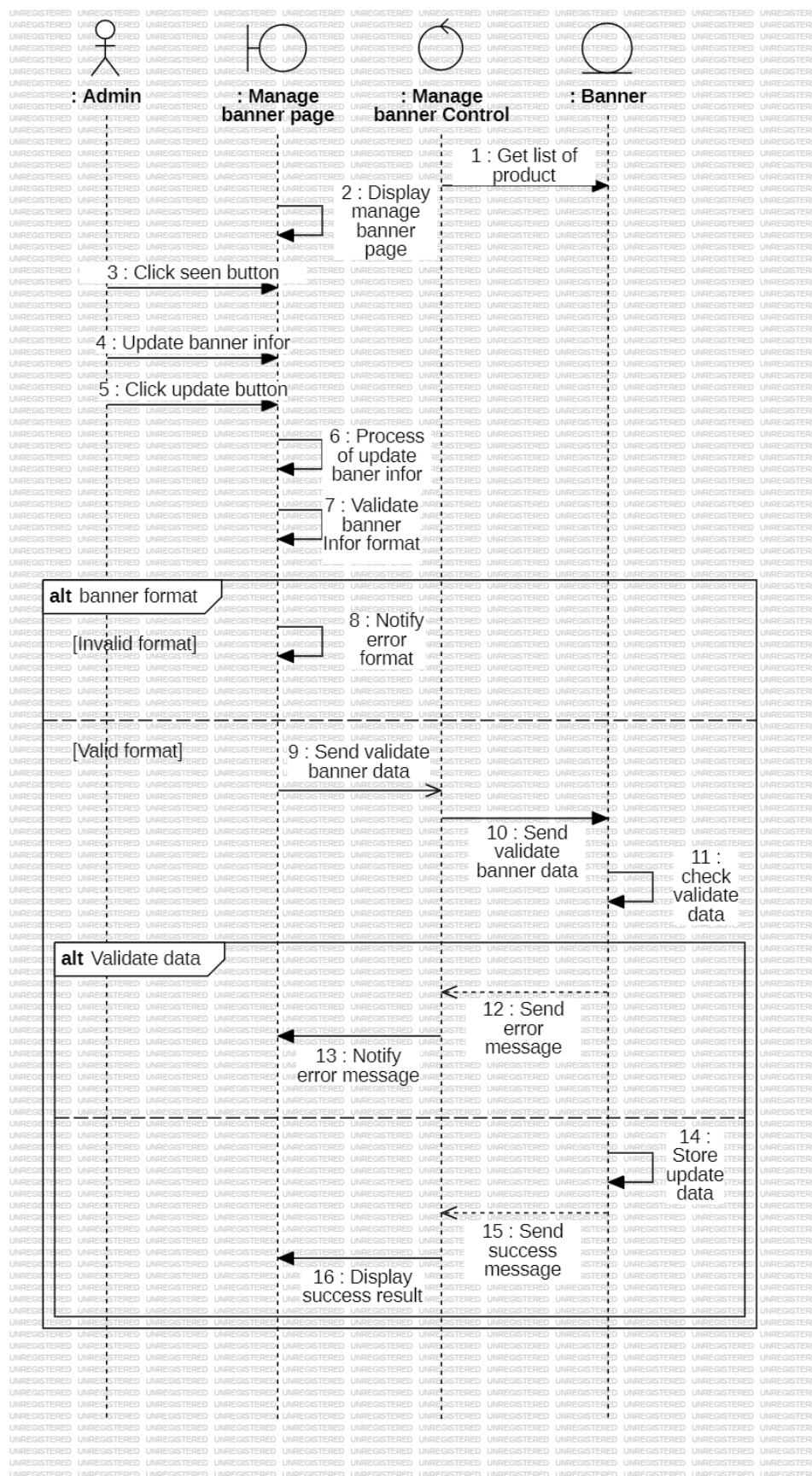


3.4.2.4.2 Sequence diagram for delete banner



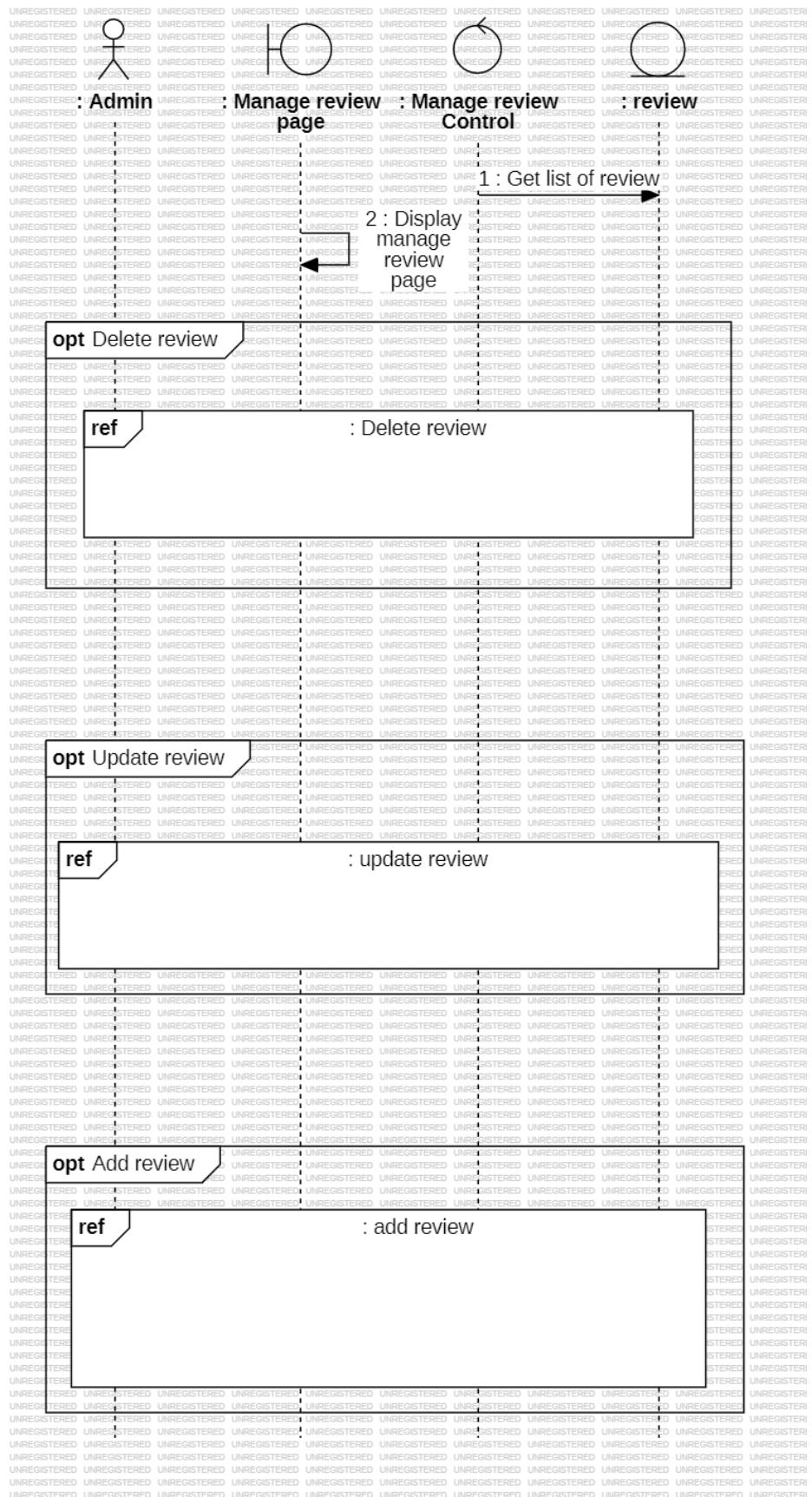
3.4.2.4.3 Sequence diagram for update banner

Furniture Online Store Website– Group 2



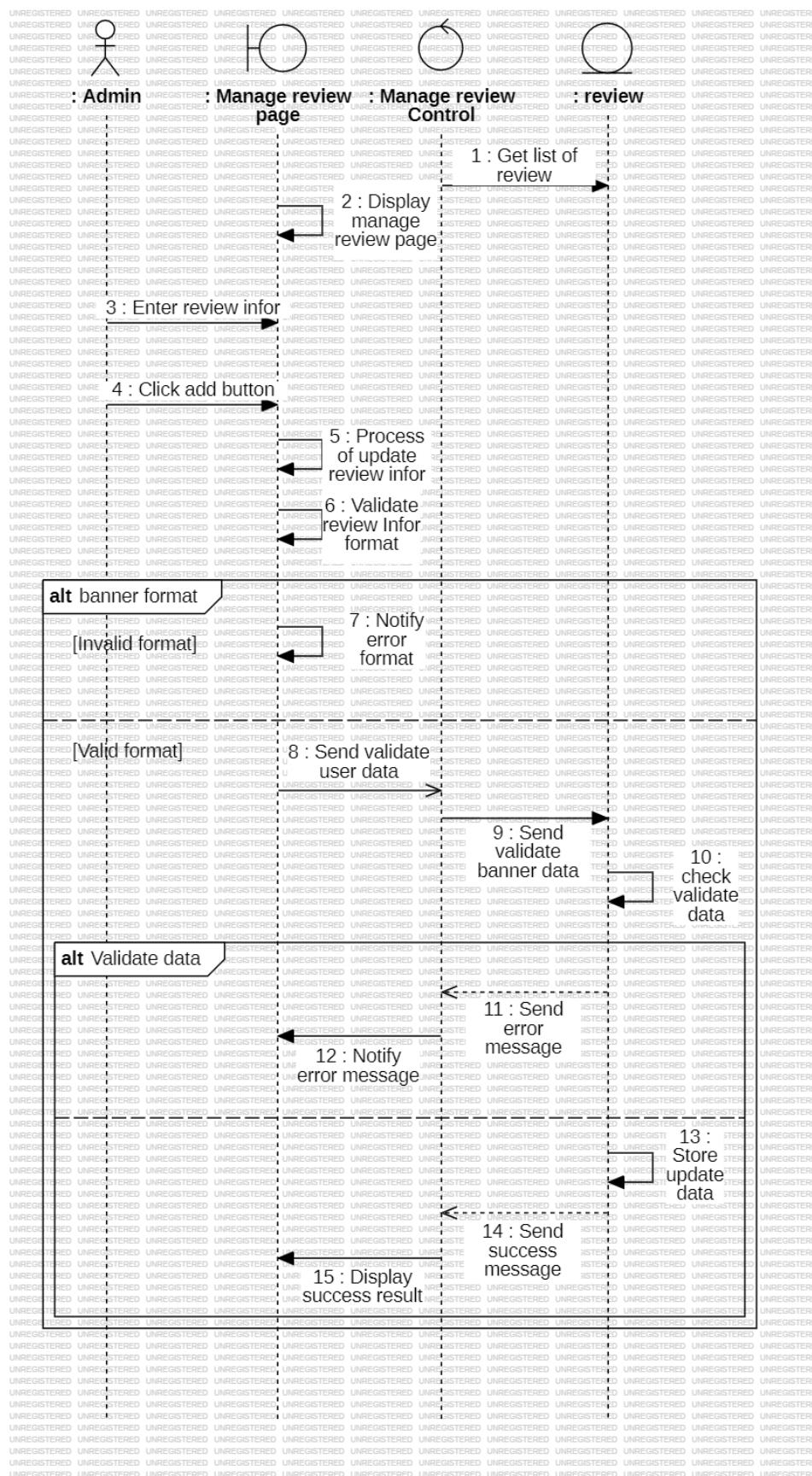
3.4.2.5 Sequence diagram for manage review as admin

Furniture Online Store Website— Group 2

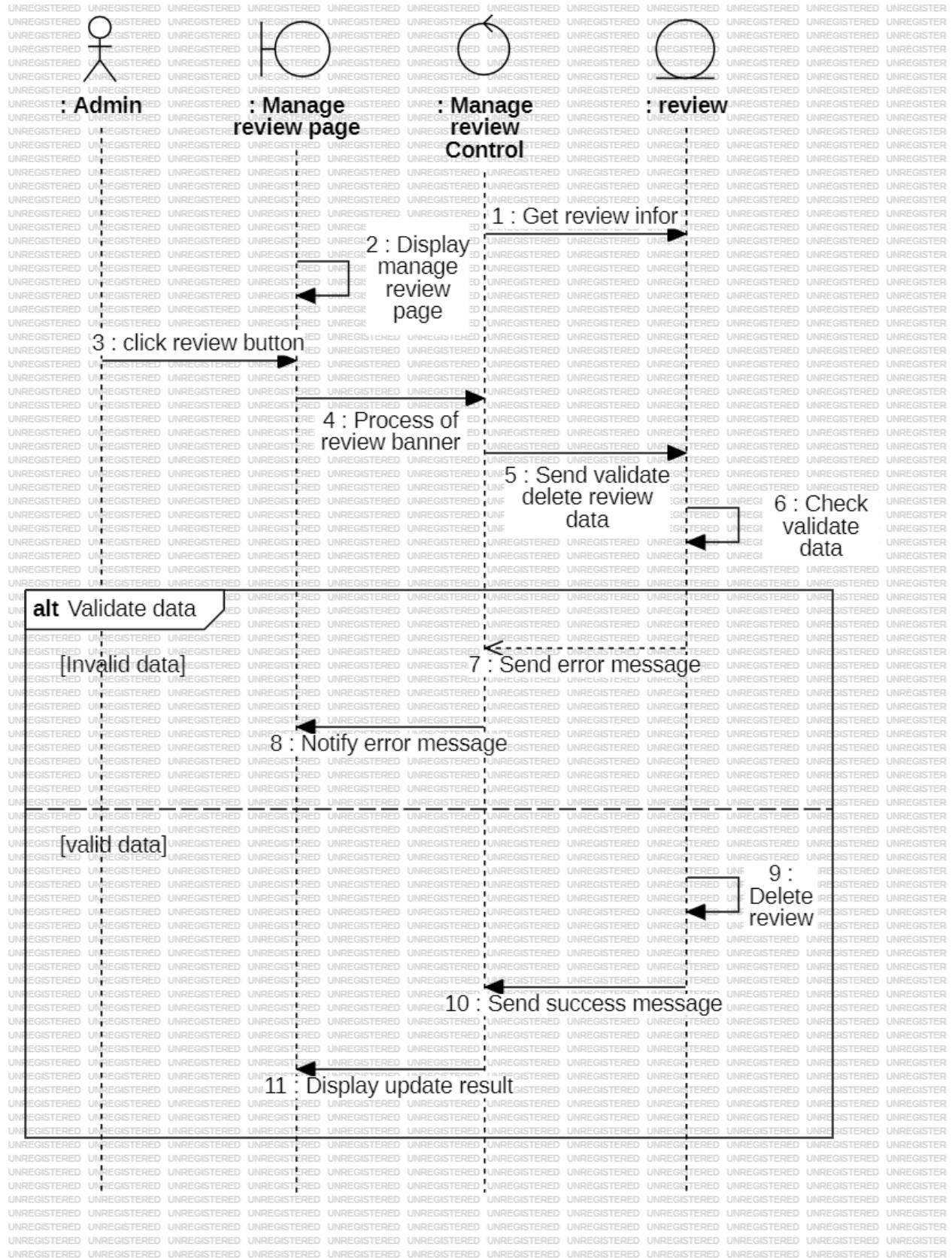


3.4.2.5.1 Sequence diagram for add review as admin

Furniture Online Store Website– Group 2

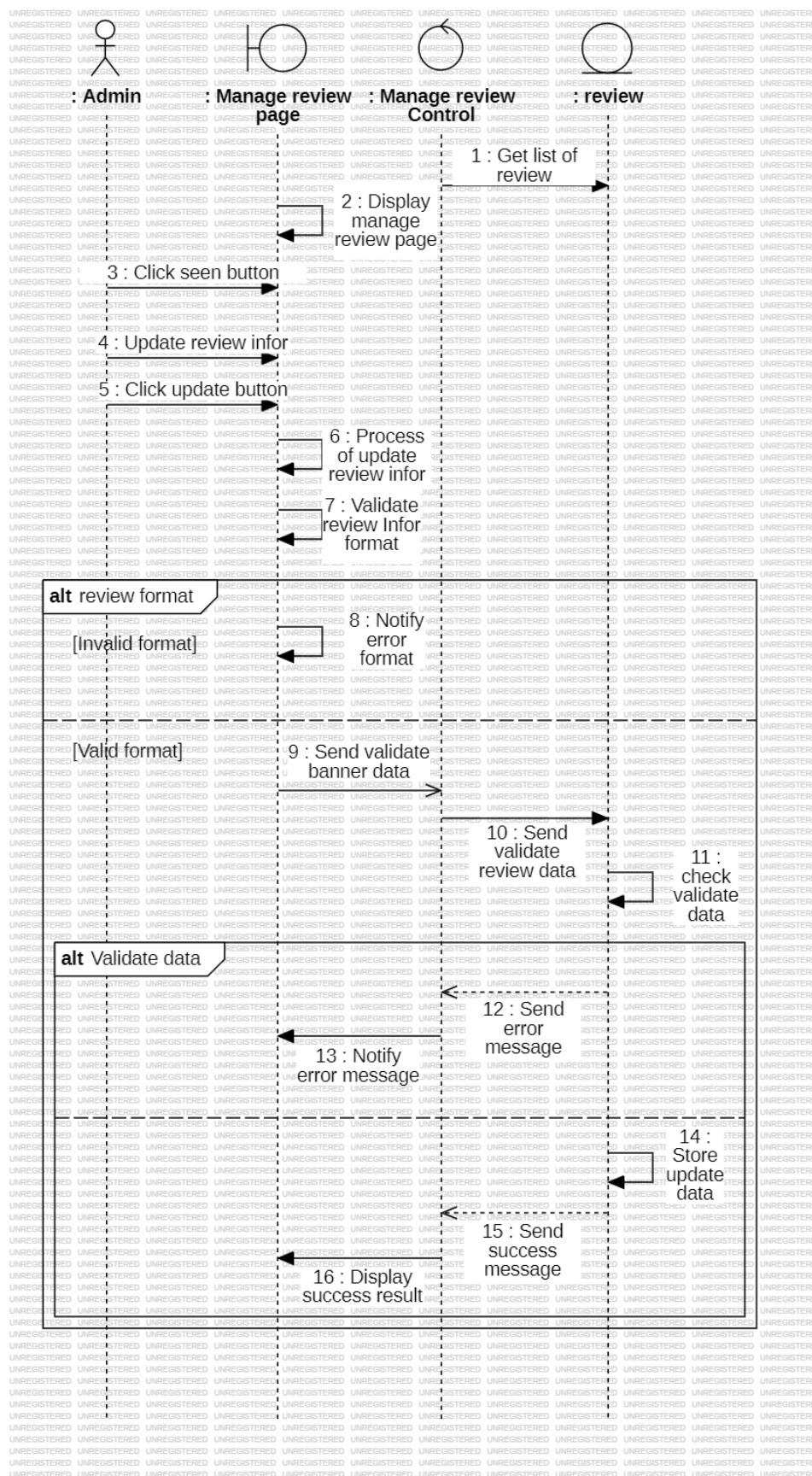


3.4.2.5.2 Sequence diagram for delete review as admin



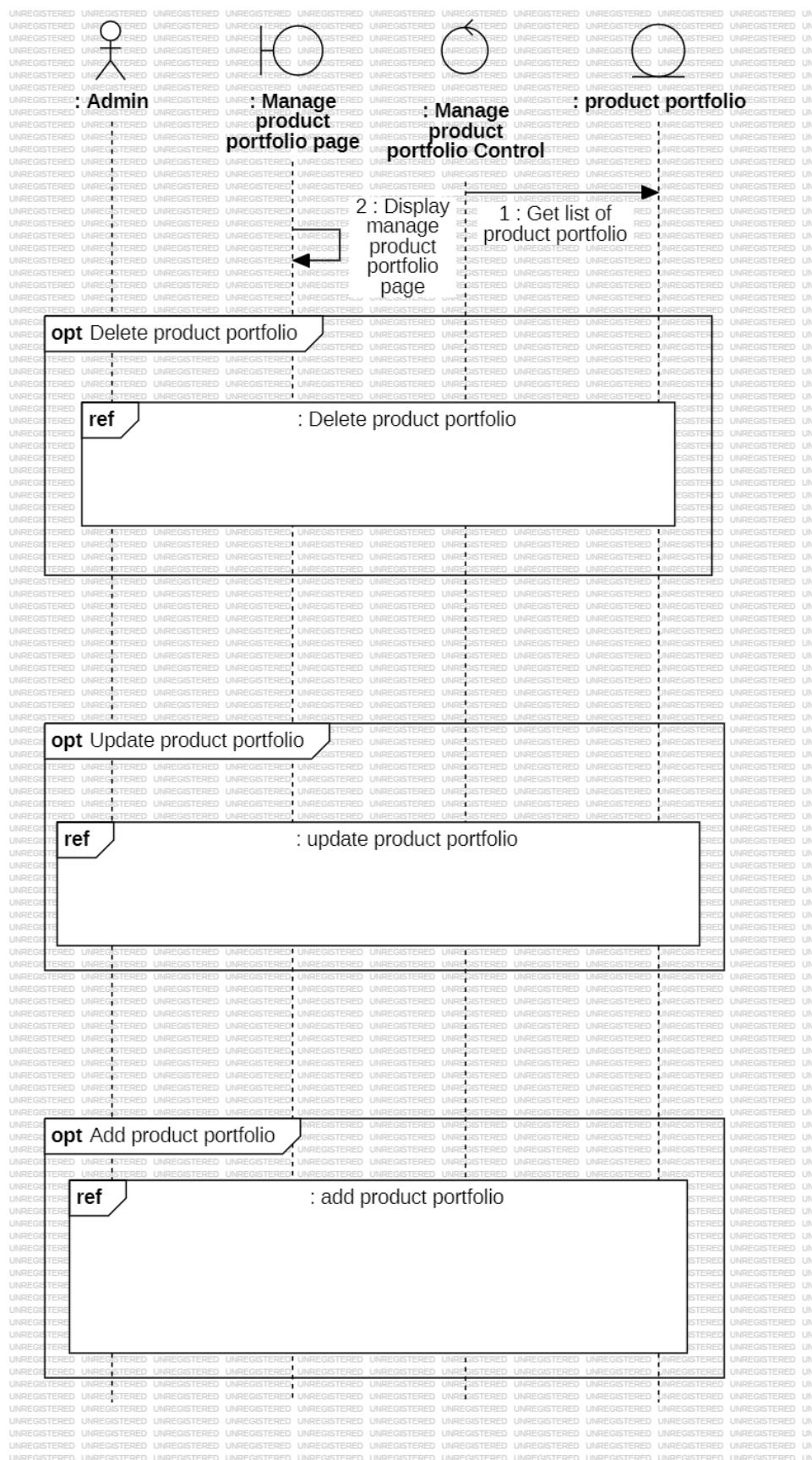
3.4.2.5.3 Sequence diagram for update review as admin

Furniture Online Store Website– Group 2



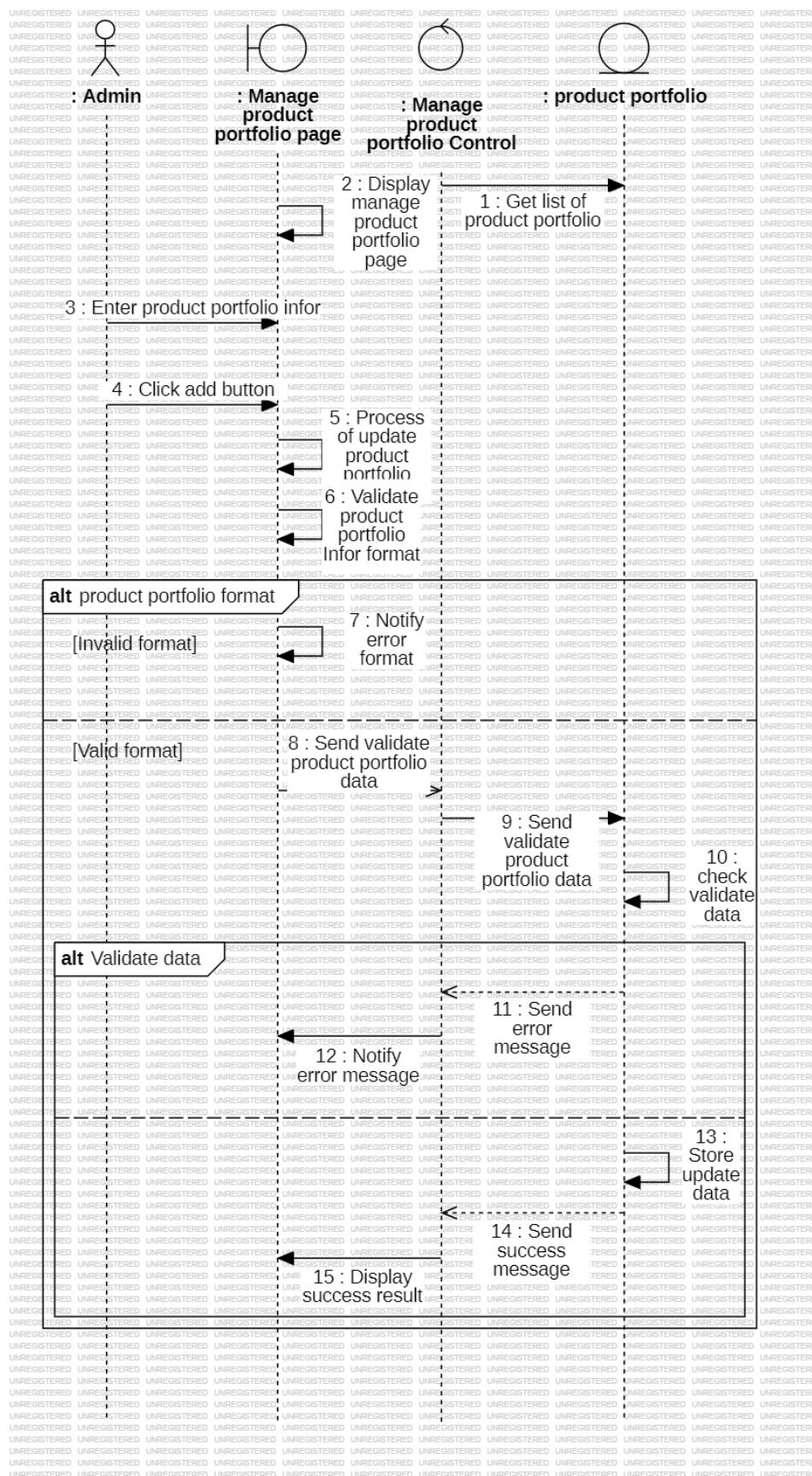
3.4.2.6 Sequence diagram for manage product portfolio as admin

Furniture Online Store Website– Group 2

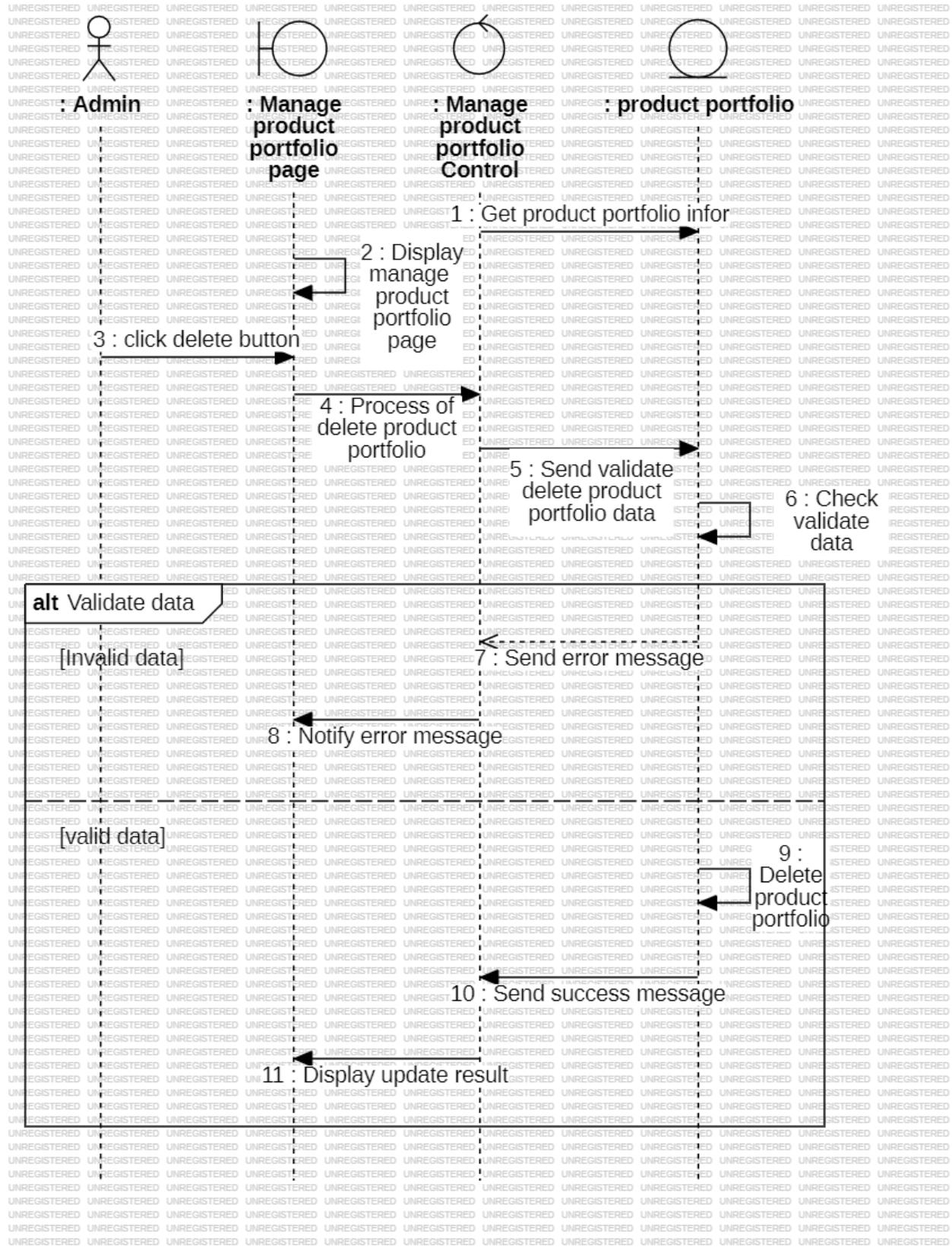


3.4.2.6.1 Sequence diagram for add product portfolio as admin

Furniture Online Store Website– Group 2

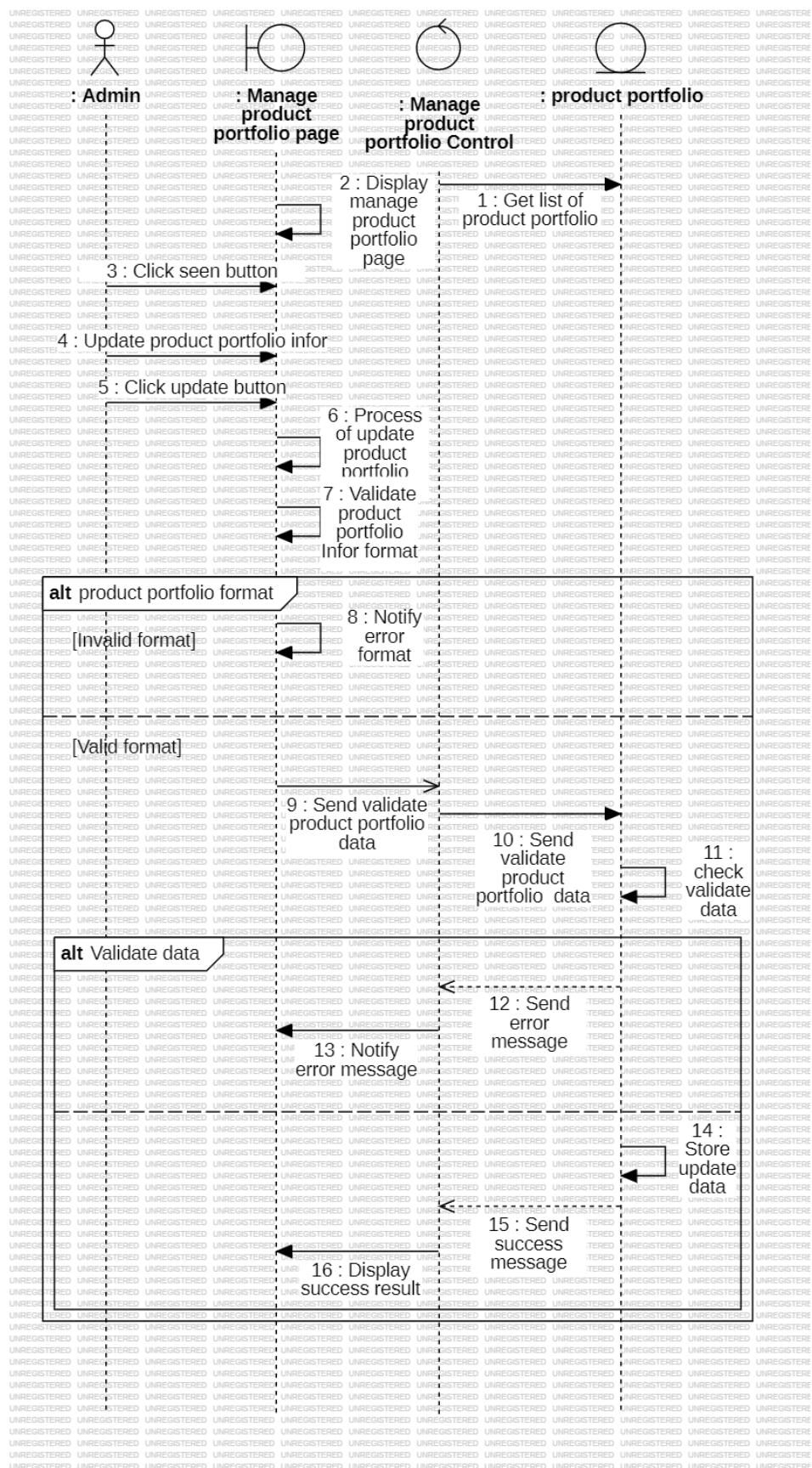


3.4.2.6.2 Sequence diagram for delete product portfolio as admin



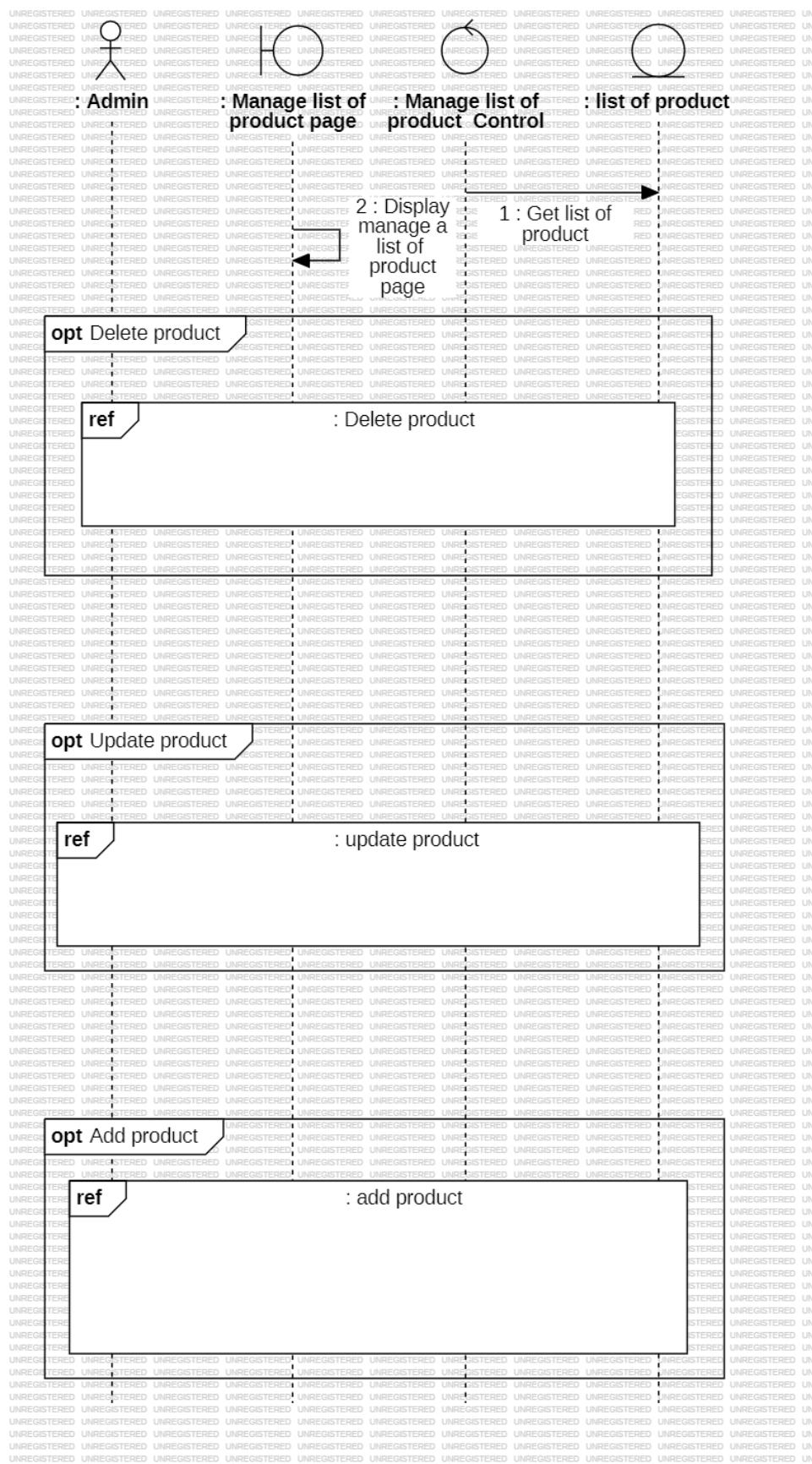
3.4.2.6.3 Sequence diagram for update product portfolio as admin

Furniture Online Store Website— Group 2



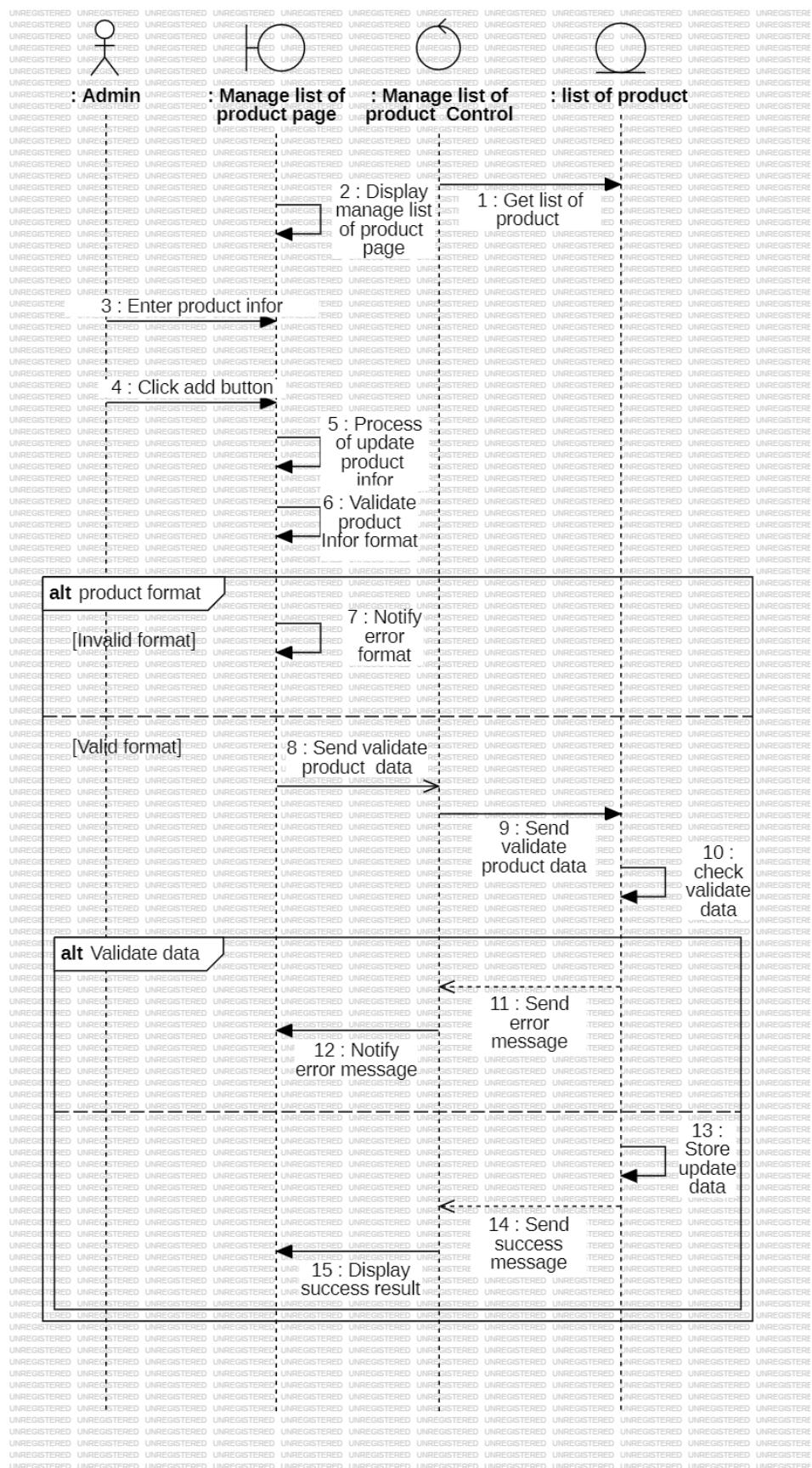
3.4.2.7 Sequence diagram for Manage List of Product as admin

Furniture Online Store Website– Group 2

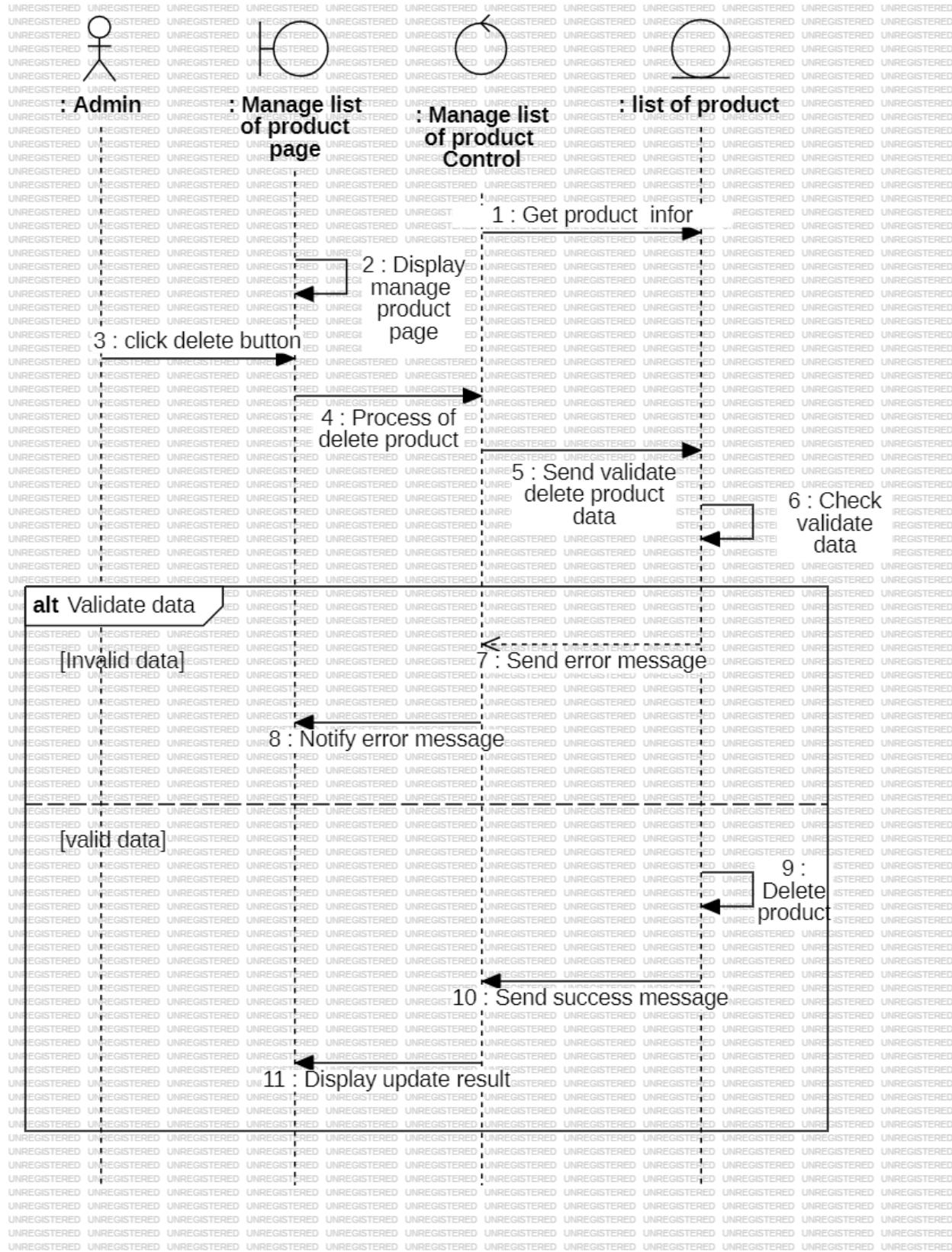


3.4.2.7.1 Sequence diagram for Add product to list as admin

Furniture Online Store Website– Group 2

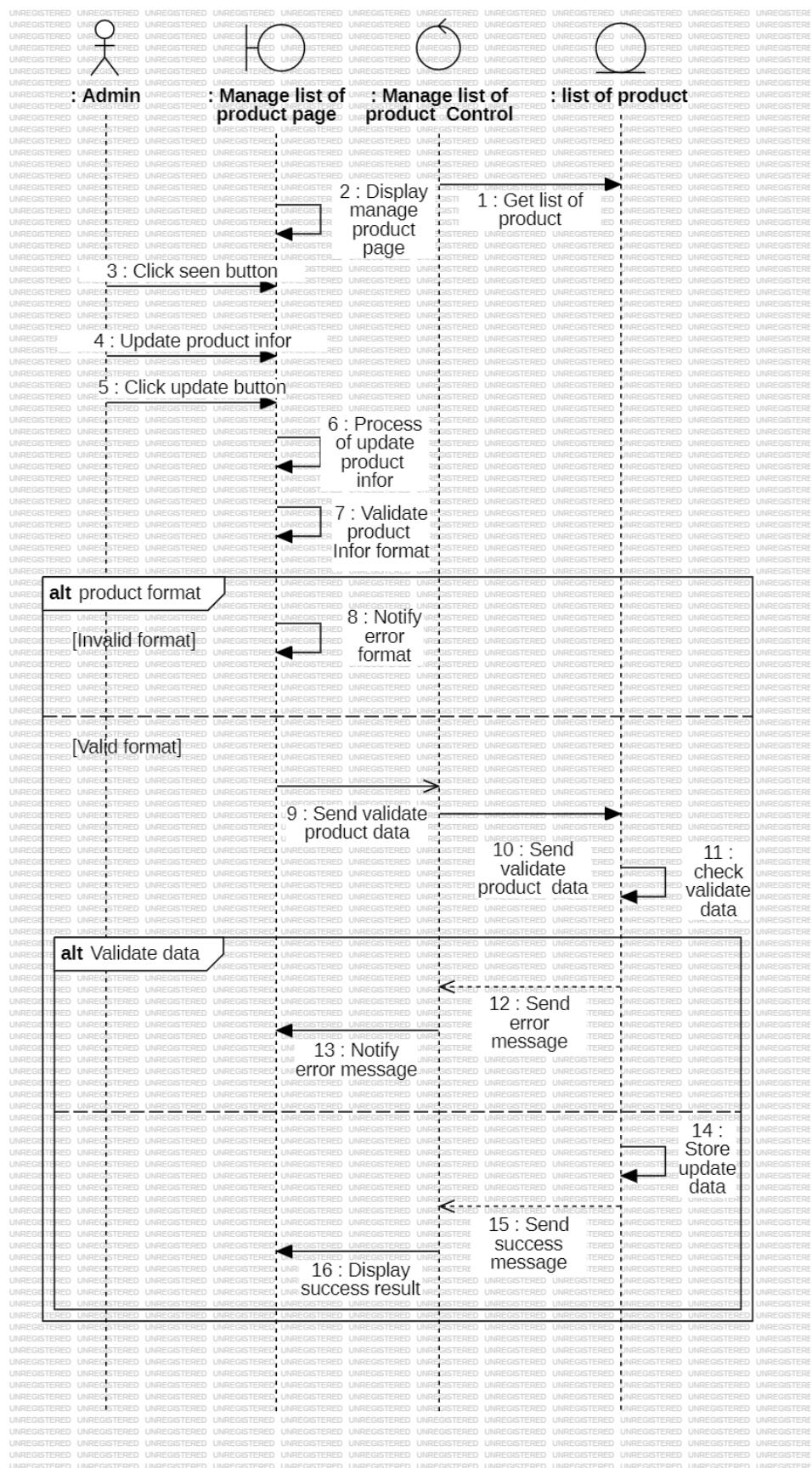


3.4.2.7.2 Sequence diagram for Delete product from list as admin



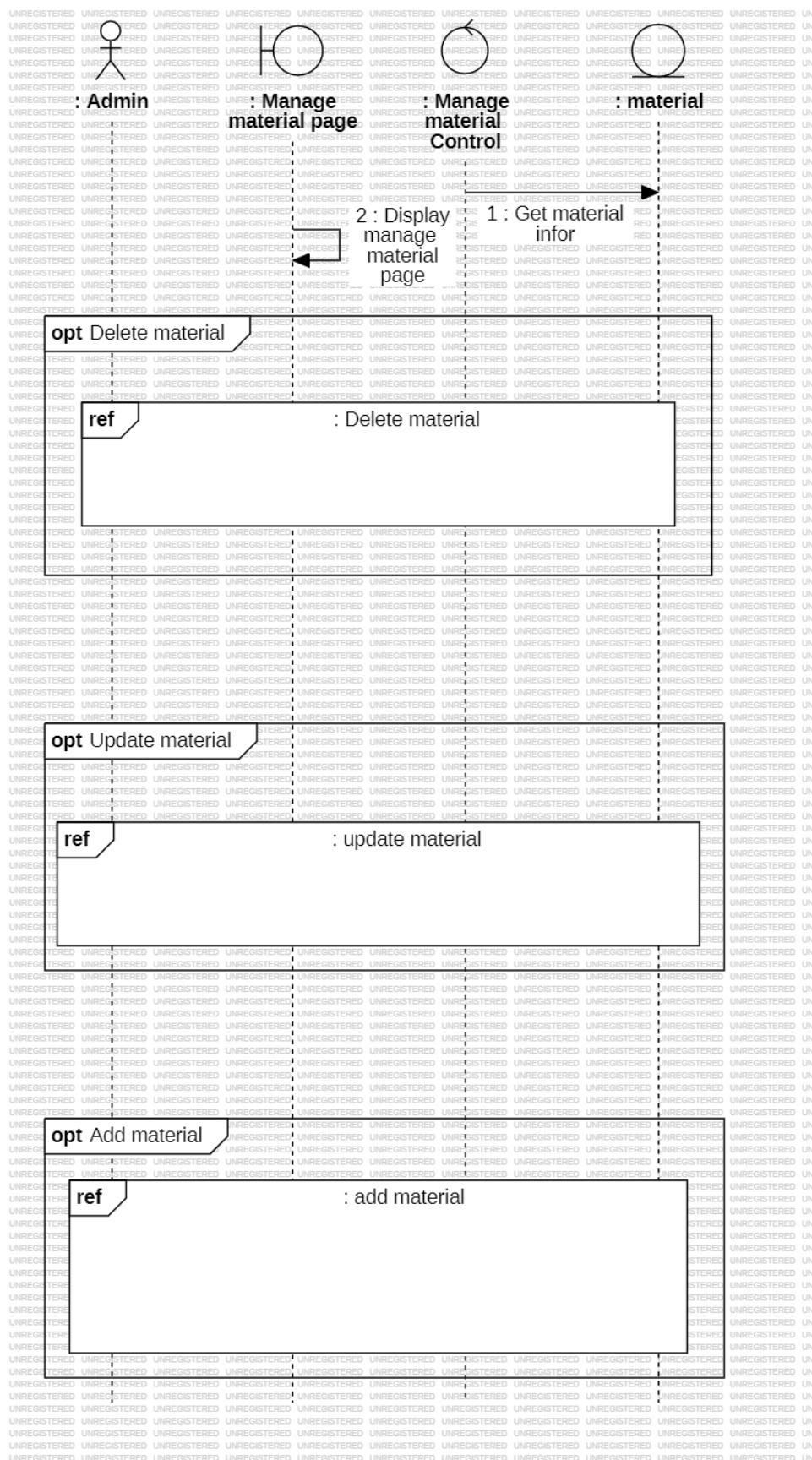
3.4.2.7.3 Sequence diagram for Update product in list as admin

Furniture Online Store Website– Group 2



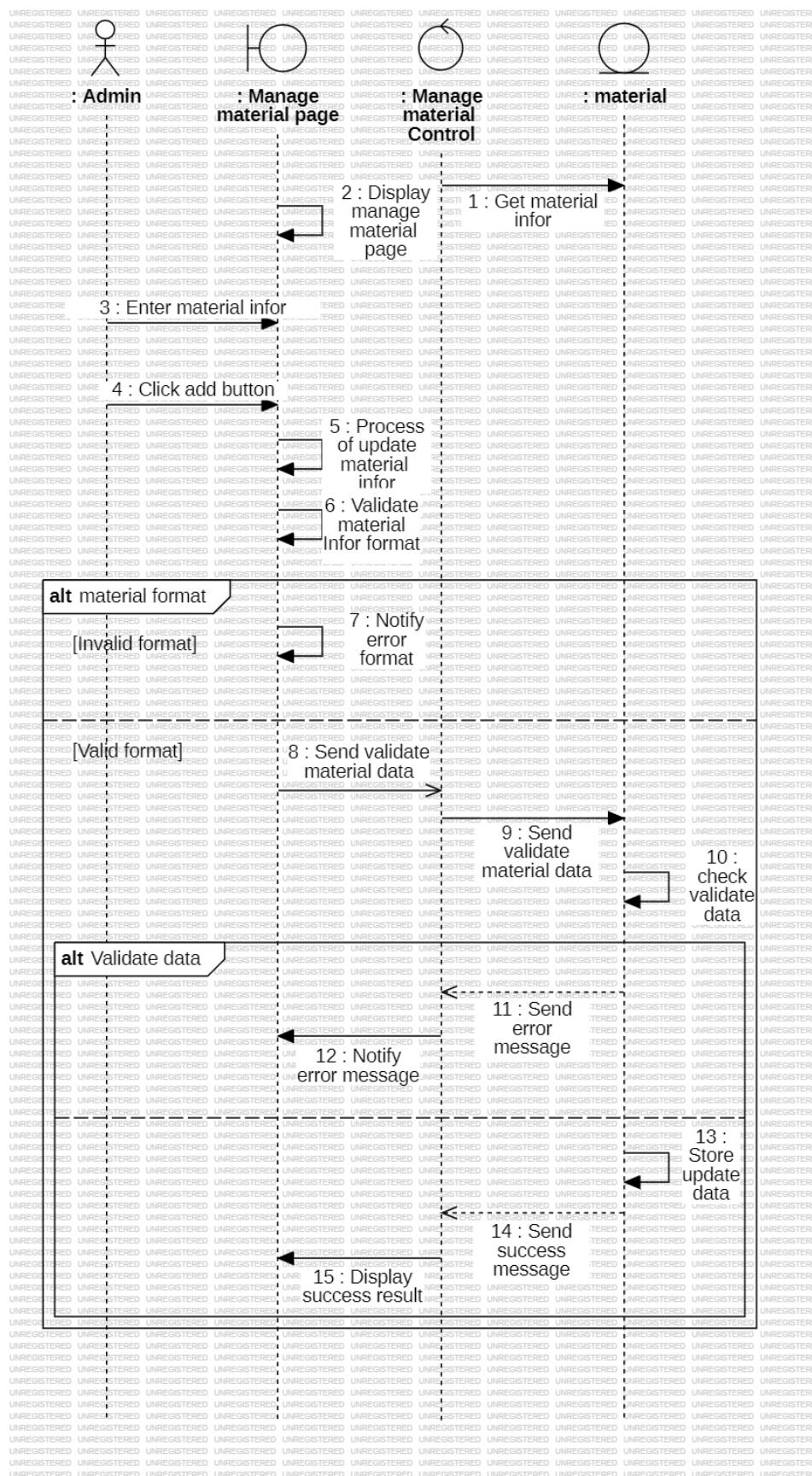
3.4.2.8 Sequence diagram for manage material as admin

Furniture Online Store Website– Group 2



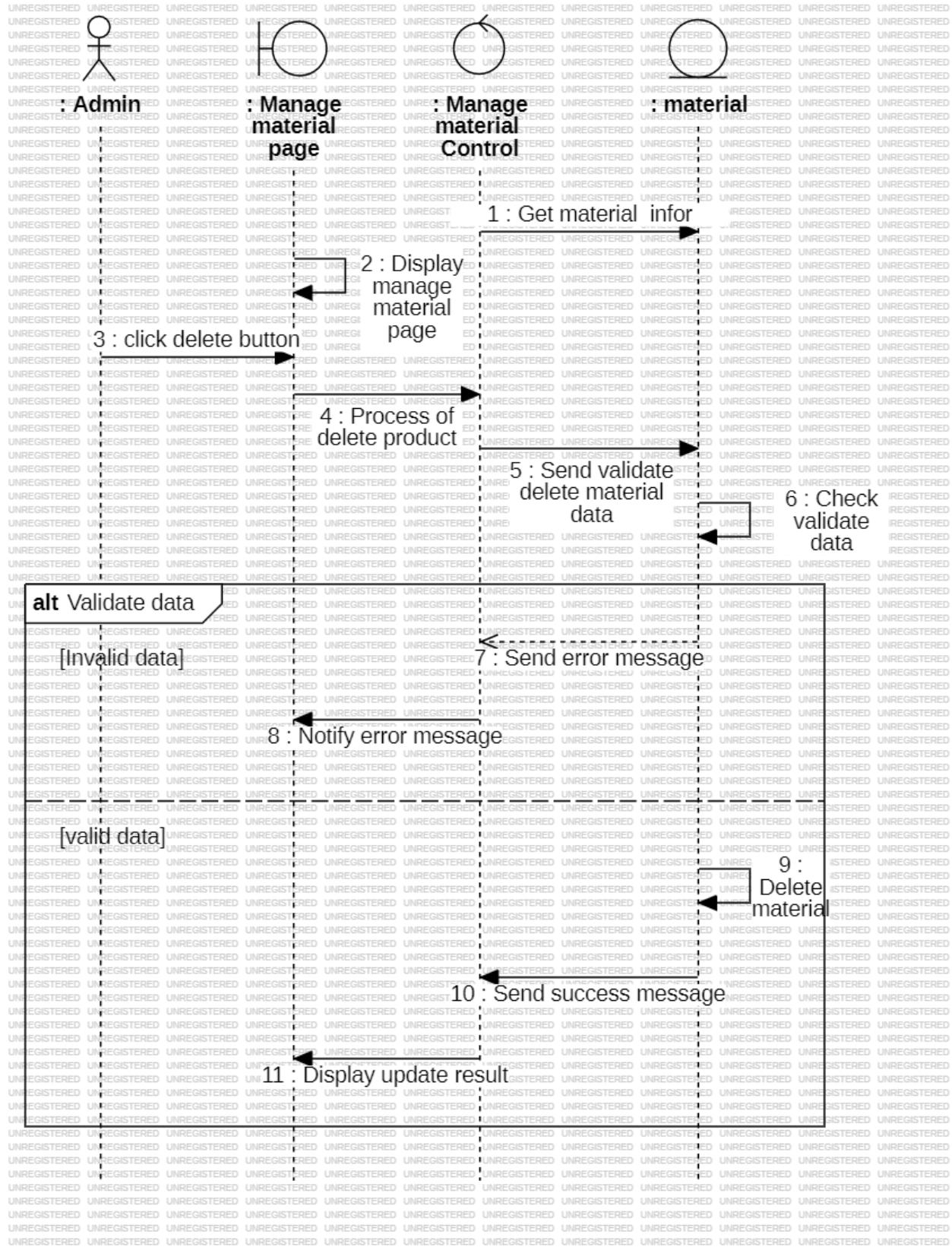
3.4.2.8.1 Sequence diagram for add material as admin

Furniture Online Store Website– Group 2



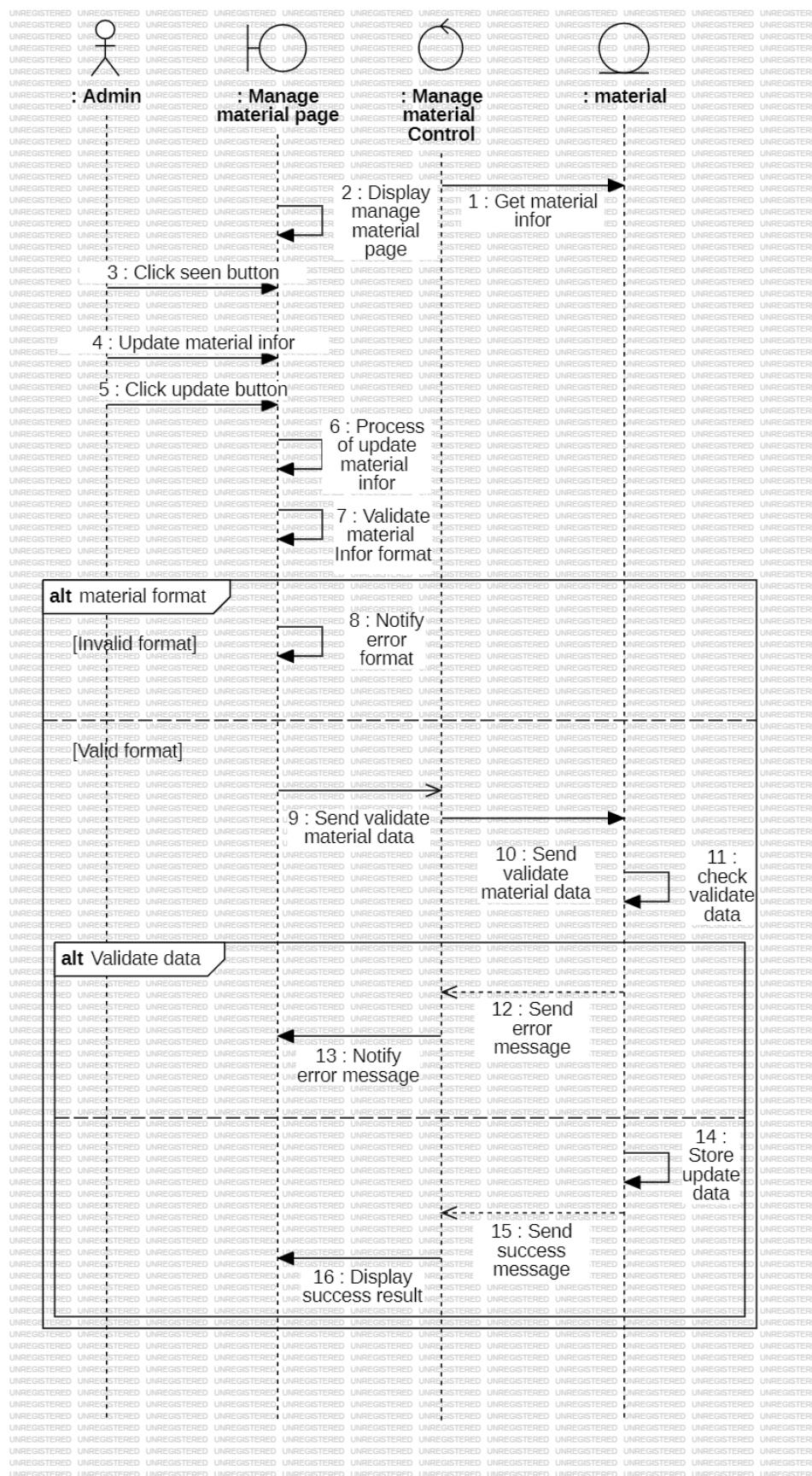
3.4.2.8.2 Sequence diagram for delete material as admin

Furniture Online Store Website– Group 2



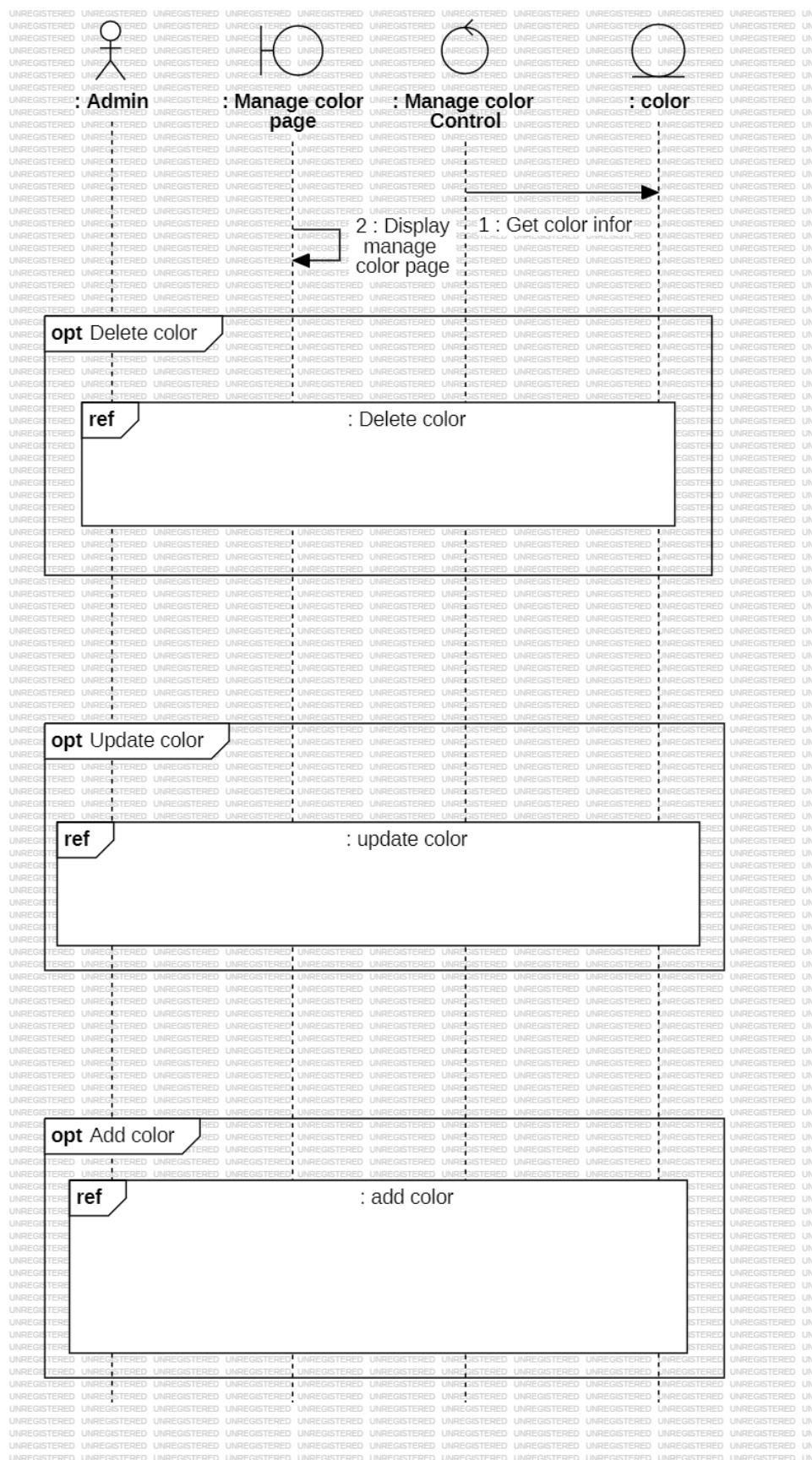
3.4.2.8.3 Sequence diagram for update material as admin

Furniture Online Store Website– Group 2



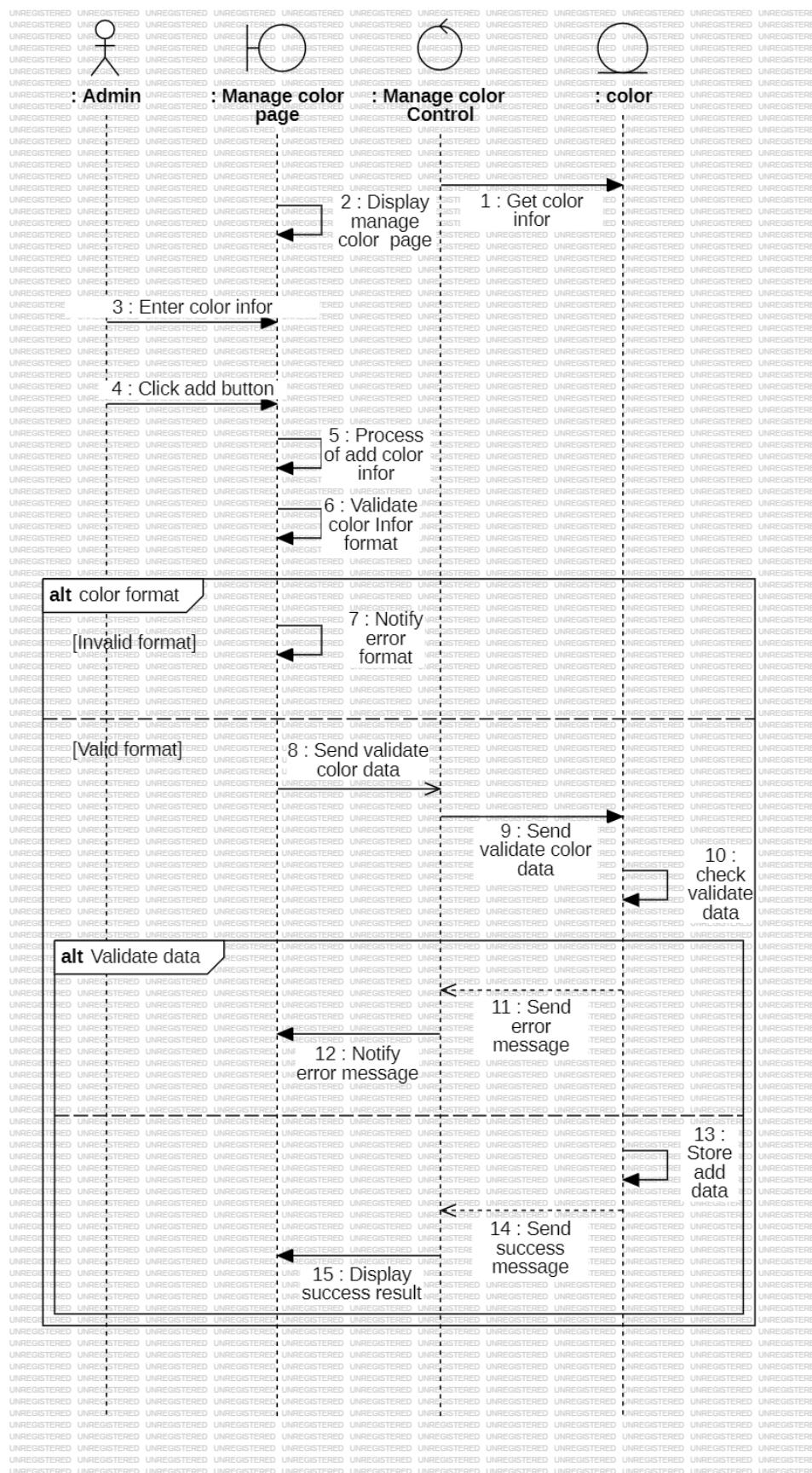
3.4.2.9 Sequence diagram for manage color as admin

Furniture Online Store Website– Group 2

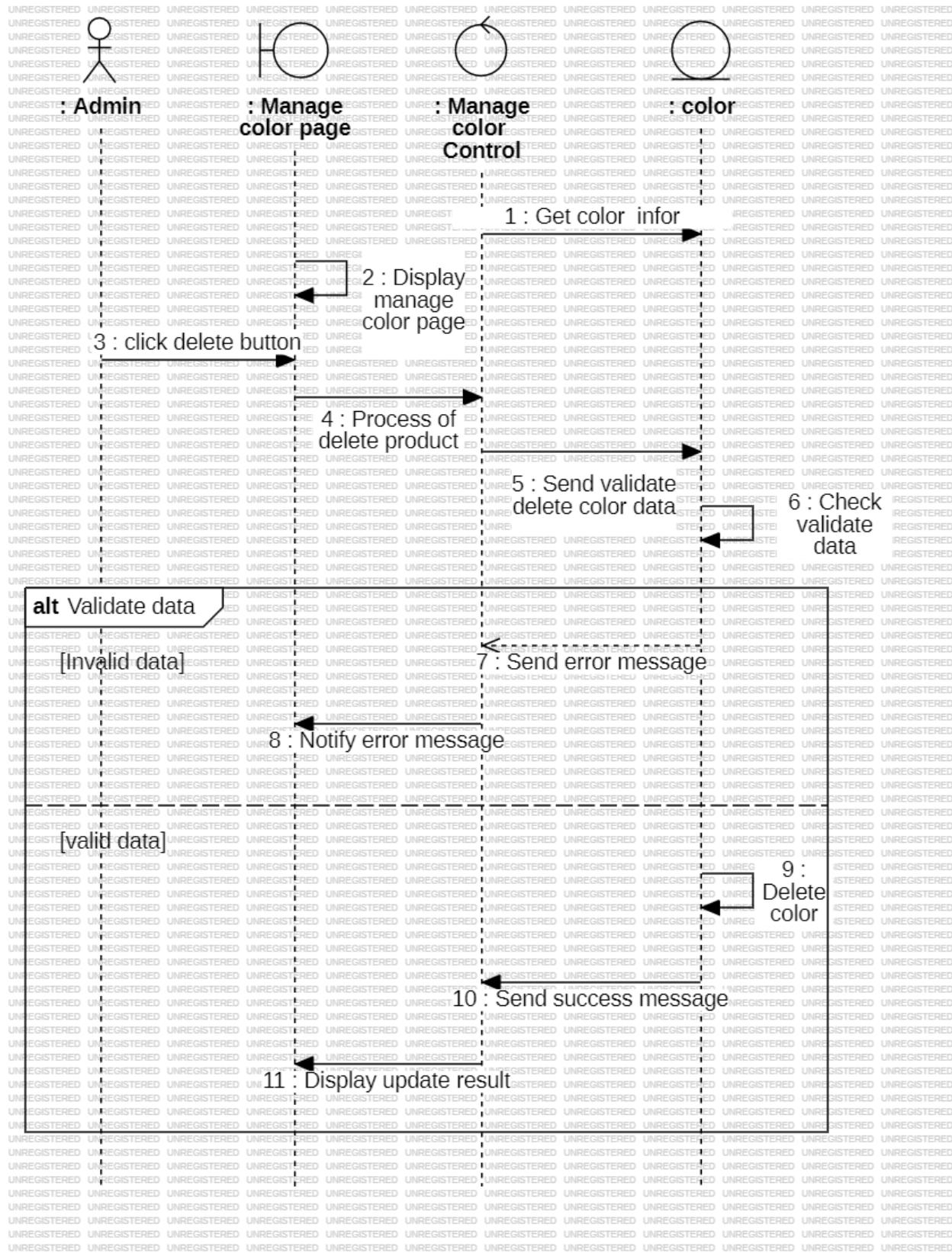


3.4.2.9.1 Sequence diagram for add color as admin

Furniture Online Store Website— Group 2

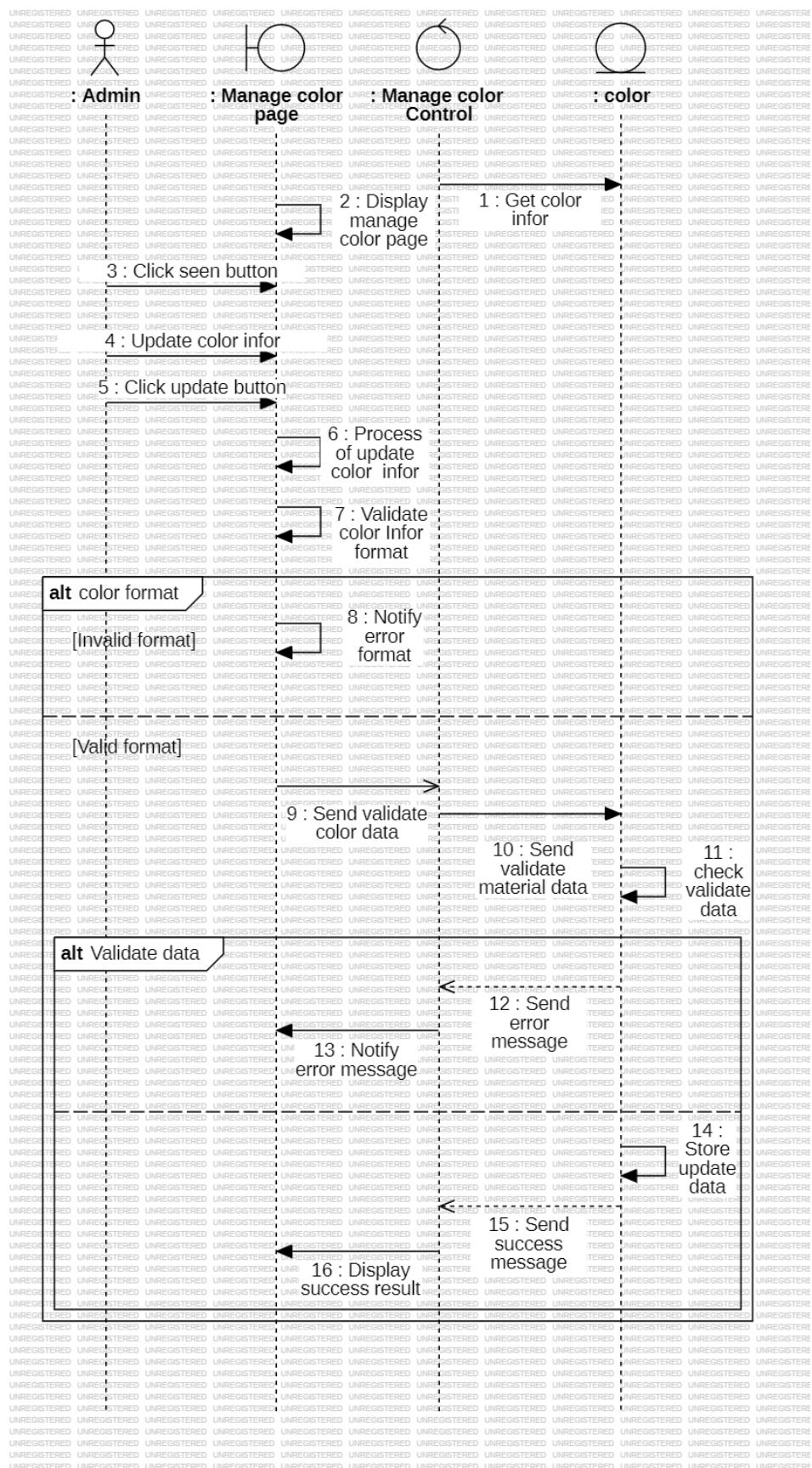


3.4.2.9.2 Sequence diagram for delete color as admin



3.4.2.9.3 Sequence diagram for update color as admin

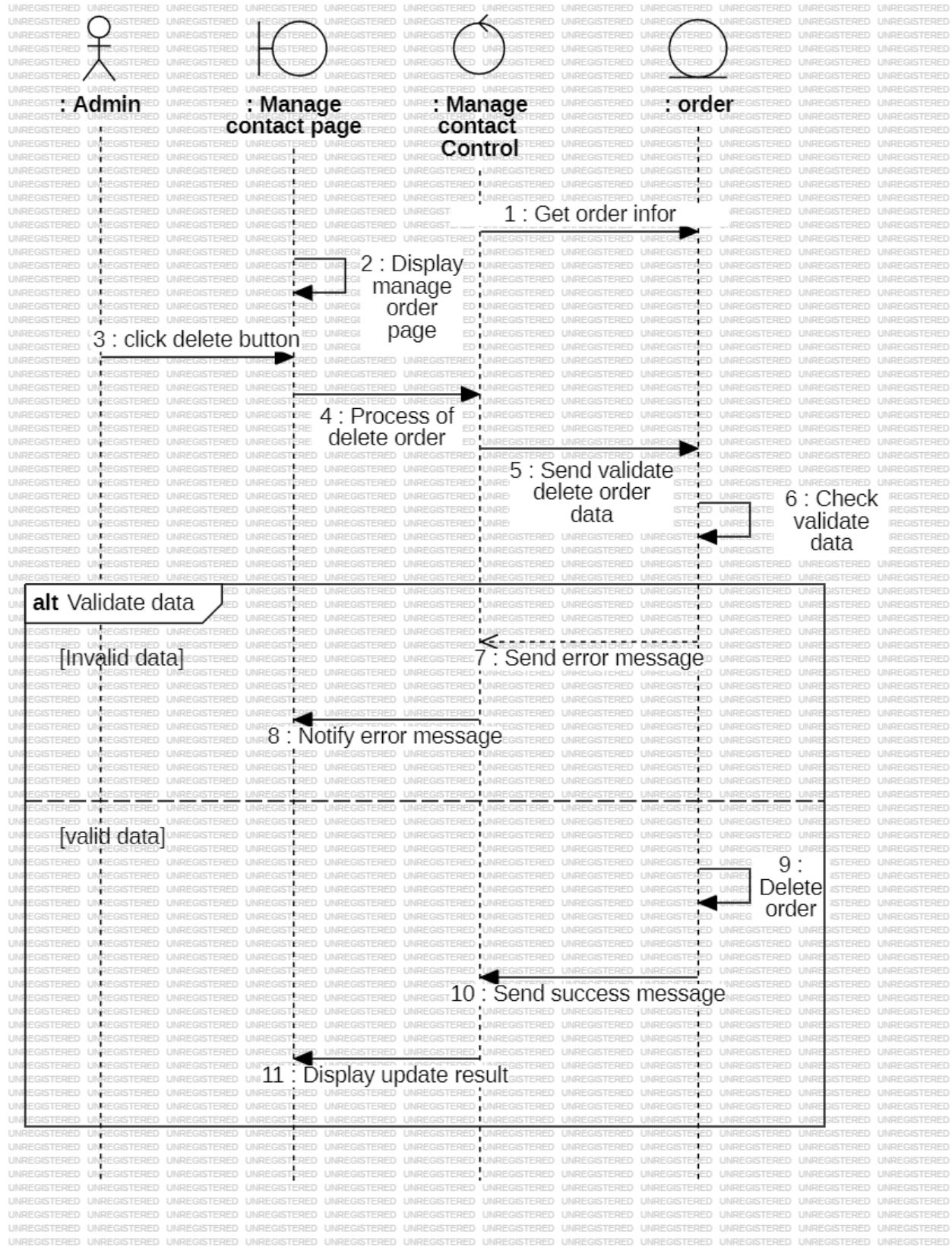
Furniture Online Store Website– Group 2



3.4.2.10 Sequence diagram for manage order as admin

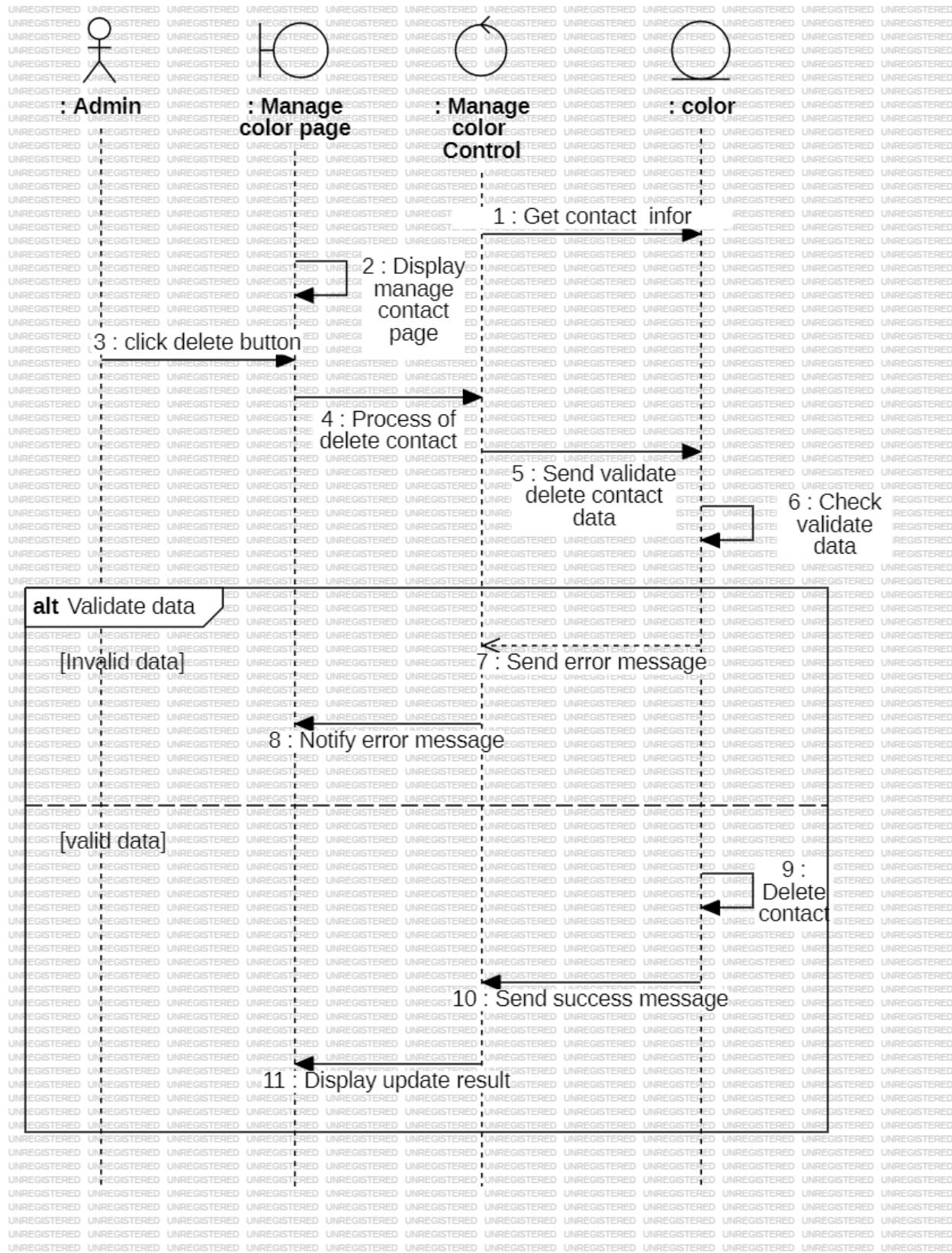
3.4.2.10.1 Sequence diagram for delete order as admin

Furniture Online Store Website– Group 2



3.4.2.11 Sequence diagram for manage contract

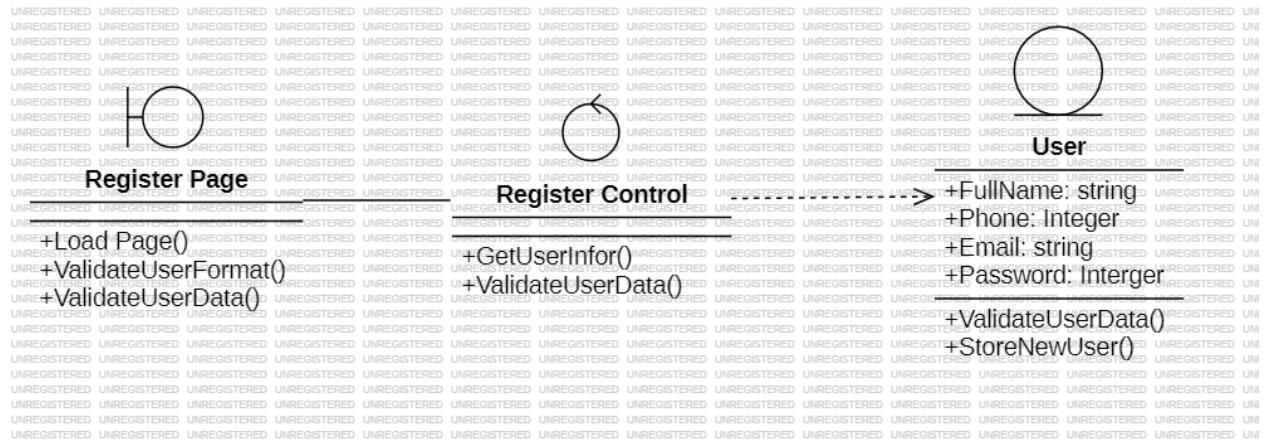
3.4.2.11.1 Sequence diagram for delete contract



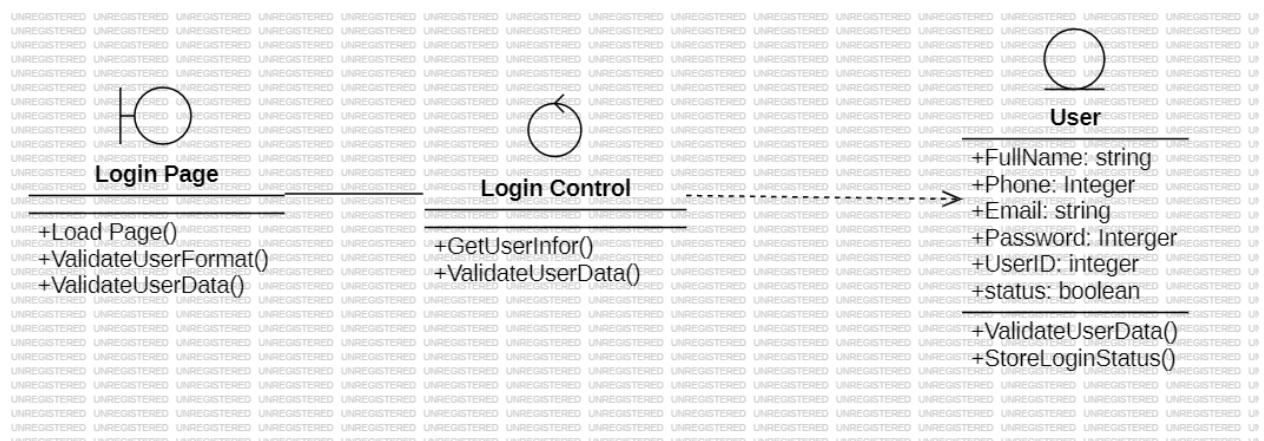
3.5 Class Diagram

3.5.1 Class Diagram for Customer

3.5.1.1 Class Diagram for Register as Customer

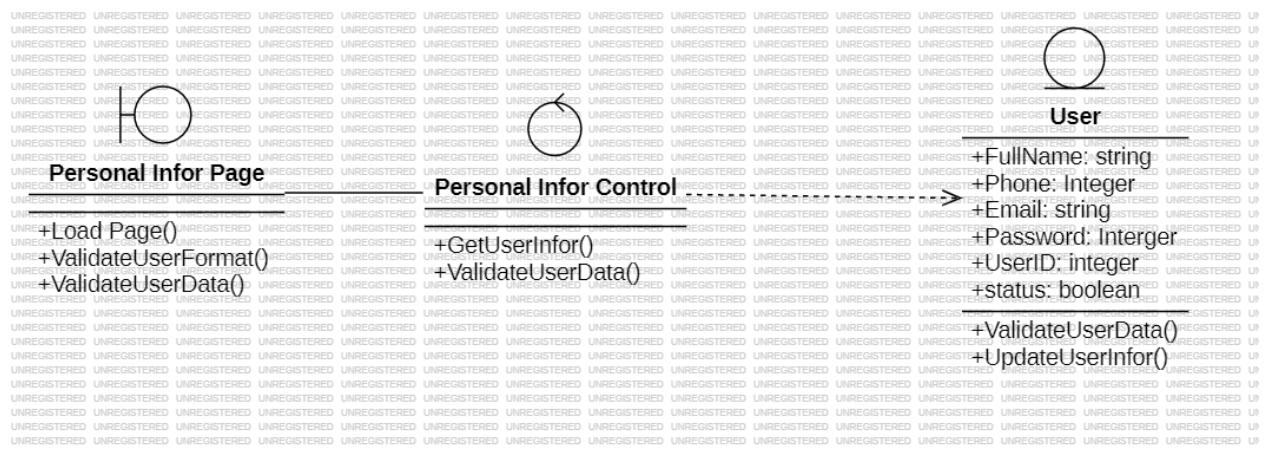


3.5.1.2 Class Diagram for login as Customer

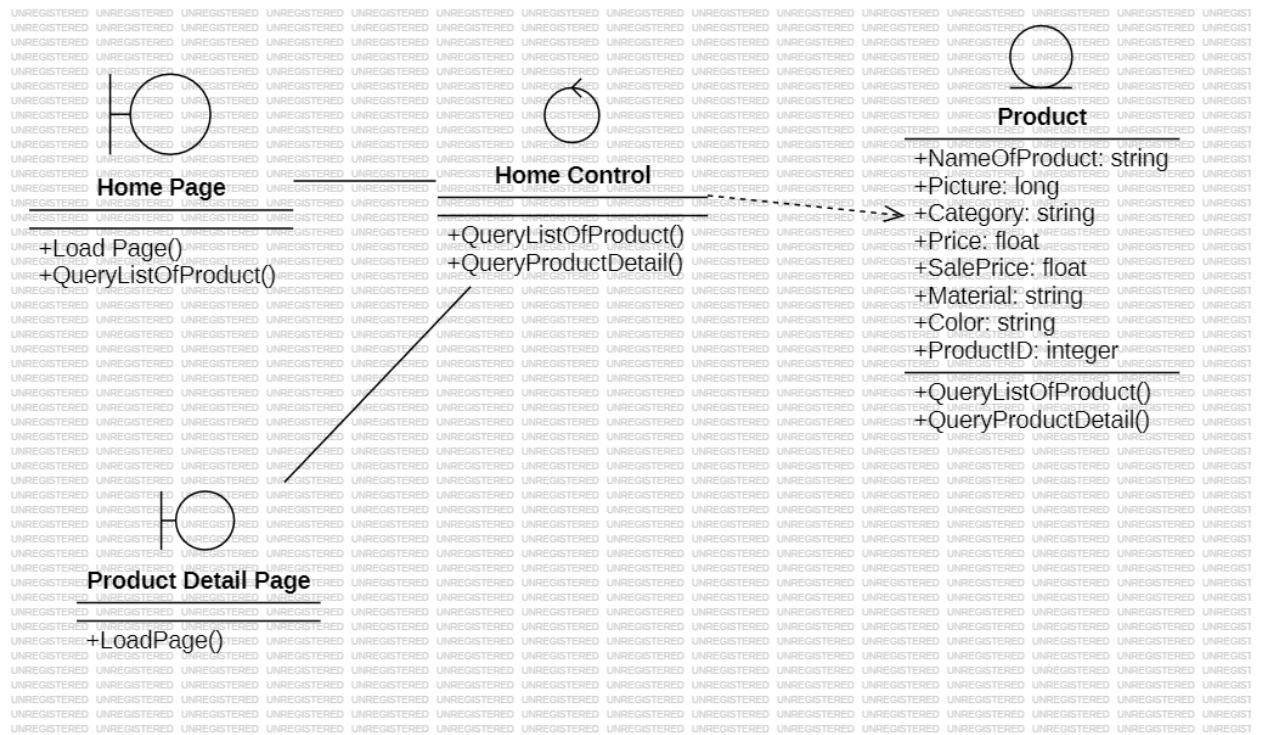


3.5.1.3 Class Diagram for Update as User

Furniture Online Store Website– Group 2

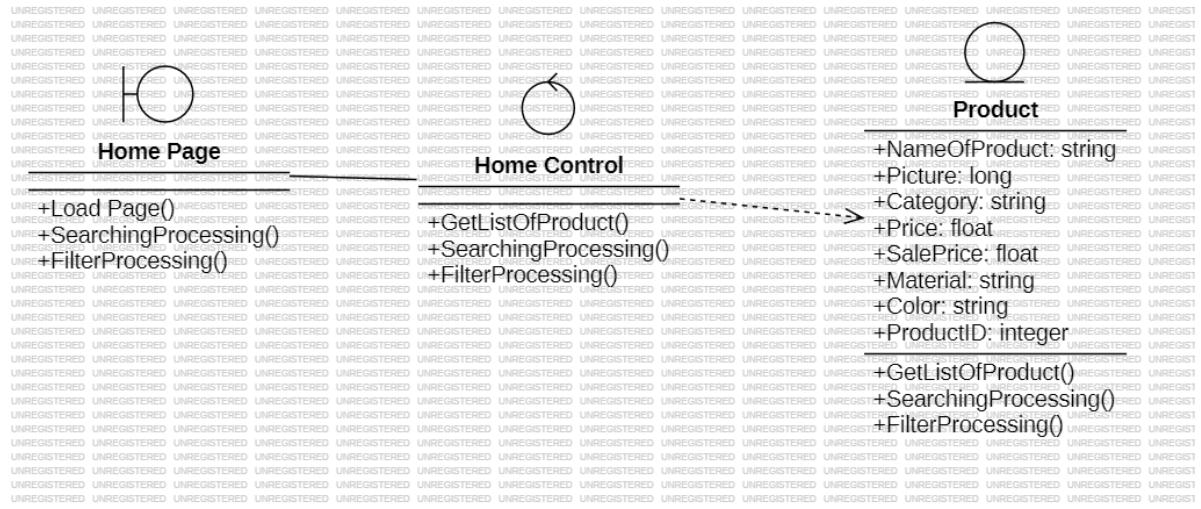


3.5.1.4 Class for explore product as customer

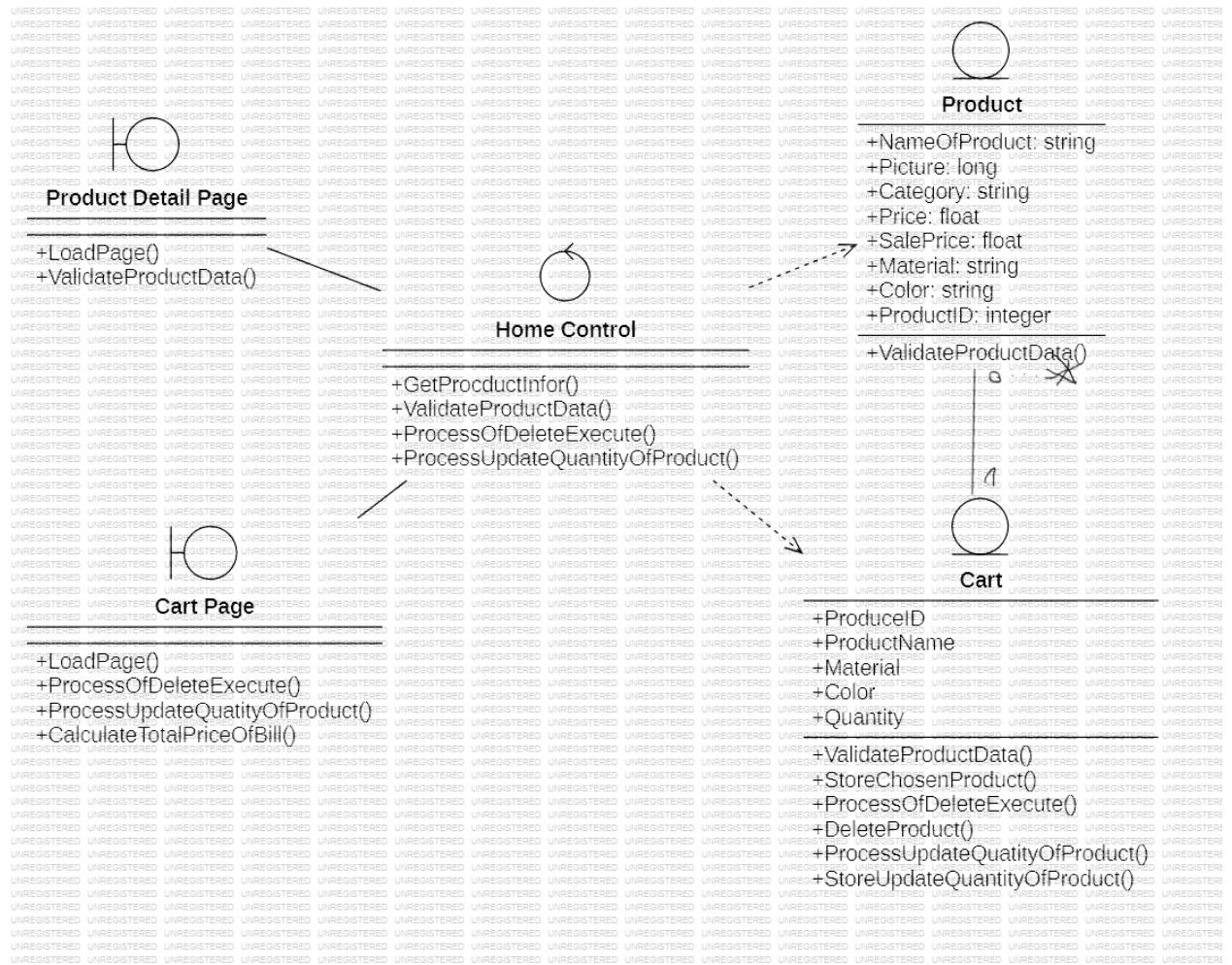


3.5.1.5 Class Diagram for search & filter product as customer

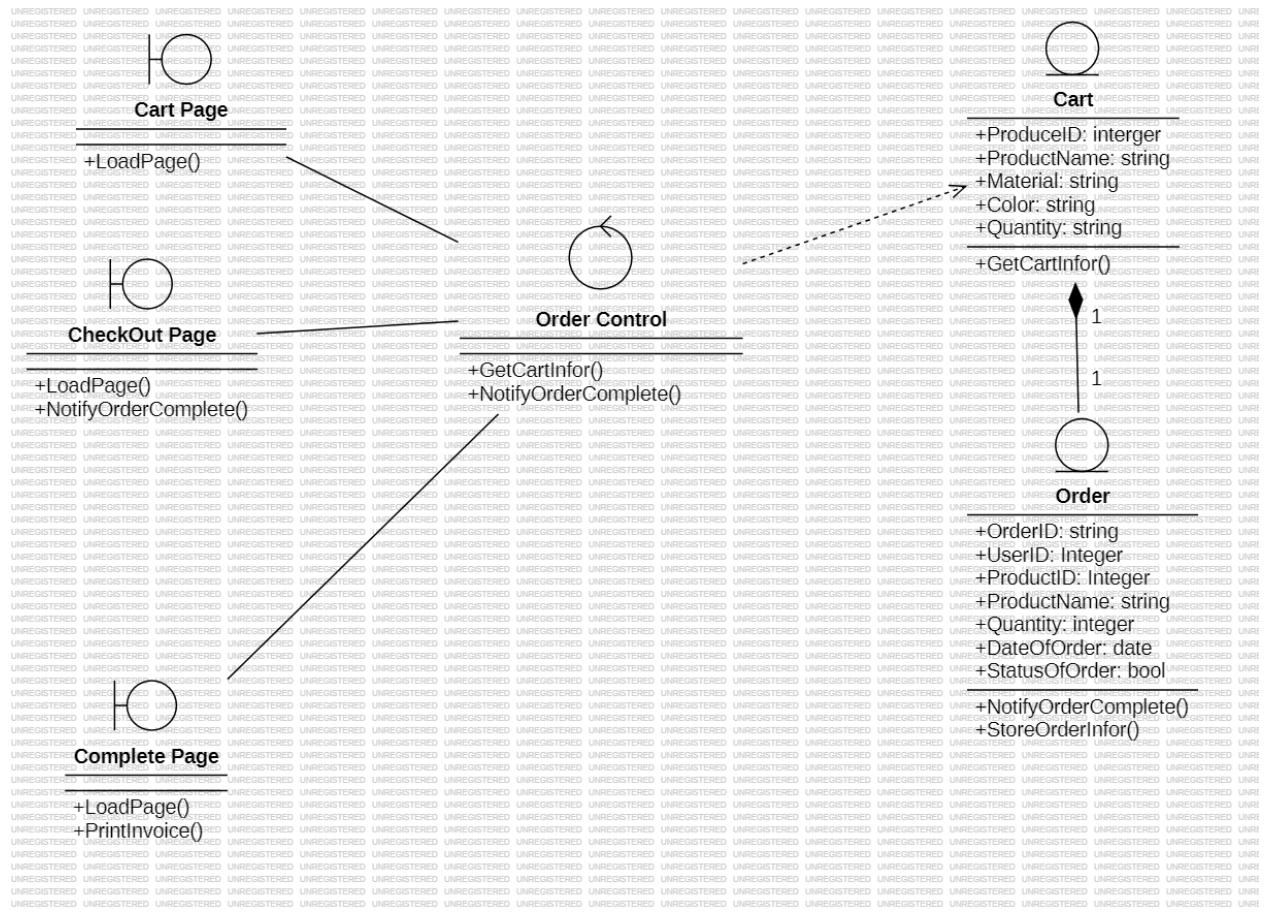
Furniture Online Store Website— Group 2



3.5.1.6 Class Diagram for manage Cart as Customer

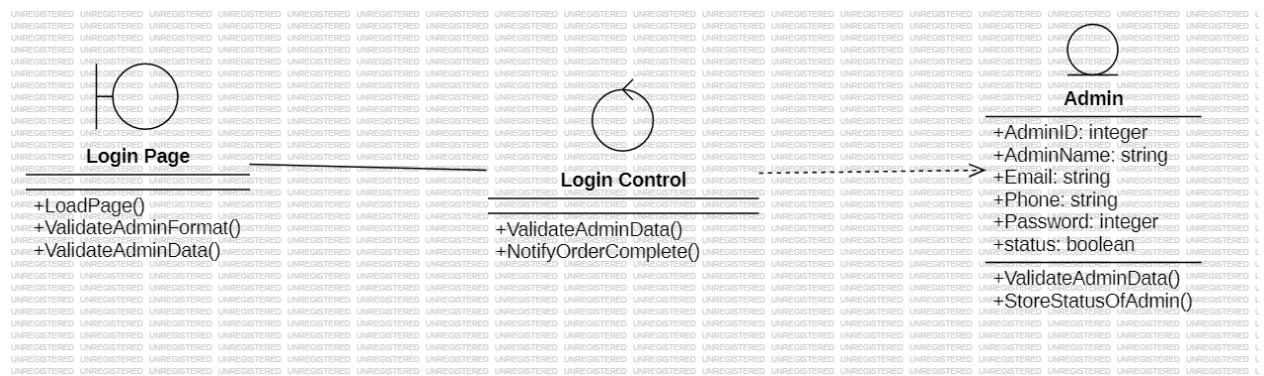


3.5.1.7 Class diagram for order product as Customer

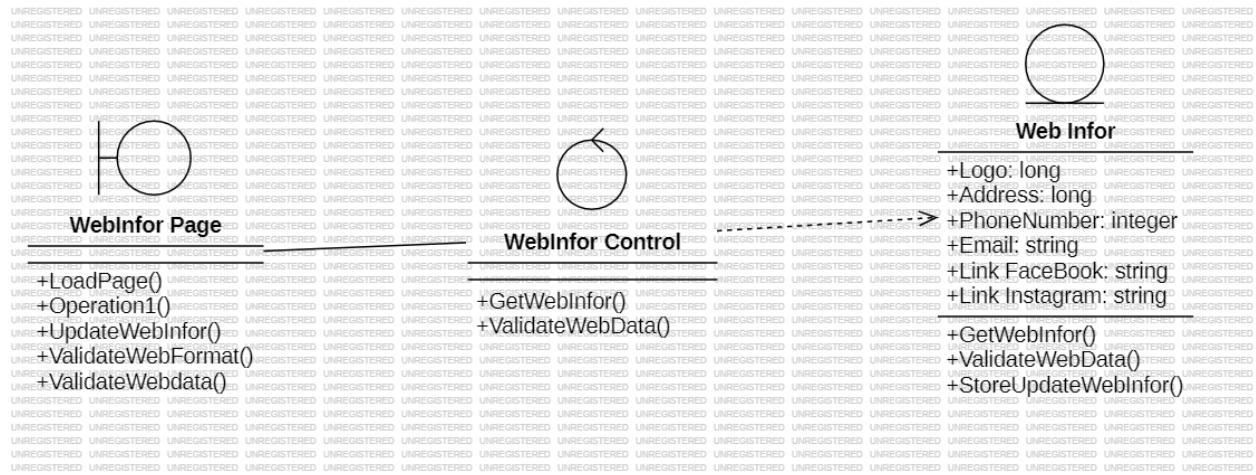


3.5.2 Class Diagram for Admin

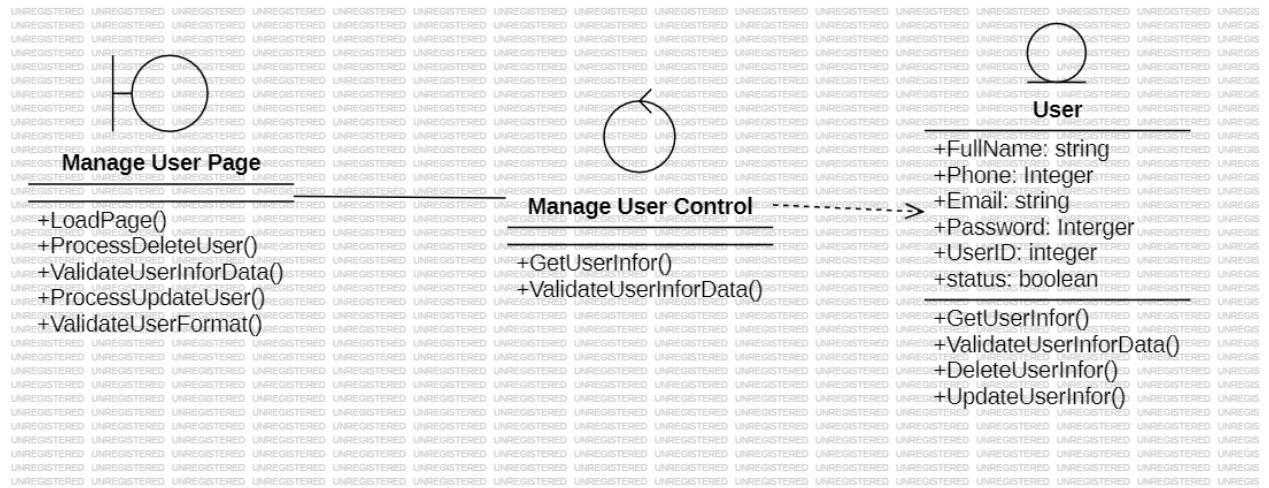
3.5.2.1 Class Diagram for login as admin



3.5.2.2 Class Diagram for manage Web Information as Admin

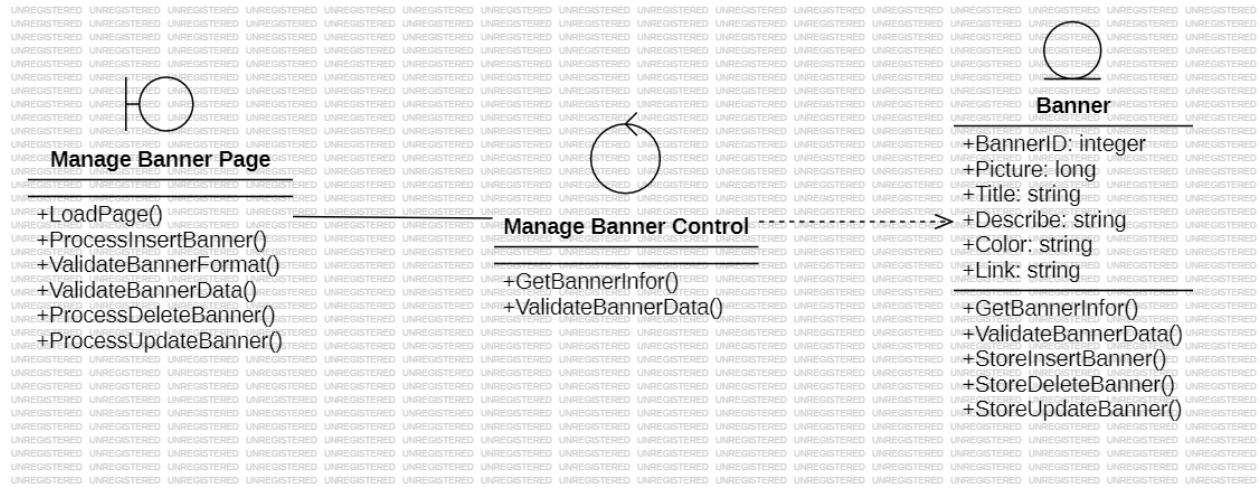


3.5.2.3 Class Diagram for manage user as Admin

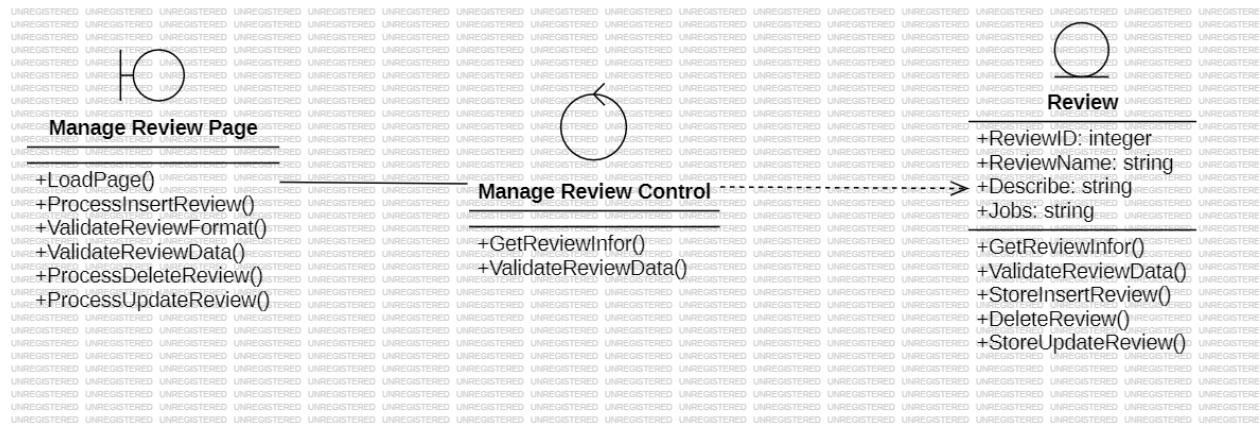


3.5.2.4 Class Diagram for manage banner

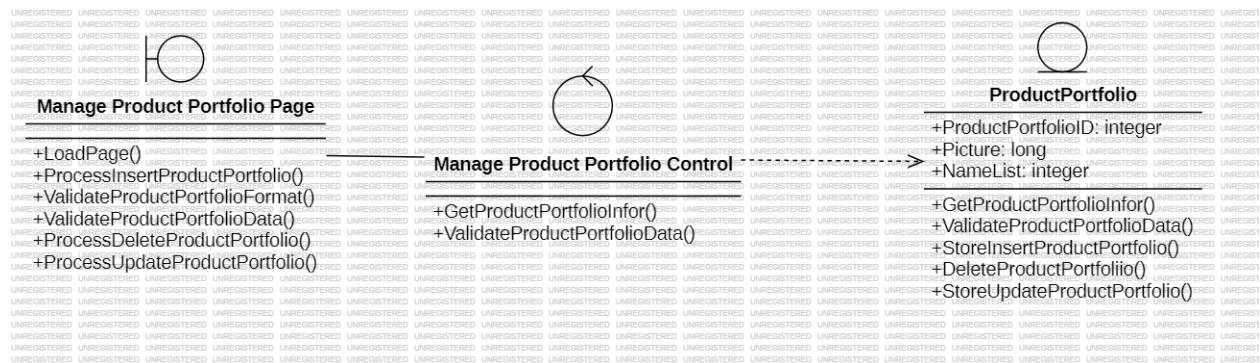
Furniture Online Store Website— Group 2



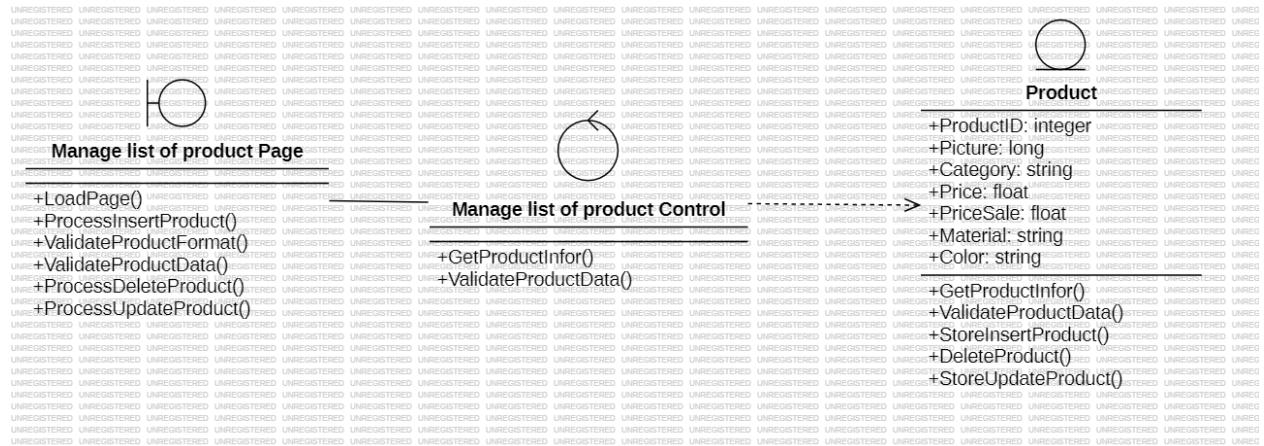
3.5.2.5 Class Diagram for manage review



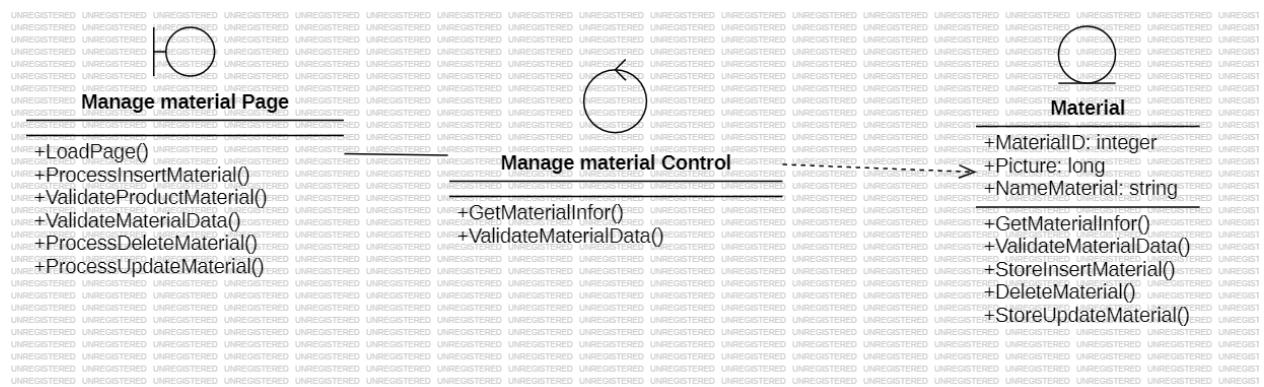
3.5.2.6 Class Diagram for manage product portfolio



3.5.2.7 Class Diagram for manage list of product

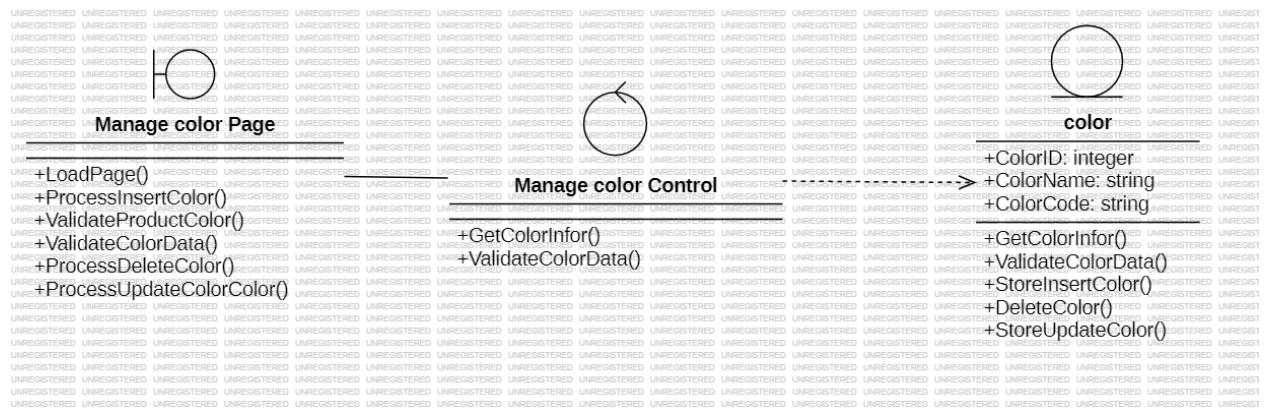


3.5.2.8 Class Diagram for manage Material

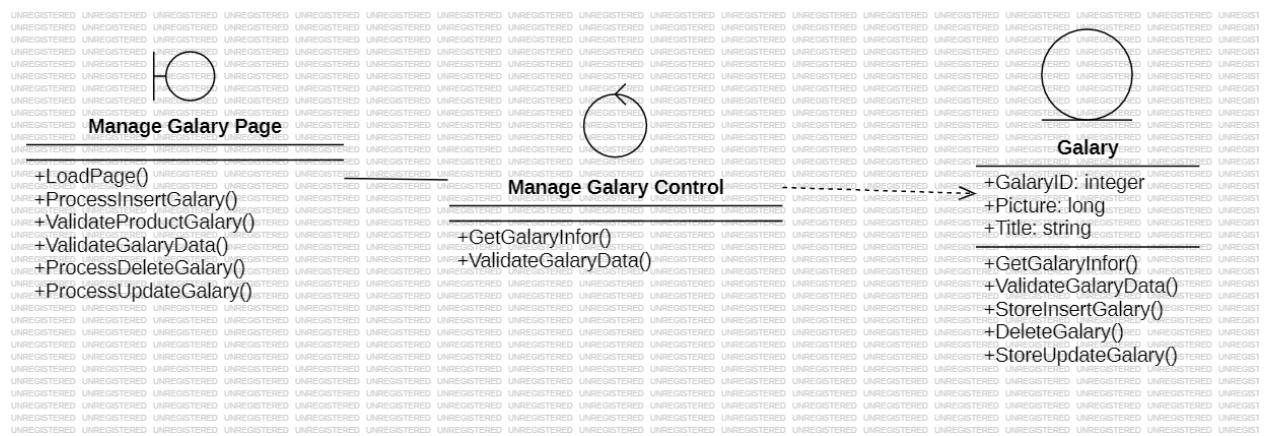


3.5.2.9 Class Diagram for manage Color

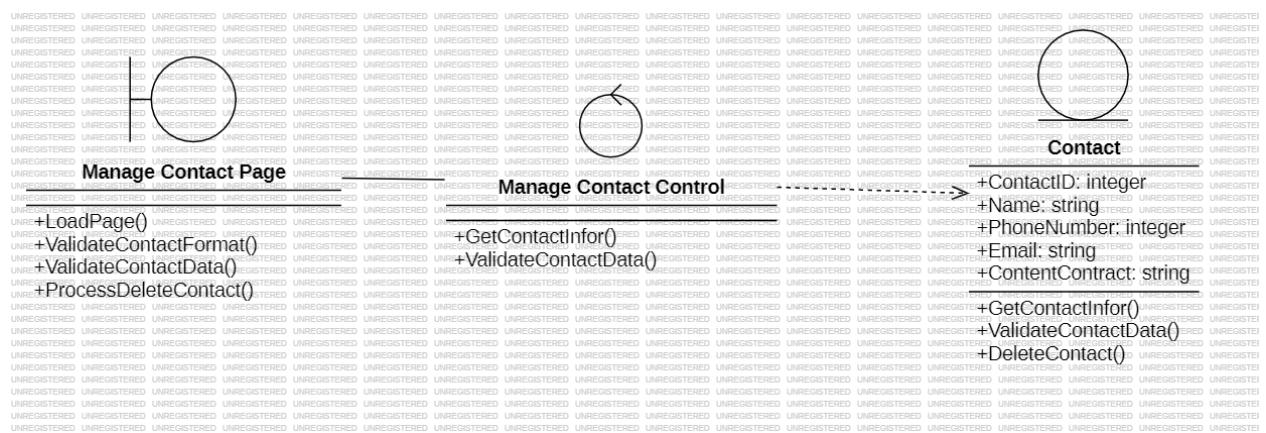
Furniture Online Store Website– Group 2



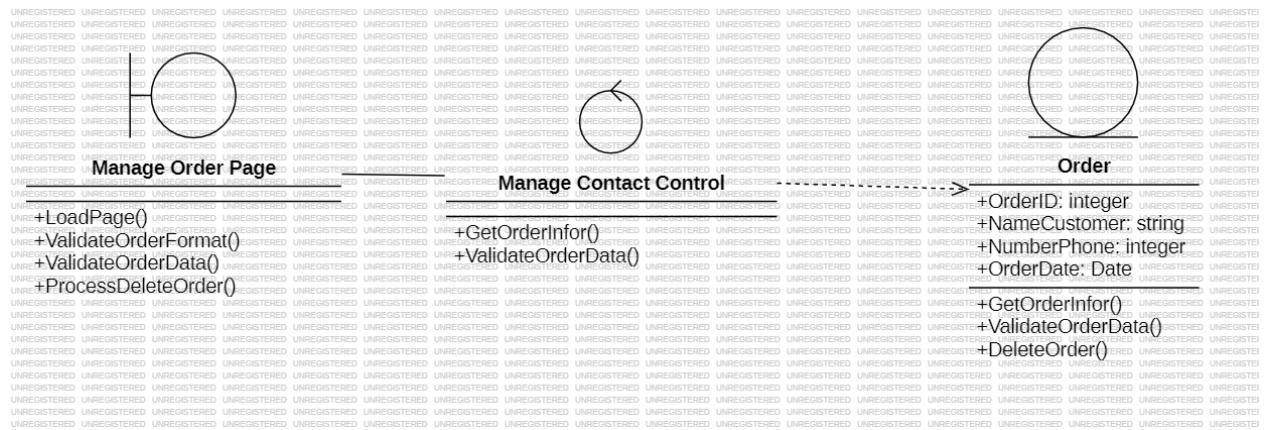
3.5.2.10 Class Diagram for manage gallery



3.5.2.11 Class Diagram for manage contact



3.5.2.12 Class Diagram for manage Order



4 IMPLEMENTATION AND TESTING

4.1 Results achieved

1. Understand Design analysis knowledge
 - + Understand the business survey process
 - + Understand Design analysis knowledge
 - + Understand the business survey process
 - + Advanced teamwork Skills
 - + Improve document reading skills
 - + Improve your report writing skills

4.2 Difficult:

- + There are many flaws in the process
- + Disagreement between team members
- + Have not experienced more on the actual project
- + Advanced teamwork Skills
- + Improve document reading skills
- + Improve your report writing skills

4.3 Group Membership Review

Members	Degree of Completion
Lương Gia Hân	
Phạm Thuỳ Dung	
Bùi Thu Hà	
Nguyễn Thị Minh Loan	

4.4 Introduction to the implementation environment

- For a Furniture Online with an online presence, the digital environment is just as important. The website or app should be user-friendly, with intuitive navigation and a visually appealing layout. High-quality images and detailed product descriptions help customers make informed decisions when shopping online. Security measures are also implemented to ensure the safety of customer data during transactions.
- Moreover, an effective Furniture Online often incorporates features like a seamless checkout process, personalized recommendations, and responsive customer support to enhance the overall customer experience.

4.5 User Interface

4.5.1 Register Interface



REGISTER

Full name

Phone

Email

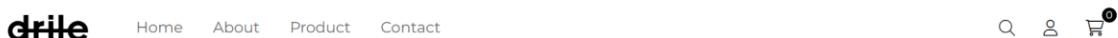
Password

REGISTER

If you have account login, please [login now](#)



4.5.2 Login Interface



LOGIN

Email

Password

LOGIN

If you are not registered yet, please create a [Register](#)

4.5.3 Profile Interface

The screenshot shows a user profile page with a sidebar on the left containing 'DASHBOARD', 'USER UPDATE', and 'ORDER' buttons. The main area displays a greeting 'Hello dung', a 'LOG OUT' button, and a placeholder text block. Below this is a larger section with the 'drile' logo, contact information (address: 112 Truong Thi Hoa 4, email: hgia1062001@gmail.com, phone: 0974200611), social media links (Facebook, Instagram), and navigation links (About Us, Delivery Info, Order Tracking, My Account, Help). On the right, there's a 'NEWSLETTER' section with a form to enter an email address, and a shopping cart icon with a notification badge.

4.5.4 Home Interface for User

The screenshot shows the homepage with a navigation bar at the top. The main content features a large image of a wooden chair with orange leather upholstery. Below the image is a heading 'Chairs You'll Love In 2023' and a short description. A 'SHOP NOW' button is located at the bottom left of the image. Navigation arrows are positioned at the bottom of the image, and a shopping cart icon with a notification badge is in the top right corner.

NEW PRODUCTS

ACCESSORIES BED CABINET CHAIR

-24%

Globe Electric Tech Series
\$460 \$350

-20%

Century Starburst Clock
\$500 \$400

-38%

Zlegant Black Watches
\$240 \$150

-33%

Grid Sideboard
\$150 \$100

-25%

• ○ ○

1. Dark sofa with potted plant and floor lamp.
2. Two modern chairs (yellow and green) and a small stool.
3. A yellow armchair, a small wooden side table, and a lamp.
4. A white chair and a large potted palm tree.
5. A wooden armchair with a large green leafy plant.

drile

📍 112 Truong Thi Hoa 4
✉️ hgia1062001@gmail.com
📞 0974200611

[About Us](#) [Delivery Info](#) [Order Tracking](#)
[My Account](#) [Help](#)

NEWSLETTER

Enjoy our newsletter to stay updated with the latest news and special sales.

Enter your email address

4.5.5 About Interface



OUR GREAT TEAM



OUR SERVICES



EASY PAYMENT

Fusce iaculis gravida lectus sed hendrerit. Aenean nec ipsum a ex eleifend porttitor



WORLDWIDE SHIPPING

Fusce iaculis gravida lectus sed hendrerit. Aenean nec ipsum a ex eleifend porttitor



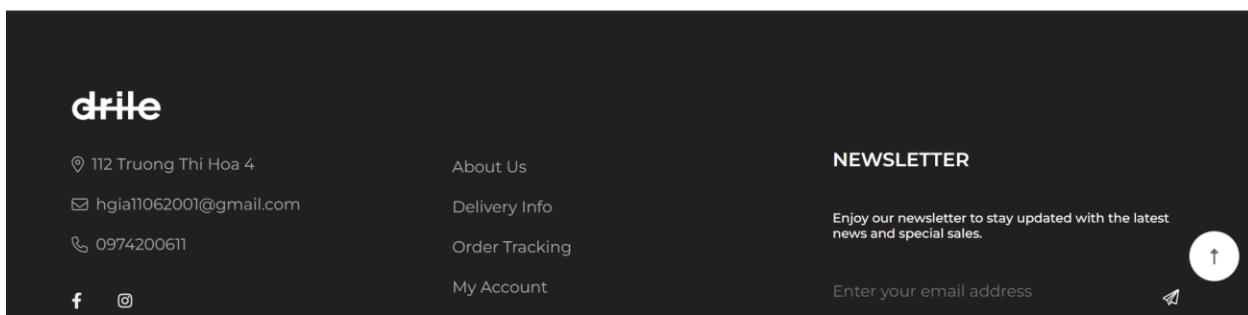
24/7 SUPPORT

Fusce iaculis gravida lectus sed hendrerit. Aenean nec ipsum a ex eleifend porttitor



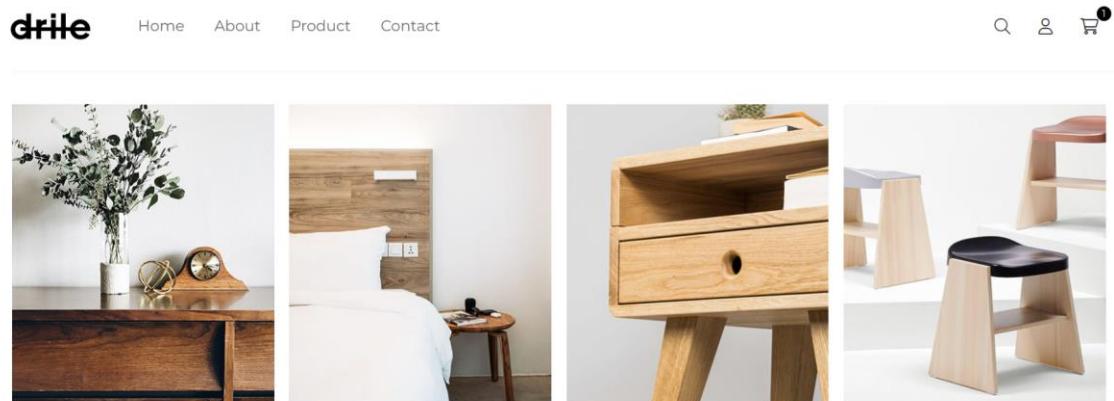
AMAZING OFFERS

Fusce iaculis gravida lectus sed hendrerit. Aenean nec ipsum a ex eleifend porttitor



4.5.6 Product Interface

Furniture Online Store Website— Group 2



[Home](#) > [Shop](#)

CATEGORIES

- Accessories
- Bed
- Cabinet
- Chair

PRICES

- All
- \$0 - \$100
- \$100 - \$300
- \$300 - \$500
- \$500 - \$800
- \$800 - \$1,000
- Over \$1,000

COLOR

- Gray
- Green
- Black
- Blue
- Brown
- Yellow
- Pink

MATERIAL

- Aluminium
- Iron
- Velvet

[FILTER ⓘ](#) Total 16 product



Globe Electric Tech Series
\$400 **\$350**



Century Starburst Clock
\$500 **\$400**



Zlegant Black Watches
\$240 **\$150**



Grid Sideboard
\$150 **\$100**



Halves Side Table
\$400 **\$350**



Haze Vitrine – Wired Glass
\$350 **\$200**



Century Starburst Clock
\$40 **\$20**



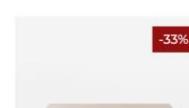
Lato Side Table
\$100 **\$70**



-50%



-10%

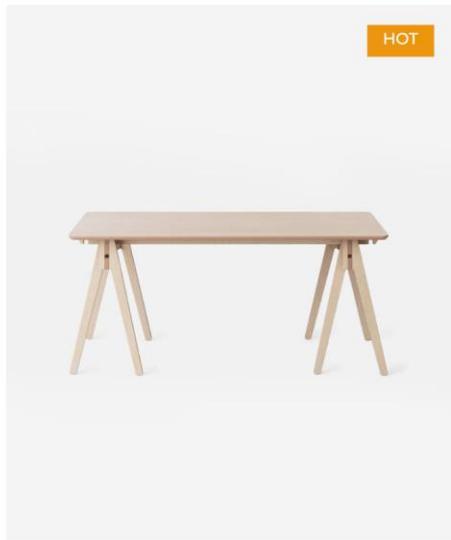


-33%



-42%

4.5.7 Product Detail Interface



Century Starburst Clock

\$40

Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

Choose Color :

Gray Green Black Blue Brown Yellow Pink

Choose Material:

Aluminium Iron Velvet Wood

1

ADD TO CART



YOU MAY ALSO LIKE...



Halves Side Table
\$400 \$350



Haze Vitrine – Wired Glass
\$350 \$200



Lato Side Table
\$100 \$70

4.5.8 Cart Interface

The screenshot shows a shopping cart page for a furniture store named "drile". The cart contains two items:

- Haze Vitrine – Wired Glass**: Gray, Aluminium, Price: \$ 200. Quantity: 1.
- Century Starburst Clock**: Gray, Aluminium, Price: \$ 20. Quantity: 1.

The cart totals are as follows:

Cart totals	
Subtotal:	\$220
Fee Shipping:	Free shipping
Total:	\$ 220

A "PROCEED TO CHECKOUT" button is visible. Below the cart, there are promotional offers:

- 180 days minimum warranty
- Freeship for orders over \$500.00
- 30 days money back
- Cashback on total order

4.5.9 Check out interface

The checkout interface is divided into two main sections:

Billing details

- Fullname *: [Input field]
- Email *: [Input field]
- Phone *: [Input field]
- Address *: [Input field]
- Order notes (optional): [Text area]

Your order

PRODUCT	SUBTOTAL
Haze Vitrine – Wired Glass x 1	Price: \$ 200
Color: Gray	\$ 200
Material: Aluminium	
Century Starburst Clock x 1	Price: \$ 20
Color: Gray	\$ 20
Material: Aluminium	
Subtotal	\$ 220
Shipping	Free Shipping
Total	\$ 220

PLACE ORDER button is located at the bottom of the left section.

4.5.10 Bill Interface

ORDER SUCCESS

There are too many choices in the market, thank you for choosing to shop at **Drile.me**

Your order has definitely been sent to Drile's order processing system. During processing, Drile will contact you if you need more information. In addition, Drile will also send an order confirmation by emails and messages.

Join the community of **Dress Up Live Quality** with Drile.

[Discover more products here](#)

Information line

11:26 - 30/11/2023

[Print PDF](#)

Name Product	Quality	Price	Color	Material	Total
Haze Vitrine – Wired Glass	1	\$ 200	\$ Gray	Aluminium	\$ 200
Century Starburst Clock	1	\$ 20	\$ Gray	Aluminium	\$ 20
Total Price					\$220
Fee Shipping					0
Total pay					\$220

Information receive

Name receive: dung

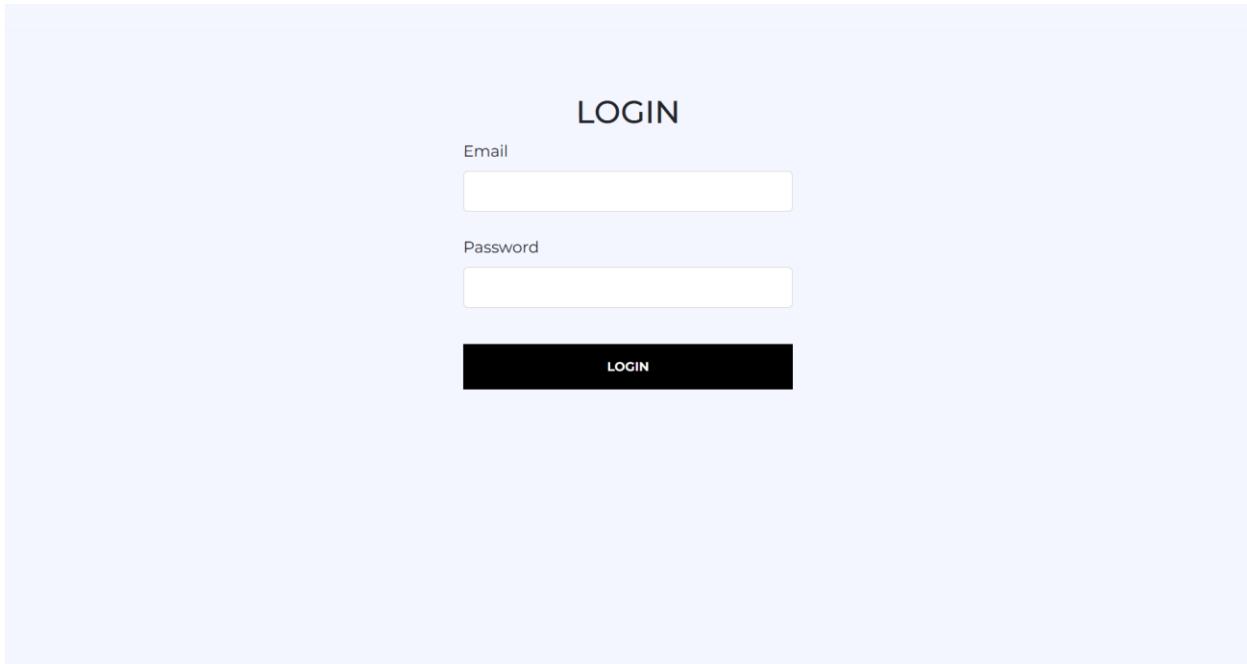
Email: dung123@gmail.com

Phone Number: 0123456789

Address: thu duc district



4.5.11 Login for admin



4.5.12 Admin controller interface

A screenshot of the admin dashboard. On the left, there's a sidebar with various menu items: "Web Information", "Product Management", "Manage Banners", "Manage Review", "Gallery", "Manage Order", "Manage User", and "Contact Manage". The main area is titled "Website information". It contains several form fields: "Logo" (with a "Choose File" button and a placeholder "No file chosen" next to a small logo icon), "Address" (containing "112 Truong Thi Hoa 4"), "Phone Number" (containing "0974200611"), "Email" (containing "hgia11062001@gmail.com"), "Link Facebook" (containing "23423"), and "Link Instagram" (containing "234"). At the bottom center is a black "Save" button. In the top right corner, there are links for "Log Out" and "Hello! Luong Gia" next to a user profile icon.

4.5.13 Manager Website information

Dashboard

Website information

Logo: Choose File (No file chosen)

Address: 112 Truong Thi Hoa 4

Phone Number: 0974200611

Email: hgia11062001@gmail.com

Link Facebook: 23423

Link Instagram: 234

Save

Log Out Hello! Luong Gia

Number	Name Customer	Number Phone	Order date	Seen	Delete
13	Luong Gia Han	0974200611	11:46 - 8/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>
14	Nguyen Tuan Khoa	123	12:43 - 8/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>
15			12:30 - 13/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>
16	Luong Gia Han	0974200611	12:39 - 13/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>
17	Luong Gia Han	0974200611	12:40 - 13/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>
18	Luong Gia Han	0974200611	12:41 - 13/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>

4.5.14 Manage Order Interface

Dashboard

Website information

Log Out Hello! Luong Gia

Number	Name Customer	Number Phone	Order date	Seen	Delete
13	Luong Gia Han	0974200611	11:46 - 8/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>
14	Nguyen Tuan Khoa	123	12:43 - 8/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>
15			12:30 - 13/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>
16	Luong Gia Han	0974200611	12:39 - 13/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>
17	Luong Gia Han	0974200611	12:40 - 13/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>
18	Luong Gia Han	0974200611	12:41 - 13/8/2023	<input type="button" value="Seen"/>	<input type="button" value="Delete"/>

4.5.15 Manage product portfolio

Dashboard

- [Web Information](#)
- [Product Management ^](#)
- [Product portfolio](#)
- [List of products](#)
- [Material](#)
- [Color](#)
- [Manage Banners](#)
- [Manage Review](#)
- [Galaxy](#)
- [Manage Order](#)

Website information

Picture

No file chosen

Name list

Add Product				
Number	Picture	Name list	Delete	Update
1		Accessories	<input type="button" value="Delete"/>	<input type="button" value="Update"/>
2		Bed	<input type="button" value="Delete"/>	<input type="button" value="Update"/>
3		Cabinet	<input type="button" value="Delete"/>	<input type="button" value="Update"/>
4		Chair	<input type="button" value="Delete"/>	<input type="button" value="Update"/>

4.5.16 Manage list of product

Dashboard

- [Web Information](#)
- [Product Management ^](#)
- [Product portfolio](#)
- [List of products](#)
- [Material](#)
- [Color](#)
- [Manage Banners](#)
- [Manage Review](#)
- [Galaxy](#)
- [Manage Order](#)
- [Manage User](#)

Website information

CategoryName ProductPrice

Price SaleDescribeChoose Color

Choose MaterialPicture

Choose Material

No file chosen

Number	Picture	Name Product	Category	Price	Price Sale	Material	Color	Update	Delete
1		Globe Electric Tech Series	Accessories	460	350	Aluminium	Gray	<input type="button" value="Delete"/>	<input type="button" value="Update"/>

4.5.17 Manage Material

Dashboard

- Web Information
- Product Management ▾

 - Product portfolio
 - List of products
 - Material
 - Color

- Manage Banners
- Manage Review
- Galaxy
- Manage Order

Website information

Picture

No file chosen

Name Material

[Add Product](#)

Number	Picture	Name Material	Delete	Update
1		Aluminium	<button>Delete</button>	<button>Update</button>
2		Iron	<button>Delete</button>	<button>Update</button>
3		Velvet	<button>Delete</button>	<button>Update</button>
4		Wood	<button>Delete</button>	<button>Update</button>

4.5.18 Manage Color

Dashboard

- Web Information
- Product Management ▾

 - Product portfolio
 - List of products
 - Material
 - Color

- Manage Banners
- Manage Review
- Galaxy
- Manage Order

Website information

Name ColorColor code

[Add Color](#)

Number	Color Name	Color code	Delete	Update
1	Gray	#767676	<button>Delete</button>	<button>Update</button>
2	Green	#75a190	<button>Delete</button>	<button>Update</button>
3	Black	#000000	<button>Delete</button>	<button>Update</button>
4	Blue	#0c54a2	<button>Delete</button>	<button>Update</button>
5	Brown	#74432a	<button>Delete</button>	<button>Update</button>

4.5.19 Manage banner

Dashboard

- [Web Information](#)
- [Product Management](#)
- [Manage Banners](#)
- [Manage Review](#)
- [Gallery](#)
- [Manage Order](#)
- [Manage User](#)
- [Contact Manage](#)

Website information

[Log Out](#)
Hello! Luong Gia

Name	Describe	Jobs
<input type="text"/>	<input type="text"/>	<input type="text"/>
Add Update		

Number	Name	Describe	Jobs	Delete	Update
1	DOUGLAS DEANS	Duis congue viverra gravida. Suspendisse sed facilisis lorem. Nullam id malesuada sapien. Etiam pulvinar gravida tortor ut sagittis. Nunc suscipit ornare lectus, eget imperdiet leo.	Technical Manager	Delete	Update

4.5.20 Manage review

Dashboard

- [Web Information](#)
- [Product Management](#)
- [Manage Banners](#)
- [Manage Review](#)
- [Gallery](#)
- [Manage Order](#)
- [Manage User](#)
- [Contact Manage](#)

Website information

[Log Out](#)
Hello! Luong Gia

Name	Describe	Jobs
<input type="text"/>	<input type="text"/>	<input type="text"/>
Add Update		

Number	Name	Describe	Jobs	Delete	Update
1	DOUGLAS DEANS	Duis congue viverra gravida. Suspendisse sed facilisis lorem. Nullam id malesuada sapien. Etiam pulvinar gravida tortor ut sagittis. Nunc suscipit ornare lectus, eget imperdiet leo.	Technical Manager	Delete	Update

4.5.21 Manage gallery

Dashboard

- [Web Information](#)
- [Product Management](#)
- [Manage Banners](#)
- [Manage Review](#)
- [Galaxy](#)
- [Manage Order](#)
- [Manage User](#)
- [Contact Manage](#)

Website information

Picture
Title
[Log Out](#)
Hello! Luong Gia

Choose File

Title

Add Product

Number	Picture	Title	Delete	Update
1		images1	Delete	Update
2		images2	Delete	Update
3		images3	Delete	Update
4		images4	Delete	Update
5		images5	Delete	Update

4.5.22 Manage Order

Dashboard

- [Web Information](#)
- [Product Management](#)
- [Manage Banners](#)
- [Manage Review](#)
- [Galaxy](#)
- [Manage Order](#)
- [Manage User](#)
- [Contact Manage](#)

Website information

Number
Name Customer
Number Phone
Order date
Seen
Delete
[Log Out](#)
Hello! Luong Gia

Number	Name Customer	Number Phone	Order date	Seen	Delete
13	Luong Gia Han	0974200611	11:46 - 8/8/2023	Seen	Delete
14	Nguyen Tuan Khoa	123	12:43 - 8/8/2023	Seen	Delete
15			12:30 - 13/8/2023	Seen	Delete
16	Luong Gia Han	0974200611	12:39 - 13/8/2023	Seen	Delete
17	Luong Gia Han	0974200611	12:40 - 13/8/2023	Seen	Delete
18	Luong Gia Han	0974200611	12:41 - 13/8/2023	Seen	Delete

4.5.23 Manage User

Dashboard

- Web Information
- Product Management ▾
- Manage Banners
- Manage Review
- Gallery
- Manage Order
- Manage User
- Contact Manage

Website information

Number	Name	Email	Access	Seen	Delete
1	Luong Gia	designfuzze@gmail.com	admin	<button>Seen</button>	<button>Delete</button>
2	Luong	lbanhngot@yahoo.com.vn	user	<button>Seen</button>	<button>Delete</button>

4.5.24 Manage Contact

Dashboard

- Web Information
- Product Management ▾
- Manage Banners
- Manage Review
- Gallery
- Manage Order
- Manage User
- Contact Manage

Website information

Number	Name	Email	Phone Number	Seen	Delete
1	Nguyen Van Gay	1sdasd@gmail.com	Admin	<button>Seen</button>	<button>Delete</button>
2	Nguyen Thi Lep	adassd@gmail.com	Admin	<button>Seen</button>	<button>Delete</button>

5 CONCLUSION

5.1 Product management process

<i>Interviewees:</i> Lương Gia Hân	Date: 01/12/2023
Question	Recorded information
Question 1: What are your main roles and responsibilities in product management?	<ul style="list-style-type: none"> - Answer: Create new product data and upload it to the system. Update information when product information is incorrect. Delete information when the product is out of stock. <ul style="list-style-type: none"> - Answer attitude: Sure
Question 2: How do you add new products to the system?	<ul style="list-style-type: none"> - Answer: After the products have been approved, products that are likely to be popular with many customers will be updated to the system and arranged in the most eye-catching place. <ul style="list-style-type: none"> - Answer attitude: Sure
Question 2.1: How do you delete or update product information?	<ul style="list-style-type: none"> - Answer: When a product has incorrect information or is out of stock, I will delete or correct the information. I will search before deleting and editing. <ul style="list-style-type: none"> - Answer attitude: Sure

<p>Question 4: What necessary product information do you need to have saved? And where is that information stored?</p>	<ul style="list-style-type: none"> - Answer: Product Name, Description, Color, Quantity, Size. This information is saved on Access - Attitude: Sure
<p>Question 5: Besides the product management department, are there any other product management departments?</p>	<ul style="list-style-type: none"> - -Answer: No - - Attitude: Sure
<p>Question 6: Do you want to improve anything about the software updates on the system?</p>	<ul style="list-style-type: none"> - Answer: Yes. Because the current software still processes quite slowly and sometimes errors occur. So I want to improve on that part. - Answer attitude: Not sure
<p>Question 7: Computer skills of the staff here?</p>	<ul style="list-style-type: none"> - - All employees know how to use basic computers (input, retrieval,...)
<p>Question 8: Do you need any conditions when adding, deleting, or editing movies?</p>	<ul style="list-style-type: none"> - Answer: When adding a new product, you must check the correct regulations. Delete products and edit searchable products - Answer attitude: Sure

5.2 Customer management process

<i>Interviewees:</i> Bùi Thu Hà	Date 01/12/2023
Question	Recorded information
Question 1: What are your activities in the customer management process?	<ul style="list-style-type: none"> - Answer: Add (Register customers) and edit customers, collect customer revenue statistics, search for customers. - Answer attitude: Sure
Question 2: When do you add customers, when do you edit customers, and calculate customer revenue statistics?	<ul style="list-style-type: none"> - Answer: I add a new customer when the customer requests membership registration by filling out a form for the customer. When customers request to correct information, call the company's hotline. Statistics of customer revenue at the end of the month, the director wants to see which customers who buy the most products will be rewarded with the company's preferential policies. - Answer attitude: Sure

<p>Question 3: What information does adding customer information include? And what is the result of this process?</p>	<ul style="list-style-type: none">- Answer: Customer's full name, date of birth, savings, customer type- The result of this process: Customer list.- Answer attitude: Sure
<p>Question 4: Besides your department, are there any other departments involved in customer management?</p>	<ul style="list-style-type: none">- Answer: Customer care department.- Answer attitude: Sure
<p>Question 5: What are the regulations of the customer management process? For example, what are the regulations on membership cards? And how do you manage this?</p>	<ul style="list-style-type: none">- - Answer: There are 3 types of customer cards: Silver, Gold, Diamond, each customer has a different level of accumulated points.<ul style="list-style-type: none">+ "Silver" customers, when accumulating purchases from 1,000,000 VND, receive a 5% discount when purchasing products+ "Gold" customers, when accumulating purchases from 5,000,000 VND, will receive a 10% discount when purchasing products.+ "Diamond" customers, when accumulating purchases from 10,000,000 VND, receive a 15%

	<p>discount when purchasing products + I manage customer information using an excel sheet connected to google sheets.</p> <ul style="list-style-type: none"> - Answer attitude: Sure
Question 6: Do you encounter any difficulties in the customer management process?	<ul style="list-style-type: none"> - Answer: Many difficulties in the management process: working with excel is very difficult for employees. Managing customers' card accumulation and upgrading also becomes more difficult and can lead to many errors. - Answer attitude: Sure

5.3 Employee management process

<i>Interviewees:</i> Phạm Thùy Dung	Date 01/12/2023
Question	Recorded information
Question 1: What are your activities in the customer management process?	<ul style="list-style-type: none"> - Answer: Add, delete and edit customers, statistics on the number of tickets that employee sells, search for employees.

	<ul style="list-style-type: none">- Answer attitude: Sure
<p>Question 2: When do you add customers, when do you edit customers, and calculate customer revenue statistics?</p>	<ul style="list-style-type: none">- Answer: I add a new employee when an employee comes to apply for a job and applies to the human resources management department and the employee is interviewed and accepted to work. When an employee wants to correct information, they will contact the human resources department directly. When the employee leaves work, the human resources department will delete that employee's name. Statistics on the number of products the employee has sold for annual determination determine salary increase policy.- Answer attitude: Sure
<p>Question 3: What information does adding employee information include? And what is the result of this process?</p>	<ul style="list-style-type: none">- Answer: Employee's full name, date of birth, gender, phone number, ID card, date of employment, address, basic

	<p>salary.</p> <ul style="list-style-type: none">- Output of this process: List of employees.- Answer attitude: Sure
<p>Question 4: Besides your department, are there any other departments involved in customer management?</p>	<ul style="list-style-type: none">- Answer: No- Answer attitude: Sure
<p>Question 5: Do you need any conditions when adding, deleting, or editing movies?</p>	<ul style="list-style-type: none">- Answer: When adding, deleting or editing, employees are required to search
<p>Question 6: Do you encounter any difficulties in the customer management process?</p>	<ul style="list-style-type: none">- Answer: Many difficulties in the management process: working with Excel is very difficult for managing employees. Using Excel to add and edit employees can cause errors.- Answer attitude: Sure

6 Conclusion and development

6.1 Conclusion

In this comprehensive report, we have meticulously analyzed the online furniture store using a suite of modeling tools and diagrams. These include Use Case, Activity, Sequence, Class, State diagrams, Entity-Relationship Diagram (ERD), and Data Flow Diagram (DFD).... The comprehensive analysis using various UML and data flow diagrams has provided deep insights into the architecture and functionality of the online furniture store. While the system demonstrates robust design and efficient processes, there are areas for improvement and optimization. The recommendations provided aim to enhance the system's scalability, efficiency, and user experience, ensuring the furniture store remains competitive and responsive to changing market needs and technological advancements.

6.2 Recommendations for Future Development

We need to improve system:

Enhancing system scalability and flexibility, especially in handling increased user traffic and expanding product ranges.

Improving the efficiency of data processing and management, possibly through adopting more advanced database management systems or cloud-based solutions.

Streamlining business processes, as identified in the Activity and Sequence Diagrams, to improve customer experience and operational efficiency.

Further optimizing the object-oriented design for better maintainability and scalability, as suggested by the Class Diagram analysis.

Implementing more robust data security measures, especially in areas where sensitive user data is handled.

7 Table of Task Assessment

Personal Assessment Table

No	Member Group	Contribution	Personal Assessment Table
1	Lương Gia Hân (Team leader)	<ul style="list-style-type: none"> - Create Project - Write a topic introduction - List of actors - Review a functionality of Project - Draw Usecase Diagram and describe the overview - Draw Class Diagrams - Code website - Demo UI/UX website and Admin Website 	10/10
2	Bùi Thu Hà (Member)	<ul style="list-style-type: none"> - Planning an overview table and an interview plan - Survey Methodology - Survey Content - Draw ERDs 	10/10

		<ul style="list-style-type: none"> - Mapping to relational model from entity class Diagram - Conclusion 	
3	Phạm Thuỳ Dung (Member)	<ul style="list-style-type: none"> - Write the result of interview question of the Furniture Online Store Website - Draw Usecase Diagram - Describe the oversview - Draw activity Diagrams - Draw sequence Diagrams - Implementation and testing - Draw Entity class diagram 	10/10
4	Nguyễn Thị Minh Loan (Member)	<ul style="list-style-type: none"> - Define Scope and project objectives - Write the result of interview question of the product / customer / employee of the Furniture Online Store Website - Draw DFDs 	10/10

8 Reference

