

**Jewelry Production Order System**

**Software Requirement Specification**

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**FPTU HCM Campus, 08-05-2024**

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# Introduction

[The introduction of the **Software Requirements Specification (SRS)** provides an overview of the entire **SRS**. It includes the purpose, scope, definitions, acronyms, abbreviations, references, and overview of the **SRS**.]

[Note: The **SRS** document captures the complete software requirements for the system, or a portion of the system. Following is a typical **SRS** outline for a project using only traditional, natural-language style requirements—with **no use-case modeling.** It captures all requirements in a single document, with applicable sections inserted from the Supplementary Specifications (which would no longer be needed). For a template of an **SRS** using use-case modeling, which consists of a package containing Use Cases of the use-case model and applicable Supplementary Specifications and other supporting information, see rup\_srsuc.dot.]

[Many different arrangements of an **SRS** are possible. Refer to [IEEE830-1998] for further elaboration of these explanations, as well as other options for **SRS** organization.]

## Purpose

The purpose of this Software Requirement Specification (SRS) document is to present a detailed description of the Jewelry Production Order System. It will describe the external behavior and non-functional requirements, identify potential design constraints, and incorporate other necessary factors vital for successful software development and implementation. This document is intended for both the stakeholders and the developers of the system and will be proposed for its approval.

The SRS also serves as a foundational document for subsequent project planning, design, coding, system testing, and user documentation phases, thoroughly aligning all stakeholders including developers, managers, sales staff, design team, manufacturing staff, and customers on what to expect from the final product.

## Scope

This software system will be an Online Jewelry Production Order Management System for a local jewelry designer who collaborates with different artisans and craftsmen across the area. This system is engineered to elevate the designer's productivity by providing advanced tools aimed to automate the order management and production process, tasks which would otherwise require strenuous manual effort. By notably enhancing the designer's efficiency and production capacity, the system meets the designer's needs, while keeping its design intuitively simple and easy to use.

This system is specifically architected to enable a designer to manage and coordinate with a diverse group of artisans, and customers to process orders with ease. The software will facilitate communication between designers, artisans, and customers through integrated messaging channels. Preformatted templates are present at each stage in the order's lifecycle to foster a standardized production process; the mapping of these templates is adaptable via the application's settings. The system houses a robust relational database containing information on Designers, Artisans, Customers, and Orders.

## Definitions, Acronyms, and Abbreviations

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Software Requirements Specification | A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document. |
| Originator | Person submitting an article to be reviewed. In case of multiple originators, this term refers to the principal author, with whom all communication is made. |
| Reviewer | A person that examines an article and has the ability to recommend approval of the article for publication or to request that changes be made in the article. |
| Approval | A person responsible for providing final approval on the document or project phase. |
| Stakeholders | People or organizations who are actively involved in the project, or whose interests may be positively or negatively affected by the execution of the project. |
| Database | Collection of all the information monitored by this system. |
| Mapping | The process of linking two things together. In this context, it refers to establishing connections between the aspects of the production process and the corresponding templates. |
| Customer | The person who uses this web application to request for jewelry production. |
| Sale Staff | The staff who are in charge of discussing with customers, managing users’ requests, users’ payment and sending quotes to customers. |
| Design Staff | The staff who are in charge of designing models for customers for the purpose of previews, as the user requests. |
| Production Staff | The staff who are in charge of recording the production process and manage production order when the product is completed. |
| Manager | The person who is in charge of staffs’ assignment, approves quotes sent by sale staff and manages production orders. |
| Administrator | The person who is in charge of user account management and system management. |

## References

IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

## Overview

[This subsection describes what the rest of the SRS contains and explains how the document is organized.]

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third and fourth chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

All three sections of the document describe the same software product in its entirety.

# Overall Description

[This section of the SRS describes the general factors that affect the product and its requirements. This section does not state specific requirements. Instead, it provides a background for those requirements, which are defined in detail in Section 3, and makes them easier to understand. Include such items as:

• product perspective

• product functions

• user characteristics

• constraints

• assumptions and dependencies

• requirements subsets]

## 2.1 Product Perspective

This software is designed to manage the custom jewelry ordering process for a jewelry manufacturing company. It serves as an integrated platform for showcasing the company's profile, jewelry collections, design samples, and blog sharing. Customers can place custom jewelry orders based on company design samples or their own design requirements. The software manages the entire custom jewelry ordering process, ensuring smooth communication and workflow among the business staff, management, design team, and customers.

## 2.2 Product Functions

The primary functions of the software include:

* Displaying the company's profile, jewelry collections, design samples, and blog posts.
* Allowing customers to submit custom jewelry requests based on company designs or personal specifications.
* Managing the custom jewelry ordering process, which involves several steps:
  1. Customers submit their requests.
  2. Business staff receive and discuss the requests with the customers.
  3. Business staff send the requests for price approval.
  4. Management approves the price quotes.
  5. Business staff send the approved price quotes to customers.
  6. Customers accept the quotes and create custom jewelry orders.
  7. The design team sends designs to customers for approval.
  8. Customers approve the designs.
  9. The manufacturing team creates the custom jewelry.
  10. Business staff deliver the finished jewelry and warranty documents to customers.
* Updating the cost of custom orders based on the estimated costs for quoting and actual manufacturing costs to calculate the capital cost and execution price. The cost calculation formula is as follows:

**Capital cost of the product=[gold price at the time×product weight]+labor cost+stone cost**

* Declaring payment policies and order cancellation terms for custom jewelry orders.
* Declaring the company's applicable gold and stone prices.
* Declaring the company's design samples and their associated cost norms.
* Providing a dashboard for statistical analysis.

## 2.3 User Characteristics

The primary users of the software include:

* **Customers:** Individuals interested in ordering custom jewelry, who can browse design samples, submit custom requests, approve designs, and manage orders.
* **Business Staff:** Employees who handle customer requests, communicate with customers, and manage the quoting and ordering process.
* **Management:** Personnel responsible for approving price quotes and overseeing the entire process.
* **Design Team:** Professionals who create jewelry designs based on customer specifications.
* **Manufacturing Team:** Workers who execute the custom jewelry manufacturing process.
* **Administrators:** Individuals responsible for managing the software, updating gold and stone prices, and maintaining the design samples and cost norms.

## 2.4 Constraints

* The software must handle a high volume of customer requests and process them efficiently.
* Data integrity and security are crucial, especially for customer information and order details.
* The system must integrate with external systems for real-time gold and stone price updates.
* The software should provide a user-friendly interface for both customers and internal users.

## 2.5 Assumptions and Dependencies

* The system assumes stable and reliable internet connectivity for all users.
* It relies on accurate and timely updates of gold and stone prices from external sources.
* The successful operation of the software depends on the coordination and timely communication among the business staff, management, design team, and manufacturing team.
* The system assumes that users have basic computer literacy and can navigate the interface with minimal training.

## 2.6 Requirements Subsets

The detailed requirements for the software are divided into several subsets:

* **User Interface Requirements:** Specifications for the design and layout of the user interface for both customers and internal users.
* **Functional Requirements:** Detailed descriptions of the features and functionalities of the software.
* **Performance Requirements:** Specifications for the performance standards the software must meet, including response times and processing speeds.
* **Security Requirements:** Measures to ensure data protection, user authentication, and secure transactions.
* **Integration Requirements:** Specifications for integrating with external systems for price updates and other necessary services.
* **Maintenance Requirements:** Guidelines for the ongoing maintenance and updates of the software to ensure its smooth operation.

**Phần mềm quản lý việc đặt gia công trang sức của khách hàng cho công ty gia công trang sức** - Trang chủ giới thiệu công ty, bộ sưu tập trang sức, mẫu thiết kế, blog chia sẻ, … - Khách hàng có thể đặt yêu cầu gia công đồ trang sức theo mẫu thiết kế công ty hoặc theo yêu cầu thiết kế của khách. - Quản lý quá trình đặt gia công trang sức của khách hàng.

<< Khách hàng gửi yêu cầu --> NV kinh doanh tiếp nhận và trao đổi với khách --> NV kinh doanh gửi yêu cầu phê duyệt báo giá --> Người quản lý phê duyệt --> NV kinh doanh gửi báo giá đã phê duyệt--> khách hàng chấp nhận báo giá và tạo đơn hàng gia công --> NV thiết kế gửi bản thiết kế cho khách --> khách hàng phê duyệt bản thiết kế --> NV gia công thực hiện gia công trang sức --> NV kinh doanh bàn giao trang sức đã gia công và giấy bảo hành cho khách hàng >>

- Cập nhật chi phí của đơn hàng gia công theo định mức để báo giá và thực tế gia công để tính giá vốn báo giá và thực hiện

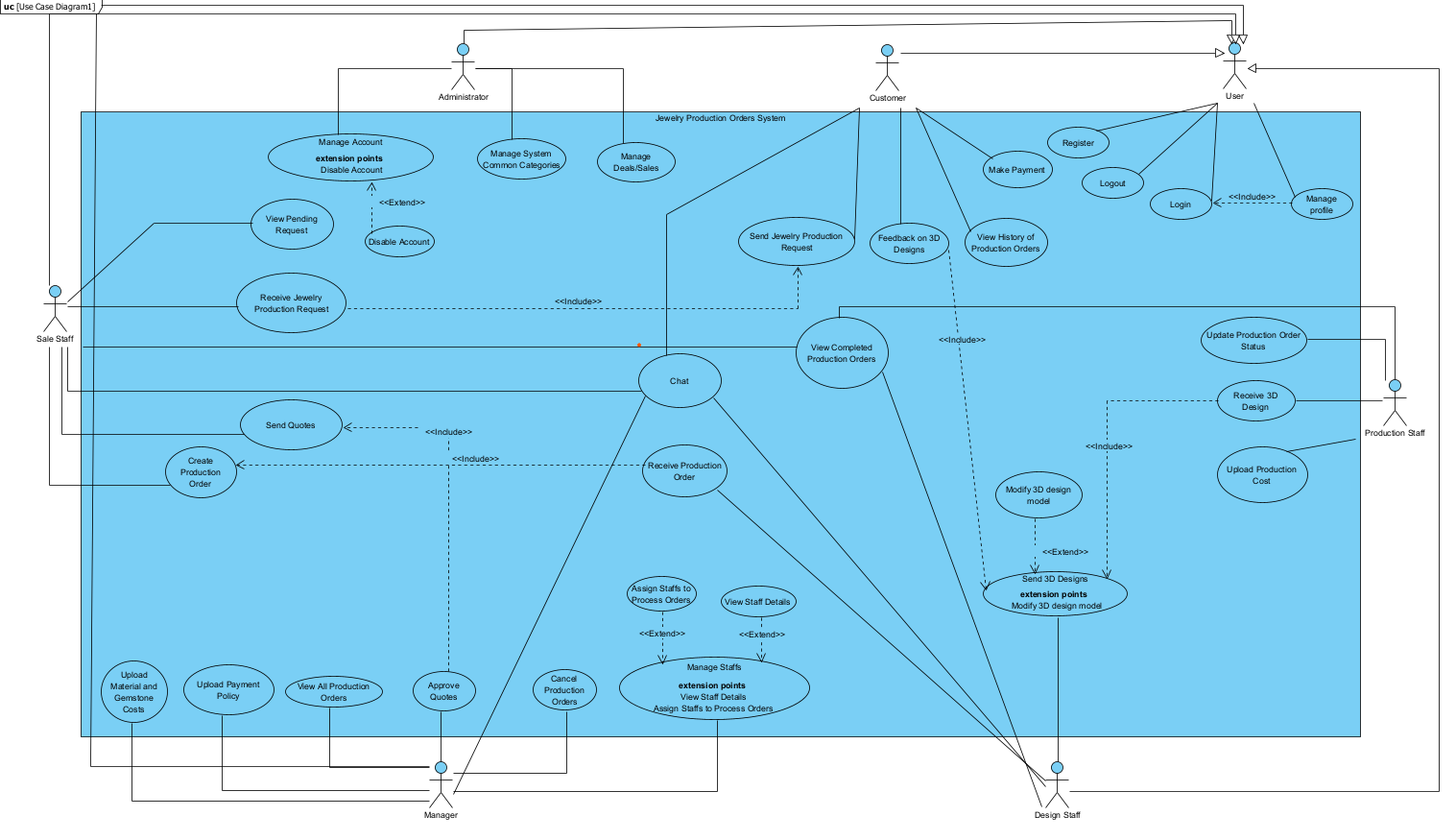
<< Giá vốn sản phẩm = [giá vàng thời điểm \* trọng lượng sản phẩm] + tiền công + tiền đá >>

- Khai báo chính sách thanh toán, hủy đơn hàng gia công trang sức. - khai báo giá vàng và giá đá áp dụng của công ty. - Khai báo mẫu thiết kế của công ty và định mức chi phí thực hiện kèm theo. - Dashboard thống kê.

# FUNCTIONAL Requirements

## Use Cases Diagram

[The main Use Case Diagrams of the system]



|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Use Case** | **Actors** | **Description** |
| UC-01 | Send Jewelry Production Request | Customer | Customers are allowed to send request to produce jewelry for them through the website. |
| UC-02 | Make Payment | Customer | Customers initiate this use case by sending payment via an online payment gateway, which the system will then automatically accept the order. |
| UC-03 | View History of Production Orders | Customer | Customers are allowed to view previous production orders made by them on the web application. |
| UC-04 | Feedback on Designs | Customer | During the design process, customers are allowed to feedback on designs sent by Design Staff in order for them to refine and improve. |
| UC-05 | Receive Jewelry Production Request | Sale Staff | Sales Staff are able to receive requests sent by customers and view their details. |
| UC-06 | Send Quotes | Sale Staff | Sales Staff can send quotes based on designs finalized with the customer. |
| UC-07 | Create Production Order | Sale Staff | After discussion with customer and the customer agreed on the quote of the product, Sale Staff will proceed to create a production order |
| UC-08 | Receive Production Order | Design Staff | Design Staff can receive production order created by the Sale Staff in order to design a model of the product |
| UC-09 | Send Designs | Design Staff | During the design process, Design Staffs are allowed to send designs of the jewelry to the customer. |
| UC-10 | Modify Designs | Design Staff | After customers feedback on the Designs, Design Staffs can edit and adjust the designs according to the customers’ desire. |
| UC-11 | Receive Designs | Production Staff | After design process, Production Staff receive model designs from Design Staff |
| UC-12 | Update Production Order Status | Production Staff | After the jewelry is finished, Production Staff can update the production order. |
| UC-13 | Upload Production Cost | Production Staff | Production Staff is responsible for determining expected cost of material, labor, manufacturing, etc. |
| UC-14 | Chat | Sale Staff, Design Staff, Manager, Customer | Staffs and Customer are able to communicate with each other via chat function. |
| UC-15 | Approve Quotes | Manager | Manager can approve quotes sent by the sales staff to ensure correctness. |
| UC-16 | Manage Staff | Manager | Manager is able to manage their staff including staff assignment, manage their work schedule, view staff details, etc. |
| UC-17 | Assign Staffs to Process Orders | Manager | Manager is able to assign staff to process orders made by the customer. |
| UC-18 | View Staff Details | Manager | Manager is able to view staff information including projects that they have involved, experience, skills, etc. |
| UC-19 | View All Production Orders | Manager | Manager is able to view all completed or ongoing production orders in the system. |
| UC-20 | Cancel Production Orders | Manager | Manager is able to cancel production orders made by the customer. |
| UC-21 | Upload Payment Policy | Manager | Manager is in charge of uploading and updating payment policy onto the platform. |
| UC-22 | Upload Material and Gemstone Costs | Manager | Manager is in charge of uploading cost of material and gemstone onto the platform |
| UC-23 | Manage Account | Administrator | Administrators can perform various account management functions on the platform. |
| UC-24 | Manage Deal/Sales | Administrator | Administrator manage deals and sale promotions for enhanced user experience |
| UC-25 | Manage System Common Categories | Administrator | Administrator oversees and organizes various categories within the system |
| UC-26 | Register | User | Customers are allowed to register an account on the platform. |
| UC-27 | Login | User | Users of the system can log into their account |
| UC-28 | Logout | User | Users of the system can log out of their account |
| UC-29 | Manage profile | User | Users of the system can manage their profile such as view or edit their profile |
| UC-30 | View products in collection | User | Users can view the list of products available on the platform with fixed designs. |
| UC-31 | View Product Details | User | Users can view detailed information about a specific product. |
| UC-32 | View Blogs | User | Users can view a list of blog posts. |
| UC-33 | View Blog Content | User | Users can view the content of a specific blog post. |
| UC-34 | View About Us Page | User | Users can view a list of warranty options. |
| UC-35 | View Warranty List | User | Users can view the warranty policy of the platform. |
| UC-36 | View Exchange Policy | User | Users can view the exchange policy of the platform. |
| UC-37 | View Gold Price | User | Users can view the current gold price. |
| UC-38 | Create Warranty | Sale Staff | Sale Staffs can create warranty for users’ orders |
| UC-39 | Manage Users | Admin | Admins can manage user accounts. |
| UC-40 | Manage Requests | Admin | Admins can manage requests made by users. |
| UC-41 | Manage Quoted Requests | Admin |  |
| UC-42 | Manage Warranty Requests | Admin |  |
| UC-43 | Manage Gemstones | Admin | Admins can manage gemstone information. |
| UC-44 | Manage Materials | Admin | Admins can manage material information. |
| UC-45 | View | Admin |  |
| UC-46 | Manage Invoices | Admin | Admins can manage invoices. |
| UC-47 | Manage Blog Post | Admin | Admins can create, view, edit blog post. |

## Use Case Specification

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| --- | --- | --- | --- |
| **USE CASE-01 SPECIFICATION** | | | |
| **Use-case No.** | UC-01 | **Use-case Version** | 1.0 |
| **Use-case Name** | Send Jewelry Production Request | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 10/05/2024 | **Priority** | High |
| **Actor:**  Customer  **Summary:**             The use case allows customers to send requests to produce jewelry through the website.  **Goal:**             The goal is to allow customers to conveniently request the production of custom jewelry through the website platform.  **Triggers**             A customer wants to order custom made jewelry.  **Preconditions:**             The customer is registered and logged in on the website. The customer has a clear idea of the jewelry design they want to produce.  **Post Conditions:**            The jewelry production request is sent successfully to the company. The customer receives a confirmation for the same.  **Main Success Scenario:**  1. The customer logs in to the account.  2. The customer navigates to the jewelry production request form.  3. The customer fills the form with the necessary details like jewelry design, material, etc.  4. The customer reviews the details and submits the request.  5. The system validates the input and sends a request to the company.  6. The customer receives a confirmation message.  **Alternative Scenario:**             The customer enters incorrect or insufficient details. In such a case, an informative error message is shown, and the customer is prompted to correct the inputs.  **Exceptions:**             Invalid customer account, Bad network causing failure in sending request, Service downtime  **Relationships:**             This use case is initiated by the ‘Log in’ use case.  **Business Rules:**             Customer requests must include all necessary details such as design specifications, materials, and gemstones. (Related to BR-01, BR-02, BR-09) | | | |

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| **USE CASE-02 SPECIFICATION** | | | |
| **Use-case No.** | UC-02 | **Use-case Version** | 1.0 |
| **Use-case Name** | Make Payment | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 10/05/2024 | **Priority** | High |
| **Actor:**  Customer  **Summary:**             The use case facilitates the customers to make payments for their orders using the online gateway system.  **Goal:**             The objective is to provide a smooth, secure, and efficient payment process for the customers through an online payment gateway.  **Triggers**             The customer is ready to make a payment for a purchase.  **Preconditions:**             The customer is authenticated in the system, has completed the order, and the online payment gateway is live and functioning.  **Post Conditions:**             The payment made by the customer via the online gateway is successfully received and the order is accepted by the system.  **Main Success Scenario:**  1. The customer logs into their account and initiates the purchase process.  2. The customer selects the 'Make Payment' option.  3. The customer executes the payment using the online payment gateway.  4. The system confirms the receipt of the payment and accordingly accepts the order.  **Alternative Scenario:**             In case of payment failure or error, customer may have to retry payment or choose a different mode of payment.  **Exceptions:**             Transaction failure, Invalid customer account, Networks errors, technical errors affecting online gateway.  **Relationships:**             This use case is initiated by the 'Place Order' use case.  **Business Rules:**  All payments must be processed through a secure payment gateway, and payment data must be encrypted and stored securely. (Related to BR-10, BR-11) | | | |

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| **USE CASE-03 SPECIFICATION** | | | |
| **Use-case No.** | UC-03 | **Use-case Version** | 1.0 |
| **Use-case Name** | View History of Production Orders | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 11/05/2024 | **Priority** | Medium |
| **Actor:**  Customer  **Summary:**             This use case allows customers to view the history of their production orders on the web application.  **Goal:**             To provide customers with the ability to retrieve and analyze their past production orders.  **Triggers**             A customer initiates the request to view their previous production orders.  **Preconditions:**             The customer has a history of production orders and is authenticated on the platform.  **Post Conditions:**              The customer is able to successfully view their past production orders.  **Main Success Scenario:**  1. The customer logs into the web application.  2. The customer clicks on the 'Order History' option.  3. The system retrieves and displays all the past production orders made by the customer.  **Alternative Scenario:**             In case no past orders exist, a related message is displayed to the customer.  **Exceptions:**  Invalid customer account, Network errors that hinder the successful retrieval of past order information.  **Relationships:**             This use case is initiated by the 'Log in' use case.  **Business Rules:**             Customer order history data must be securely stored and easily retrievable. (Related to BR-08, BR-09, BR-10). | | | |

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| **USE CASE-04 SPECIFICATION** | | | |
| **Use-case No.** | UC-04 | **Use-case Version** | 1.0 |
| **Use-case Name** | Feedback on Designs | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 11/05/2024 | **Priority** | Low |
| **Actor:**  Customer  **Summary:**             This use case allows the customers to provide feedback on designs during the design process for refinement and improvement.  **Goal:**             To ensure customer involvement in the development process by enabling them to provide their inputs on designs for improved quality.  **Triggers**              The customer receives designs from the Design Staff.  **Preconditions:**             The customer has received the design and is authenticated on the platform.  **Post Conditions:**             The customer has successfully provided feedback on the design.  **Main Success Scenario:**  1. The customer logs into his or her account.  2. The customer views the design sent by the Design Staff.  3. The customer provides feedback on the design for further refining and improvement.  **Alternative Scenario:**             In case the customer doesn’t want to provide feedback, they can skip this step.  **Exceptions:**             Invalid customer account, Network errors that hinder the successful submission of feedback.  **Relationships:**             This use case is initiated by the 'View Design' use case.  **Business Rules:**             Customer feedback must be documented and reviewed by the Design Staff to ensure continuous improvement. (Related to BR-09, BR-10) | | | |

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| **USE CASE-05 SPECIFICATION** | | | |
| **Use-case No.** | UC-05 | **Use-case Version** | 1.0 |
| **Use-case Name** | Receive Jewelry Production Request | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 11/05/2024 | **Priority** | High |
| **Actor:**  Sale Staff  **Summary:**             This use case allows the Sale Staff to receive and view the details of the Jewelry Production Requests sent by customers.  **Goal:**             To ensure requests from customers about jewelry production are received, viewed, and handled efficiently by the Sale Staff.  **Triggers**             A customer sends a request for jewelry production.  **Preconditions:**             The Sale Staff is authenticated on the system and customer has initiated a jewelry production request.  **Post Conditions:**             The Sale Staff has received the customer's request and viewed their details.  **Main Success Scenario:**  1. The Sale Staff logs into the system.  2. The system notifies the Sale Staff about the new jewelry production request.  3. The Sale Staff views the details of the customer's request.  **Alternative Scenario:**             In case no new requests exist, no notifications are sent.  **Exceptions:**             Invalid Sale Staff account, Network errors that hinder the successful receipt or viewing of customer requests.  **Relationships:**             This use case is initiated by the 'Log in' use case.  **Business Rules:**             Customer requests must be documented and handled in a timely manner to ensure customer satisfaction. (Related to BR-01, BR-09, BR-10) | | | |

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| **USE CASE-06 SPECIFICATION** | | | |
| **Use-case No.** | UC-06 | **Use-case Version** | 1.0 |
| **Use-case Name** | Send Quotes | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 11/05/2024 | **Priority** | High |
| **Actor:**  Sale Staff  **Summary:**             This use case details the process by which the Sales Staff can create a production order post-quote agreement with the customer.  **Goal:**             To streamline the process of producing orders as per a mutually agreed-upon quote between the Sale Staff and the customer.  **Triggers**             Customer agrees to the provided quote.  **Preconditions:**             The Sales Staff is authenticated on the system, and the customer has agreed to the provided quote.  **Post Conditions:**             The Sales Staff has successfully created a new production order.  **Main Success Scenario:**  1. The Sale Staff logs into the system.  2. Sale Staff confirms the quote agreement with the customer.  3. The Sales Staff proceeds to create a production order based on the agreement.  **Alternative Scenario:**             In case the customer rejects the quote, the production order creation step isn't proceeded with.  **Exceptions:**             Invalid Sale Staff account, network errors that prevent the successful creation of production orders.  **Relationships:**             This use case is initiated by the 'Send Quotes' use case.  **Business Rules:**             Quotes must be reviewed and approved by a manager before being sent to ensure accuracy and compliance with company policies. (Related to BR-04, BR-09) | | | |

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| **USE CASE-07 SPECIFICATION** | | | |
| **Use-case No.** | UC-07 | **Use-case Version** | 1.0 |
| **Use-case Name** | Create Production Order | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 18/05/2024 | **Priority** | Critical |
| **Actor:**  Sale Staff  **Summary:**             This use case details the process by which the Sales Staff can create a production order post-quote agreement with the customer.  **Goal:**             To streamline the process of producing orders as per a mutually agreed-upon quote between the Sale Staff and the customer.  **Triggers**             Customer agrees to the provided quote.  **Preconditions:**             The Sales Staff is authenticated on the system, and the customer has agreed to the provided quote.  **Post Conditions:**             The Sales Staff has successfully created a new production order.  **Main Success Scenario:**  1. The Sale Staff logs into the system.  2. Sale Staff confirms the quote agreement with the customer.  3. The Sales Staff proceeds to create a production order based on the agreement.  **Alternative Scenario:**             In case the customer rejects the quote, the production order creation step isn't proceeded with.  **Exceptions:**             Invalid Sale Staff account, network errors that prevent the successful creation of production orders.  **Relationships:**             This use case is initiated by the 'Send Quotes' use case.  **Business Rules:**             Production orders must be created only after receiving explicit confirmation from the customer. (Related to BR-02, BR-04, BR-09) | | | |

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| **USE CASE-08 SPECIFICATION** | | | |
| **Use-case No.** | UC-08 | **Use-case Version** | 1.0 |
| **Use-case Name** | Receive Production Order | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 11/05/2024 | **Priority** | High |
| **Actor:**  Design Staff  **Summary:**             This use case allows the Design Staff to receive the production order created by the Sales Staff to design a model of the product.  **Goal:**             To enable smooth transition from order creation to design  **Triggers**             The creation of a production order by the Sales Staff.  **Preconditions:**             Design Staff is authenticated on the system and a production order has been issued.  **Post Conditions:**             The Design Staff has received the order and can commence work on the model design.  **Main Success Scenario:**  1. The Design Staff logs into the system.  2. Receives the production order created by Sales Staff.  3. Starts designing the model of the product.  **Alternative Scenario:**             If there's no production order, the Design Staff doesn't start the design process.  **Exceptions:**             Invalid Design Staff account, network errors that hamper receipt of production orders.  **Relationships:**  This use case is initiated by the 'Create Production Order' use case.  **Business Rules:**             Design Staff must verify the details of the production order before starting the design process. (Related to BR-02, BR-05) | | | |

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| **USE CASE-09 SPECIFICATION** | | | |
| **Use-case No.** | UC-09 | **Use-case Version** | 1.0 |
| **Use-case Name** | Send Designs | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 11/05/2024 | **Priority** | Medium |
| **Actor:**  Design Staff  **Summary:**             This use case enables the Design Staff to send designs of the jewelry to the customer during the design process.  **Goal:**             To involve the customers in the design process and provide transparency.  **Triggers**             Design Staff completes the first cut of model design.  **Preconditions:**             Design Staff is authenticated on the system and the design of the product is ready for review.  **Post Conditions:**             The Design Staff has successfully sent the design to the customer for review.  **Main Success Scenario:**  1. The Design Staff logs into the system.  2. Prepares the design for sending to the customer.  3. Sends the design to the customer.  **Alternative Scenario:**             If the design isn't ready or approved internally, the Design Staff doesn't send the design.  **Exceptions:**             Invalid Design Staff account, network errors that hamper sending designs.  **Relationships:**             This use case is initiated by the 'Receive Production Order' use case.  **Business Rules:**            Designs must be reviewed internally before being sent to customers to ensure they meet company standards. (Related to BR-05, BR-09) | | | |

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| **USE CASE-10 SPECIFICATION** | | | |
| **Use-case No.** | UC-10 | **Use-case Version** | 1.0 |
| **Use-case Name** | Modify Designs | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 11/05/2024 | **Priority** | Medium |
| **Actor:**  Design Staff  **Summary:**             This use case outlines how the Design Staff can edit and adjust the designs of the product after customers provide feedback.  **Goal:**             To ensure that the desired specifications and expectations of the customer are met accurately.  **Triggers**             Reception of customer feedback regarding the design.  **Preconditions:**             Design Staff is authenticated on the system and has received feedback from the customer about the design.  **Post Conditions:**             The Design Staff has successfully modified the design as per the customer's feedback.  **Main Success Scenario:**  1. The Design Staff logs into the system.  2. Reviews the feedback received about the design from the customer.  3. Modifies and adjusts the design as per the customer's feedback.  **Alternative Scenario:**             If the feedback is not actionable or there are constraints in implementing it, a discussion is initiated with the customer.  **Exceptions:**             Invalid Design Staff account, network errors that hamper modification of designs.  **Relationships:**             This use case is an extension to the 'Send Designs' use case.  **Business Rules:**             Design modifications must adhere to the original design specifications and quality standards. (Related to BR-05, BR-09) | | | |

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| **USE CASE-11 SPECIFICATION** | | | |
| **Use-case No.** | UC-11 | **Use-case Version** | 1.0 |
| **Use-case Name** | Receive Designs | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 11/05/2024 | **Priority** | Medium |
| **Actor:**  Production Staff  **Summary:**             This Use Case describes how Production Staff can retrieve designs from Design Staff during the production process and use these as a base for their production.  **Goal:**             For Production Staff to effectively retrieve and utilize designs in the production process.  **Triggers**             Commencement of production process or when designs are required for certain stages of production.  **Preconditions:**             Production Staff is authenticated on the system and Design Staff have produced and uploaded the designs onto the system.  **Post Conditions:**             Production Staff are able to retrieve the designs and proceed with production.  **Main Success Scenario:**  1. The Production Staff logs into the system.  2. The Production Staff open the request list  3. Get the design that the design staff included in the request.  **Alternative Scenario:**             In case the designs are not available or retrievable, the Production Staff alerts the Design Staff.  **Exceptions:**             Invalid Production Staff account, network or system errors that hinder the retrieval process, absence or unavailability of designs.  **Relationships:**             This use case is directly linked and is positioned after the 'Create Designs' use case handled by the Design Staff.  **Business Rules:**             Production Staff must ensure that the designs are used accurately and consistently in the production process. (Related to BR-05, BR-09) | | | |

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| **USE CASE-12 SPECIFICATION** | | | |
| **Use-case No.** | UC-12 | **Use-case Version** | 1.0 |
| **Use-case Name** | Update Production Order Status | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 10/05/2024 | **Priority** | High |
| **Actor:**  Production Staff  **Summary:**             This use case describes how the Production Staff updates the status of the production order once the jewelry is finished.  **Goal:**             To ensure that the status of the production order is kept up-to-date, reflecting the progress of the production process.  **Triggers**             Completion of the jewelry production.  **Preconditions:**             Production Staff is authenticated on the system and the jewelry production has finished.  **Post Conditions:**             The Production Staff has successfully updated the status of the production order.  **Main Success Scenario:**  1. The Production Staff logs into the system.  2. Checks the finalized product against the production order.  3. Updates the status of the production order in the system.  **Alternative Scenario:**             If the produced jewelry does not match the production order or is not up to standards, the status is not updated and production is revisited.  **Exceptions:**             Invalid Production Staff account, network errors that hamper updating the production order status.  **Relationships:**             This use case is an extension to the 'Record and Update Production Progress' use case.  **Business Rules:**             Production order status must be updated at key milestones to ensure accurate tracking and transparency. (Related to BR-06, BR-09) | | | |

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| **USE CASE-13 SPECIFICATION** | | | |
| **Use-case No.** | UC-13 | **Use-case Version** | 1.0 |
| **Use-case Name** | Upload Production Cost | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 10/05/2024 | **Priority** | High |
| **Actor:**  Production Staff  **Summary:**             This use case describes how the Production Staff determines the standard cost of production including factors such as material, labor, and manufacturing costs.  **Goal:**             To calculate an accurate cost estimate for the production process.  **Triggers**             Initiation of the production process or changes in material, labor or manufacturing costs.  **Preconditions:**             Production Staff is authenticated on the system and has access to all necessary cost-related information.  **Post Conditions:**             The Production Staff has successfully determined the standard cost for the production.  **Main Success Scenario:**  1. The Production Staff logs into the system.  2. Reviews the expected costs of materials, labor, and manufacturing.  3. Calculates and records the standard cost in the system.  **Alternative Scenario:**             If there is a discrepancy or lack of clarity in cost-related data, further investigation is initiated.  **Exceptions:**             Invalid Production Staff account, network errors that hamper the cost calculation and recording process.  **Relationships:**             This use case is an extension to the 'Update Production Order Status' use case.  **Business Rules:**             Production costs must be accurately calculated and recorded to maintain profitability and ensure transparency. (Related to BR-07, BR-09) | | | |

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| **USE CASE-14 SPECIFICATION** | | | |
| **Use-case No.** | UC-14 | **Use-case Version** | 1.0 |
| **Use-case Name** | Chat | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 19/05/2024 | **Priority** | High |
| **Actor:**  Sale Staff, Design Staff, Manager, Customer  **Summary:**             This use case describes how the Sale Staff, Design Staff, Manager, and Customer interact and communicate with each other in real-time using the chat function.  **Goal:**             To facilitate instantaneous, direct communication between staff and customers.  **Triggers**             A new message is sent or received within the system.  **Preconditions:**             The users are authenticated on the system and have access to the chat function.  **Post Conditions:**             The users have successfully exchanged messages using the chat function.  **Main Success Scenario:**  1. The user logs into the system.  2. They open the chat function.  3. They send a message to another user or group.  4. They receive and view the message responses.  **Alternative Scenario:**             In case of any issues like failure to send or receive a message, the user is notified and assisted accordingly.  **Exceptions:**             Network or system errors that prevent the chat function from working properly.  **Relationships:**             This use case relates broadly to all other use cases where communication between the participating roles is required.  **Business Rules:**             All communication must be professional and adhere to company policies regarding data security and privacy. (Related to BR-09, BR-10) | | | |

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| **USE CASE-15 SPECIFICATION** | | | |
| **Use-case No.** | UC-15 | **Use-case Version** | 1.0 |
| **Use-case Name** | Approve Quotes | | |
| **Author** | Dinh Khac Ba Thuan | | |
| **Date** | 10/05/2024 | **Priority** | High |
| **Actor:**  Manager  **Summary:**             This use case outlines how the Manager can approve quotes that have been submitted by the sales staff, ensuring their correctness and appropriateness.  **Goal:**             To confirm the accuracy and integrity of quotes created by the sales staff.  **Triggers**             Receipt of a new quote for approval or a request to review an existing quote.  **Preconditions:**             The Manager is authenticated on the system and has received a quote submitted by the sales staff.  **Post Conditions:**             The Manager has successfully reviewed and approved the quote.  **Main Success Scenario:**  1. The Manager logs into the system.  2. Reviews the details of the quote submitted by sales staff.  3. Approves the quote if it matches with the company's policies and price structure.  **Alternative Scenario:**             If the quote does not match the company's policies or price structure, the Manager rejects the quote and notifies the sales staff for re-consideration.  **Exceptions:**             Invalid Manager account, network errors that hamper the quote review and approval process.  **Relationships:**             This use case is an extension to the 'Send Quote' use case handled by the sales staff.  **Business Rules:**             Quotes must be reviewed for compliance with company policies and pricing structures. (Related to BR-04, BR-05, BR-09) | | | |

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| **USE CASE-16 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-16> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage Staff | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | Medium | |
| **Actor:**  Manager  **Summary:**             The Manager has the authority to manage staff, including task assignments, schedule adjustments, and staff information viewing.  **Goal:**             To ensure efficient management of staff resources within the organization.  **Triggers**             The use case is triggered when the Manager needs to assign a task, adjust work schedules or view staff details.  **Preconditions:**             Manager is logged into the system.             The system has data on staff details and workload schedule.  **Post Conditions:**             The relevant staff member's details, assignments, or schedules have been updated to reflect the manager's actions.  **Main Success Scenario:**   1. Manager logs into the system. 2. Manager navigates to the Staff Management system. 3. Manager selects appropriate options to either assign tasks, change schedule, or view staff details. 4. Manager updates necessary changes. System updates the database.   **Alternative Scenario:**             If there is a system failure or other errors, the manager can choose to retry or contact system support.  **Exceptions:**             Could occur if the system fails, the Manager attempts to access unauthorized data, inconsistent schedule management, etc.  **Relationships:**             This use case is related to all other use cases involving task assignments and schedule management.  **Business Rules:**             All business policies related to staff management, information security, and HR policies should be maintained. (Related to BR-08, BR-09, BR-11) | | | | |
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| **USE CASE-17 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-17> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Assign Staffs to Process Orders | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  Manager  **Summary:**             The manager assigns staff to process customer's production orders.  **Goal:**             To ensure that every order is handled efficiently by assigning them to suitable staff.  **Triggers**             Receipt of a new production order from a customer.  **Preconditions:**             Manager is logged into the system.             New customer order is available in the system.             Staff members are available for task assignments.  **Post Conditions:**             An order is assigned to a staff member and they are notified.  **Main Success Scenario:**   1. The manager is notified of a new order. 2. The manager reviews the details of the order. 3. The manager decides on the best staff members to handle the order. 4. The manager assigns the order to the selected staff member through the system. 5. The system confirms the assignment and initiates a notification for the staff member.   **Alternative Scenario:**             In the event that no staff members are available, the manager will have to wait or hire new staff.  **Exceptions:**             If there are no available staff, the order cannot be assigned.             If there is a system error preventing order assignment.  **Relationships:**             This use case directly relates to UC-16 (Manage Staff) and is indirectly related to all use cases where staff interacts with orders.  **Business Rules:**             Orders must be assigned in a fair and load-balanced manner. (Related to BR-09,  BR-11) | | | | |

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| **USE CASE-18 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-18> | **Use-case Version** | | <1.0> |
| **Use-case Name** | View Staff Details | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  Manager  **Summary:**             The manager is able to view staff details, including personal information, projects involved in, experiences, skills, and other relevant data.  **Goal:**             Maintain an efficient and updated staff management system by accessing up-to-date information on staff.  **Triggers**             When the manager needs to view staff details for decision making such as task assignments, promotions, or project placements.  **Preconditions:**             Manager is logged into the system.             System has up-to-date and comprehensive staff information.  **Post Conditions:**             Manager is updated with the required staff details.  **Main Success Scenario:**   1. Manager logs into the system. 2. Manager navigates to the "View Staff Details" option in the system. 3. Manager selects a staff member or a group of staff members whose details are to be viewed. 4. System displays the requested details.   **Alternative Scenario:**             In case the system cannot retrieve the required details, the manager may need to request them from the HR department.  **Exceptions:**             System failure or inaccessible staff data.  **Relationships:**             This use case directly relates to UC-16 (Manage Staff) and is indirectly related to all use cases where staff data is required.  **Business Rules:**             The manager must only have access to professional data and not unnecessary personal data. By law, sensitive personal data must be hidden or protected. (Related to BR-08, BR-09, BR-10) | | | | |

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| **USE CASE-19 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-19> | **Use-case Version** | | <1.0> |
| **Use-case Name** | View All Production Orders | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  Manager  **Summary:**             The Manager is able to view all completed or ongoing production orders in the system.  **Goal:**             To oversee the production process effectively by monitoring all production orders.  **Triggers**             The need to monitor production progress, quality check, or resource planning.  **Preconditions:**             Manager is logged into the system.             The system has updated and accurate information on all production orders.  **Post Conditions:**             The Manager has the latest insights into the production orders.  **Main Success Scenario:**   1. Manager logs into the system. 2. Manager navigates to the "View All Production Orders" section in the system. 3. System presents a comprehensive view of all production orders, distinguished by their statuses, i.e., completed or ongoing.   **Alternative Scenario:**             If the system can't retrieve the required information, the Manager may need to request it from the production department.  **Exceptions:**             System failure, incorrect, or inaccessible data.  **Relationships:**             This use case is related to all other use cases that require insights from the production process, such as UC-17 (Assign Staffs to Process Orders) and UC-20 (Manage Inventory).  **Business Rules:**             Manager must only have access to relevant data, and sensitive information must be protected. (Related to BR-08, BR-09, BR-10) | | | | |

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| **USE CASE-20 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-20> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Cancel Production Orders | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  Manager  **Summary:**             The Manager has the authority to cancel any production orders made by the customer.  **Goal:**             To control production flow by canceling orders when necessary.  **Triggers**             The need to cancel a production order due to changes in production capacity, raw materials shortage, or request from client.  **Preconditions:**             Manager is logged into the system.             The production order exists in the system.  **Post Conditions:**             Selected production order is canceled in the system.  **Main Success Scenario:**   1. Manager logs into the system. 2. Manager navigates to the "Cancel Production Orders" section. 3. Manager selects the production order to be canceled. 4. System validates and cancels the selected order.   **Alternative Scenario:**             If the system can't retrieve or cancel the selected order, manual intervention might be required.  **Exceptions:**             System failure, invalid, or inaccessible data.  **Relationships:**             This use case is related to all other use cases involving production orders, such as UC-19 (View All Production Orders) and UC-21 (Reschedule Production Orders).  **Business Rules:**             Manager must have valid reasons supported by necessary documentation to cancel a production order. (Related to BR-09, BR-10, BR-11) | | | | |

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| **USE CASE-21 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-21> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Upload Payment Policy | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  Manager  **Summary:**             The Manager is responsible for uploading and updating the payment policy onto the platform.  **Goal:**             To keep the platform's payment policy up to date and readily accessible to customers.  **Triggers**             The need to introduce a new payment method, changes in fees, or changes in terms of service.  **Preconditions:**             Manager is logged into the system.             The updated payment policy is ready for upload.  **Post Conditions:**             Updated payment policy is available on the platform.  **Main Success Scenario:**   1. Manager logs into the system. 2. Manager navigates to the "Upload Payment Policy" section. 3. Manager uploads the updated payment policy document. 4. System validates the document and makes it available on the platform.   **Alternative Scenario:**             If the system can't upload the document, manual upload might be required.  **Exceptions:**             System failure or invalid document.  **Relationships:**             This use case is related to all payment-related use cases, such as UC-25 (Process Payments) and UC-26 (Handle Payment Disputes).  **Business Rules:**             Payment policies must adhere to applicable laws and regulations. (Related to BR-04, BR-09, BR-10) | | | | |

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| **USE CASE-22 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-22> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Upload Material and Gemstone Costs | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  Manager  **Summary:**             The Manager is responsible for uploading and updating the costs of materials and gemstones onto the platform.  **Goal:**             To maintain up-to-date cost information on platform for smooth business operations and accurate pricing.  **Triggers**             Market changes affecting the costs of materials and gemstones.  **Preconditions:**             Manager is logged into the system.             Cost details of the materials and gemstones are available for upload.  **Post Conditions:**             Accurate and updated costs of materials and gemstones are available on the platform.  **Main Success Scenario:**   1. Manager logs into the system. 2. Manager navigates to the "Upload Material and Gemstone Costs" section. 3. Manager uploads the updated cost details. 4. System validates the details and makes the updated costs available on the platform.   **Alternative Scenario:**             If the system can't upload the details, manual entry might be required.  **Exceptions:**             System failure or invalid cost details.  **Relationships:**             This use case is related to all pricing and costing related use cases, such as UC-23 (Update Product Pricing) and UC-24 (Generate Quotations).  **Business Rules:**             Cost information must be derived from reliable sources and should be verified before upload. (Related to BR-02, BR-05, BR-07) | | | | |

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| **USE CASE-23 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-23> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage Account | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  Administrator  **Summary:**             Administrators have permissions to perform various account management functions on the platform.  **Goal:**             To effectively handle account management including account creation, deletion and modifications.  **Triggers**             Administrator's decision to make changes in a user's account based on specific reasons.  **Preconditions:**             Administrator is logged into the system.  **Post Conditions:**             Changes to the accounts are implemented successfully.  **Main Success Scenario:**   1. Administrator logs into the system. 2. Administrator navigates to the "Manage Account" section. 3. Administrator performs the necessary account management operations. 4. System validates and implements the changes.   **Alternative Scenario:**             If the system can't implement the changes, manual intervention might be required.  **Exceptions:**             System failure, invalid account details.  **Relationships:**             This use case is related to all account-related operations and use cases, such as UC-24 (Reset Password) and UC-25 (Change Role Permissions).  **Business Rules:**             Account changes must comply with user preferences and privacy policies. (Related to BR-08, BR-09, BR-10) | | | | |

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| **USE CASE-24 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-24> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manager Deal/Sales | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  Administrator  **Summary:**             Administrator is responsible for managing deals and sales promotions to enhance the user experience.  **Goal:**             To draw customer attention, increase sales, and offer a better user experience with promotional deals.  **Triggers**              Need for introducing or updating sales promotions or deals based on market trend, special occasions, or marketing strategy.  **Preconditions:**             Administrator is logged into the system.             The details of the deals and sales promotions are ready for upload.  **Post Conditions:**             Latest deals and sales promotions are available on the platform.  **Main Success Scenario:**   1. Administrator logs into the system. 2. Administrator navigates to the "Manager Deal/Sales" section. 3. Administrator creates or updates the sales promotion details. 4. System validates the details and implements the promotions on the platform.   **Alternative Scenario:**             If the system can't update the promotions, manual entry might be required.  **Exceptions:**             System failure or invalid promotion details.  **Relationships:**             This use case is related to all marketing and sale related use cases, such as UC-25 (Plan Marketing Strategy) and UC-26 (Analyze Sales Performance).  **Business Rules:**             All deals and promotions must comply with the company's policy and regulations. (Related to BR-04, BR-05, BR-09) | | | | |

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| **USE CASE-25 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-25> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage System Common Categories | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  Administrator  **Summary:**             The Administrator has the responsibility to oversee, organize, and manage various categories within the system.  **Goal:**             To oversee and streamline the categorization within the system for easy navigation and efficient functioning.  **Triggers**             Initialization of system revamping or revisions, addition of a new category, or reclassification of existing ones.  **Preconditions:**             Administrator is logged into the system.  **Post Conditions:**             The system categories are efficiently updated and managed.  **Main Success Scenario:**   1. Administrator logs into the system. 2. Administrator navigates to the "Manage System Common Categories" section. 3. Administrator performs the necessary category management operations. 4. System validates and implements the changes.   **Alternative Scenario:**             If the system can't implement the changes, manual intervention might be required.  **Exceptions:**             System failure, invalid category details.  **Relationships:**             This use case may be linked to any functionality that relies on or affects the system's categorization, such as UC-26 (Product Categorization) and UC-27 (Service Classification).  **Business Rules:**             Any modifications to system categories should comply with system architecture rules and should not disrupt the current system functioning. (Related to BR-09, BR-10) | | | | |

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| **USE CASE-26 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-26> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Register | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  User  **Summary:**             Customers can register themselves in the platform to access the extended services.  **Goal:**             To facilitate easy and efficient user registration, paving the way for value-adding platform user interactions.  **Triggers**             A new customer's desire to avail the services offered on the platform.  **Preconditions:**             The details required to complete the registration are available with the customer.  **Post Conditions:**             Customer's account is created and ready to be used.  **Main Success Scenario:**   1. User navigates to the "Register" section. 2. User provides the necessary details needed for registration. 3. System captures, validates the details and creates the user account.   **Alternative Scenario:**             If the system can't capture the details, manual registration might be required.  **Exceptions:**             System failure, invalid user details.  **Relationships:**             This use case is related to other user-onboarding use cases, such as UC-27 (User Login) and UC-28 (Password Reset).  **Business Rules:**             All registrations must comply with the privacy policies and terms and conditions of the platform. (Related to BR-01, BR-08, BR-09, BR-10) | | | | |

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| **USE CASE-27 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-27> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Login | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  User  **Summary:**             Users can log into their account using their registered credentials for accessing services.  **Goal:**             To ensure secure and seamless entry of registered users into their accounts.  **Triggers**             User's need to access their account to use the services provided by the platform.  **Preconditions:**             User must be already registered.             User should remember their login credentials.  **Post Conditions:**  User successfully accesses their account.  **Main Success Scenario:**   1. User navigates to the "Login" section. 2. User enters their credentials. 3. System validates the credentials and allows the user to access their account.   **Alternative Scenario:**             If the user enters incorrect credentials, a password recovery option is provided.  **Exceptions:**             System failure, invalid user details.  **Relationships:**             This use case is related to UC-26 "Register" and UC-28 "Password Reset".  **Business Rules:**             User login details must comply with the privacy policies of the platform. (Related to BR-01, BR-08, BR-09) | | | | |

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| **USE CASE-28 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-28> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Logout | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  User  **Summary:**             Users can logout their account safely staying ensured that their session ends securely.  **Goal:**             To maintain the security and privacy of the user account by ending the current session securely.  **Triggers**             User's desire to end their session.  **Preconditions:**             User is logged in.  **Post Conditions:**             User's session ends securely.  **Main Success Scenario:**   1. User navigates to the "Logout" section. 2. User selects to log out. 3. System completes the logout process and ends the user session.   **Alternative Scenario:**             If the system fails to perform the logout operation, a retry option must be provided.  **Exceptions:**             System failure.  **Relationships:**             This use case is related to UC-27 "Login".  **Business Rules:**             User logout must comply with the privacy policies of the platform. (Related to BR-08, BR-09, BR-10) | | | | |

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| **USE CASE-29 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-29> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage Profile | | | |
| **Author** | Phi Le Minh Tam | | | |
| **Date** | 18/05/2024 | **Priority** | High | |
| **Actor:**  User  **Summary:**             Users can view and modify their account profile information.  **Goal:**             To provide users with the ability to manage their profiles, allowing them to keep their information up-to-date.  **Triggers**             User's intention to view or alter their profile details.  **Preconditions:**             User should be logged into the system.  **Post Conditions:**             Updated user profile information is saved and displayed in the system.  **Main Success Scenario:**   1. User navigates to the "Profile" section. 2. User views the existing profile details. 3. User makes desired changes and saves them. 4. System validates and updates the user profile details.   **Alternative Scenario:**             If the user enters invalid details, appropriate error messages guide the user.  **Exceptions:**             System failure, invalid user details.  **Relationships:**             This use case is directly related to UC-27 "Login".  **Business Rules:**             All user profile updates must comply with the privacy policies of the platform. (Related to BR-01, BR-08, BR-09) | | | | |

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| **USE CASE-30 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-30> | **Use-case Version** | | <1.0> |
| **Use-case Name** | View Products in Collection | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  User  **Summary:**             Users can view the list of products available on the platform with fixed designs.  **Goal:**             To enable users to browse and view all available products on the platform.  **Triggers**             User accesses the platform and navigates to the products collection.  **Preconditions:**             The user is authenticated on the system if required, and products with fixed designs are available on the platform.  **Post Conditions:**             Users can successfully view and browse the listed products.  **Main Success Scenario:**  1. The user logs into the system (if required).  2. Navigates to the 'Products Collection' section.  3. Views the list of available products with their respective designs.  Alternative Scenario:  If no products are available, a message indicating the absence of products is displayed to the user.  **Exceptions:**  Network or system errors that prevent loading or displaying the product list.  **Relationships:**  This use case can relates to the 'Authentication' use case if users need to log in before accessing the product collection.  **Business Rules:** All user profile updates must comply with the privacy policies of the platform. (Related to BR-01, BR-08, BR-09) | | | | |

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| **USE CASE-31 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-31> | **Use-case Version** | | <1.0> |
| **Use-case Name** | View Product Details | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  User  **Summary:**             Users can view detailed information about a specific product available on the platform.  **Goal:**             To allow users to access and review comprehensive details of a specific product.  **Triggers**             User selects or clicks on a specific product from the product list.  **Preconditions:**           The user is authenticated on the system if required, and has accessed the list of products.  **Post Conditions:**            Users can see all the relevant details of the selected product.  Users can see all the relevant details of the selected product.  **Main Success Scenario:**  1. The user logs into the system (if required).  2. Navigates to the 'Products Collection' section.  3. Selects or clicks on a specific product.  4. Views the detailed information of the selected product, including images, descriptions, prices, specifications, and reviews.  **Alternative Scenario:**  If the specific product details cannot be loaded, an error message is displayed to the user.  **Exceptions:**  Network or system errors that prevent loading or displaying product details.  **Relationships:**  This use case is directly linked to UC-30 'View Products in Collection' as it follows after selecting a product from the collection.  **Business Rules:**  The system should ensure that product details are accurate, up to date, and include all relevant information a user might require.  All user profile updates must comply with the privacy policies of the platform. (Related to BR-01, BR-08, BR-09) | | | | |

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| **USE CASE-32 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-32> | **Use-case Version** | | <1.0> |
| **Use-case Name** | View Blogs | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | Low | |
| **Actor:**  User  **Summary:**             Users can view a list of blog posts available on the platform.  **Goal:**             To enable users to browse and view all available blog posts on the platform.  To enable users to browse and view all available blog posts on the platform.  **Triggers**             User accesses the platform and navigates to the blog section.  **Preconditions:**           The user is authenticated on the system if required, and blog posts are available on the platform.  **Post Conditions:** can see all the relevant details of the selected product.  Users can see all the relevant details of the selected product.  **Main Success Scenario:**  1. The user logs into the system (if required).  2. Navigates to the 'Blog' section.  3. Views the list of available blog posts with their titles and short descriptions.  **Alternative Scenario:**  If no blog posts are available, a message indicating the absence of blog posts is displayed to the user.  **Exceptions:**  Network or system errors that prevent loading or displaying the blog list.  **Relationships:**  This use case may relate to other use cases involving user engagement, such as commenting or sharing blog posts.  **Business Rules:**  The system should ensure the list of blog posts is up to date and accessible to users.  All user profile updates must comply with the privacy policies of the platform. (Related to BR-01, BR-08, BR-09) | | | | |

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| **USE CASE-33 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-33> | **Use-case Version** | | <1.0> |
| **Use-case Name** | View Blog Content | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | Low | |
| **Actor:**  User  **Summary:**             This use case describes how users can view the content of a specific blog post on the platform.  **Goal:**  To allow users to access and read the full content of a selected blog post.  **Triggers**             User selects or clicks on a specific blog post from the list of blog posts.  **Preconditions:**           The user is authenticated on the system if required, and has accessed the list of blog posts.  **Post Conditions:** can see all the relevant details of the selected product.  Users can see and read the detailed content of the selected blog post.  **Main Success Scenario:**  1. The user logs into the system (if required).  2. Navigates to the 'Blog' section.  3. Selects or clicks on a specific blog post.  4. Views and reads the full content of the selected blog post, including text, images, videos, and comments if available.  **Alternative Scenario:**  If the content of the specific blog post cannot be loaded, an error message is displayed to the user.  **Exceptions:**  Network or system errors that prevent loading or displaying the blog content.  **Relationships:**  This use case is directly linked to UC-32 'View Blogs' as it follows after selecting a blog post from the list.  **Business Rules:**  The system should ensure that blog content is accurate, up to date, and includes all relevant media and information a user might require.  All user profile updates must comply with the privacy policies of the platform. (Related to BR-01, BR-08, BR-09) | | | | |

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| **USE CASE-34 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-34> | **Use-case Version** | | <1.0> |
| **Use-case Name** | View About Us Page | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | Low | |
| **Actor:**  User  **Summary:**  This use case describes how users can view the About Us page of the platform.  **Goal:**  To provide users with information about the organization through the About Us page.  **Triggers:**  User navigates to the About Us page link provided on the platform.  **Preconditions:**  The About Us page content is created and maintained by the organization.  **Post Conditions:**  Users can view the comprehensive information about the organization.  **Main Success Scenario:**  1. The user logs into the system (if required).  2. Navigates to the 'About Us' section.  3. Views the information provided on the About Us page, which includes the organization's history, mission, vision, team, and contact information.  **Alternative Scenario:**  If the About Us page cannot be loaded, an error message is displayed to the user.  **Exceptions:**  Network or system errors that prevent loading or displaying the About Us page.  **Relationships:**  **Business Rules:**  The system should ensure the About Us page is regularly updated and provides accurate and relevant information to the users. | | | | |

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| **USE CASE-35 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-35> | **Use-case Version** | | <1.0> |
| **Use-case Name** | View About Us Page | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | Low | |
| **Actor:**  User  **Summary:**  This use case describes how users can view the About Us page of the platform.  **Goal:**  To provide users with information about the organization through the About Us page.  **Triggers:**  User navigates to the About Us page link provided on the platform.  **Preconditions:**  The About Us page content is created and maintained by the organization.  **Post Conditions:**  Users can view the comprehensive information about the organization.  **Main Success Scenario:**  1. The user logs into the system (if required).  2. Navigates to the 'About Us' section.  3. Views the information provided on the About Us page, which includes the organization's history, mission, vision, team, and contact information.  **Alternative Scenario:**  If the About Us page cannot be loaded, an error message is displayed to the user.  **Exceptions:**  Network or system errors that prevent loading or displaying the About Us page.  **Relationships:**  **Business Rules:**  The system should ensure the About Us page is regularly updated and provides accurate and relevant information to the users. | | | | |

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| **USE CASE-36 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-36> | **Use-case Version** | | <1.0> |
| **Use-case Name** | View Exchange Policy | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | Medium | |
| **Actor:**  User  **Summary:**  Users can view the exchange policy of the platform.  **Goal:**  To allow users to access and understand the exchange policies available.  **Triggers:**  User navigates to the exchange policy section.  **Preconditions:**  Exchange policy information is available and up-to-date.  **Post Conditions:**  Users can view the exchange policy details.  **Main Success Scenario:**   1. The user logs into the system (if required). 2. The user navigates to the 'Exchange Policy' section. 3. The user views the exchange policy information.   **Alternative Scenario:**  If the exchange policy cannot be loaded, an error message is displayed to the user.  **Exceptions:**  Network or system errors that prevent loading the exchange policy.  **Relationships:**  **Business Rules:**  The system should ensure the exchange policy information is regularly updated and accurate. | | | | |

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| **USE CASE-37 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-37> | **Use-case Version** | | <1.0> |
| **Use-case Name** | View Gold Price | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | Medium | |
| **Actor:**  User  **Summary:**  Users can view the current gold price.  **Goal:**  To provide users with up-to-date gold price information.  **Triggers:**  User navigates to the gold price section.  **Preconditions:**  Gold price information is available and updated regularly.  **Post Conditions:**  Users can view the current gold price.  **Main Success Scenario:**   1. The user logs into the system (if required). 2. The user navigates to the 'Gold Price' section. 3. The user views the current gold price information.   **Alternative Scenario:**  If the gold price information cannot be loaded, an error message is displayed to the user.  **Exceptions:**  Network or system errors that prevent loading the gold price information.  **Relationships:**  **Business Rules:**  The business should ensure the gold price information is regularly updated and accurate. | | | | |

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| **USE CASE-38 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-38> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Create Warranty | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  Sale Staff  **Summary:**  Sales staff can create a warranty for users’ orders.  **Goal:**  To enable sales staff to create and assign warranty policies to users’ orders.  **Triggers:**   * Users complete payment for corresponding orders. * Sales staff initiates the warranty creation process.   **Preconditions:**   * The user’s order details are available. * Sales staff is logged into the system.   **Post Conditions:**  A warranty is created and associated with the user’s order.  **Main Success Scenario:**   1. Sales staff logs into the system. 2. Sales staff navigates to the 'Completed Orders' section. 3. Sales staff clicks on the 'Create Warranty' option for the order. 4. Sales staff enters the necessary warranty details. 5. Sales staff submits the warranty creation form. 6. The system validates the details and creates the warranty. 7. The warranty is associated with the user’s order and a confirmation is displayed.   **Alternative Scenario:**  If the warranty creation fails, an error message is displayed, and the sales staff is prompted to correct the information and try again.  **Exceptions:**  Network or system errors that prevent creating the warranty.  **Relationships:**  This use case is initiated by the ‘Log in’ use case.  **Business Rules:**  The system should ensure the warranty details are accurate and properly associated with the user’s order. | | | | |

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| **USE CASE-39 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-39> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage Users | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  Admin  **Summary:**  Admins can manage user accounts.  **Goal:**  To provide admins with the ability to view, edit, and manage user accounts.  **Triggers:**  Admin navigates to the user management section.  **Preconditions:**   * Admin is logged into the system. * User account details are available.   **Post Conditions:**  User accounts are managed successfully (viewed, edited, or deleted as needed).  **Main Success Scenario:**   1. Admin logs into the system. 2. Admin navigates to the 'Manage Users' section. 3. Admin views the list of user accounts. 4. Admin selects a user account to manage. 5. Admin edits or updates user details as needed. 6. Admin saves the changes and the system updates the user account information.   **Alternative Scenario:**  If user management fails, an error message is displayed, and the admin is prompted to correct the information and try again.  **Exceptions:**  Network or system errors that prevent managing user accounts.  **Relationships:**  This use case is initiated by the ‘Log in’ use case.  **Business Rules:**  The system should ensure user account details are accurate and changes are properly logged. | | | | |

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| **USE CASE-40 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-40> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage Requests | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  Admin  **Summary:**  Admins can manage requests made by users.  **Goal:**  To enable admins to view, process, and manage user requests.  **Triggers:**  Admin navigates to the requests management section.  **Preconditions:**   * Admin is logged into the system. * User requests are available.   **Post Conditions:**  User requests are managed successfully.  **Main Success Scenario:**   1. Admin logs into the system. 2. Admin navigates to the 'Manage Requests' section. 3. Admin views the list of user requests. 4. Admin selects a request to manage. 5. Admin processes the request (approve, deny, or update). 6. Admin saves the changes and the system updates the request status.   **Alternative Scenario:**  If request management fails, an error message is displayed, and the admin is prompted to correct the information and try again.  **Exceptions:**  Network or system errors that prevent managing requests.  **Relationships:**  This use case is initiated by the ‘Log in’ use case.  **Business Rules:**  The system should ensure request details are accurate and changes are properly logged. | | | | |

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| **USE CASE-41 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-41> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage Quoted Requests | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  Admin  **Summary:**  Admins can manage quoted requests.  **Goal:**  To enable admins to view, edit, and manage quoted requests.  **Triggers:**  Admin navigates to the quoted requests management section.  **Preconditions:**   * Admin is logged into the system. * Quoted request details are available.   **Post Conditions:**  Quoted requests are managed successfully.  **Main Success Scenario:**   1. Admin logs into the system. 2. Admin navigates to the 'Manage Quoted Requests' section. 3. Admin views the list of quoted requests. 4. Admin selects a quoted request to manage. 5. Admin edits or updates quoted request details as needed. 6. Admin saves the changes and the system updates the quoted request information.   **Alternative Scenario:**  If quoted request management fails, an error message is displayed, and the admin is prompted to correct the information and try again.  **Exceptions:**  Network or system errors that prevent managing quoted requests.  **Relationships:**  This use case is initiated by the ‘Log in’ use case.  **Business Rules:**  The system should ensure quoted request details are accurate and changes are properly logged. | | | | |

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| **USE CASE-42 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-42> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage Warranty | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  Admin  **Summary:**  Admins can manage warranty requests.  **Goal:**  To enable admins to view, process, and manage warranty.  **Triggers:**  Admin navigates to the warranty management section.  **Preconditions:**   * Admin is logged into the system. * Warranty request details are available.   **Post Conditions:**  Warranty requests are managed successfully.  **Main Success Scenario:**   1. Admin logs into the system. 2. Admin navigates to the 'Manage Warranty Requests' section. 3. Admin views the list of warranty requests. 4. Admin selects a warranty request to manage. 5. Admin processes the request (approve, deny, or update). 6. Admin saves the changes and the system updates the warranty request status.   **Alternative Scenario:**  If warranty request management fails, an error message is displayed, and the admin is prompted to correct the information and try again.  **Exceptions:**  Network or system errors that prevent managing warranty requests.  **Relationships:**  This use case is initiated by the ‘Log in’ use case.  **Business Rules:**  The system should ensure warranty request details are accurate and changes are properly logged. | | | | |

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| **USE CASE-43 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-43> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage Gemstones | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  Admin  **Summary:**  Admins can manage admins can manage gemstone information.  **Goal:**  To enable admins to add, edit, and remove gemstone information.  **Triggers:**  Admin navigates to the gemstone management section.  **Preconditions:**   * Admin is logged into the system.   **Post Conditions:**  Gemstone information is managed successfully.  **Main Success Scenario:**   1. Admin logs into the system. 2. Admin navigates to the 'Manage Gemstones' section. 3. Admin views the list of gemstones. 4. Admin selects a gemstone to manage. 5. Admin edits or updates gemstone details as needed. 6. Admin saves the changes and the system updates the gemstone information.   **Alternative Scenario:**  If gemstone management fails, an error message is displayed, and the admin is prompted to correct the information and try again.  **Exceptions:**  Network or system errors that prevent managing gemstones.  **Relationships:**  This use case is initiated by the ‘Log in’ use case.  **Business Rules:**  The system should ensure gemstone details are accurate and changes are properly logged. | | | | |

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| --- | --- | --- | --- | --- |
| **USE CASE-44 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-44> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage Materials | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  Admin  **Summary:**  Admins can manage material information.  **Goal:**  To enable admins to add, edit, and remove material information.  **Triggers:**  Admin navigates to the material management section.  **Preconditions:**   * Admin is logged into the system.   **Post Conditions:**  Material information is managed successfully.  **Main Success Scenario:**   1. Admin logs into the system. 2. Admin navigates to the 'Manage Materials' section. 3. Admin views the list of materials. 4. Admin selects a material to manage. 5. Admin edits or updates material details as needed. 6. Admin saves the changes and the system updates the material information.   **Alternative Scenario:**  If material management fails, an error message is displayed, and the admin is prompted to correct the information and try again.  **Exceptions:**  Network or system errors that prevent managing materials.  **Relationships:**  This use case is initiated by the ‘Log in’ use case.  **Business Rules:**  The system should ensure material details are accurate and changes are properly logged. | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE-45 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-45> | **Use-case Version** | | <1.0> |
| **Use-case Name** | View Analytical Figures | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  Admin  **Summary:**  Admins can view analytical figures in the dashboard.  **Goal:**  To provide admins with insights and analytical data through the dashboard.  **Triggers:**  Admin navigates to the dashboard section.  **Preconditions:**   * Admin is logged into the system.   **Post Conditions:**  Admins viewed the analytical figures on the dashboard.  **Main Success Scenario:**   1. Admin logs into the system. 2. Admin navigates to the 'Dashboard' section. 3. The system retrieves the latest analytical data. 4. Admin views the analytical figures displayed on the dashboard.   **Alternative Scenario:**  If the analytical figures cannot be retrieved, an error message is displayed.  **Exceptions:**  Network or system errors that prevent retrieving or displaying the analytical figures.  **Relationships:**  This use case is initiated by the ‘Log in’ use case.  **Business Rules:**  The system should ensure that the analytical figures are accurate, up-to-date, and relevant to the admin's needs. | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE-46 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-46> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage Invoices | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  Admin  **Summary:**  Admins can manage invoices.  **Goal:**  To enable admins to create, view, edit, and delete invoices.  **Triggers:**  Admin navigates to the invoice management section.  **Preconditions:**   * Admin is logged into the system. * Invoice details are available.   **Post Conditions:**  Invoices are managed successfully.  **Main Success Scenario:**   1. Admin logs into the system. 2. Admin navigates to the 'Manage Invoices' section. 3. Admin views the list of invoices. 4. Admin selects an invoice to manage. 5. Admin edits or updates invoice details as needed. 6. Admin saves the changes and the system updates the invoice information.   **Alternative Scenario:**  If invoice management fails, an error message is displayed, and the admin is prompted to correct the information and try again.  **Exceptions:**  Network or system errors that prevent managing invoices.  **Relationships:**  This use case is initiated by the ‘Log in’ use case.  **Business Rules:**  The system should ensure invoice details are accurate and changes are properly logged. | | | | |

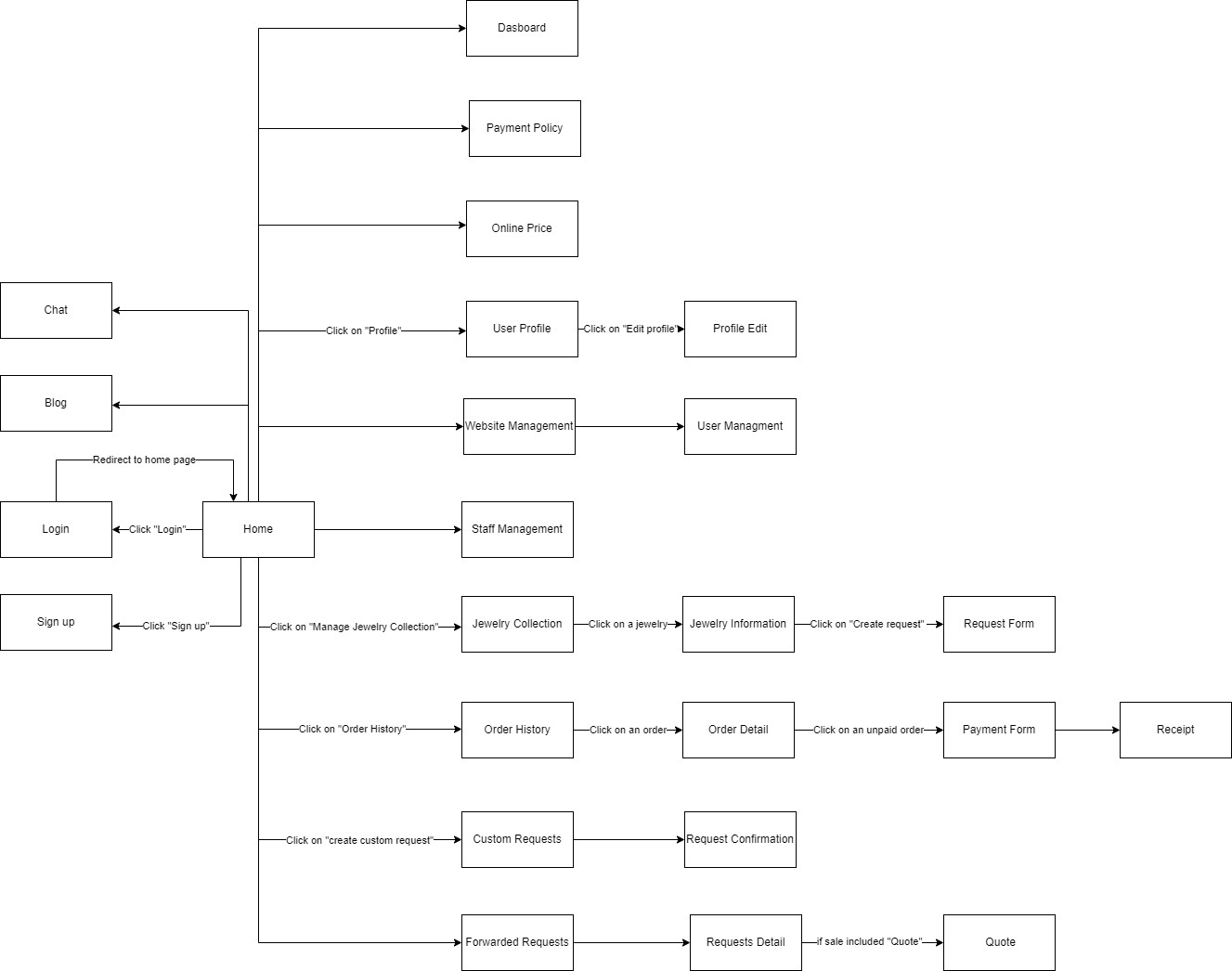
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| --- | --- | --- | --- | --- |
| **USE CASE-47 SPECIFICATION** | | | | |
| **Use-case No.** | <UC-47> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Manage Blog Post | | | |
| **Author** | Dinh Khac Ba Thuan | | | |
| **Date** | 24/05/2024 | **Priority** | High | |
| **Actor:**  Admin  **Summary:**  Admins can create, view, and edit blog posts.  **Goal:**  To enable admins to manage blog content.  **Triggers:**  Admin navigates to the blog post management section.  **Preconditions:**   * Admin is logged into the system. * Blog details are available.   **Post Conditions:**  Blog posts are managed successfully.  **Main Success Scenario:**   1. Admin logs into the system. 2. Admin navigates to the 'Manage Blog Post' section. 3. Admin views the list of blog posts. 4. Admin selects a blog post to manage. 5. Admin edits or updates the blog post as needed. 6. Admin saves the changes and the system updates the blog post information.   **Alternative Scenario:**  If blog post management fails, an error message is displayed, and the admin is prompted to correct the information and try again.  **Exceptions:**  Network or system errors that prevent managing blog posts.  **Relationships:**  This use case is initiated by the ‘Log in’ use case.  **Business Rules:**  The system should ensure blog post details are accurate and changes are properly logged. | | | | |

## Business Rule

|  |  |
| --- | --- |
| **ID** | **Rule Definition** |
| BR-01 | Customers must be registered and logged into their account to submit production requests. |
| BR-02 | Production requests must include all necessary details such as design specifications, materials, and gemstones. |
| BR-03 | Customers should be able to track the status of their orders through their account dashboard. |
| BR-04 | Quotes provided to customers must be approved by a manager before being sent. |
| BR-05 | Products must undergo thorough quality checks before delivery to ensure they meet company standards and customer expectations. |
| BR-06 | Production order status must be updated at key milestones: initiation, in-progress, completed, and shipped. Customers should receive automated notifications for each status update. |
| BR-07 | Production costs, both standard and actual, must be tracked and analyzed to maintain profitability and identify areas for cost reduction. |
| BR-08 | Data backup and recovery procedures must be in place to prevent data loss and ensure business continuity. |
| BR-09 | All processes and transactions should be documented accurately and reported regularly to ensure transparency and accountability. |
| BR-10 | All communication with customers must be clear, professional, and timely. Response times should be within 24 hours. |
| BR-11 | Regular performance reviews and feedback sessions should be conducted to maintain high productivity and morale. |

## Screen Flow

## Screen Flow Diagram



## Screen Flow Description

|  |  |  |
| --- | --- | --- |
| **#** | **Screen** | **Description** |
| 1 | Home | Introduction to the company  Jewelry collections  Design samples  Blog insights  Navigation to other sections |
| 2 | Login | User authentication  Fields for username/email and password  Forgot password option |
| 3 | Sign Up | User registration  Fields for personal details (name, email, password, etc.) |
| 4 | Blog | List of blog posts  Categories and tags  Individual blog post view |
| 5 | User Profile | User details (name, email, contact information) |
| 6 | Online Price | Current market prices for gold and gemstones |
| 7 | Order History | List of past orders  Order status and details  Ability to reorder or review |
| 8 | Payment Policy | Detailed payment policies  Methods accepted  Payment Rules |
| 9 | Dashboard | Overview of key metrics and statistics  Recent activities  Summary of active orders, quotes, and requests |
| 10 | Profile Edit | Update personal information  Change password  Manage contact preferences |
| 11 | Jewelry Information | Detailed descriptions of jeweler items  Materials, designs, and craftsmanship  Navigation to request sections |
| 12 | Custom Request | Form for submitting custom jewelry requests  Order confirmation and receipt  Printable format  Email confirmation |
| 13 | Order detail | Comprehensive view of a specific order  Status updates and timeline  Communication history with staff |
| 14 | Payment form | Secure payment processing  Options for different payment methods |
| 15 | Receipt | Order confirmation and receipt  Printable format  Email confirmation |
| 16 | Custom Request | Acknowledgement of received custom requests  Expected processing time |
| 17 | Request Confirmation | Acknowledgement of received custom requests  Expected processing time |
| 18 | Forwarded Requests | Internal view for staff to manage forwarded requests  Status tracking |
| 19 | Request Detail | Detailed view of individual requests  Notes and communication log |
| 20 | Quote | Managers Approve or Deny of quotes for custom requests  Breakdown of costs (materials, labor, etc.) |
| 21 | Staff Management | Manage staff accounts and roles  Assign tasks and responsibilities |
| 22 | Website Management | Content management for the website  Update product listings, blog posts, and other content |
| 23 | User Management | Manage user accounts  Monitor activity and handle support requests |
| 24 | Chat | Real-time messaging between customers and staff  Support and order-related inquiries |

## Screen Flow Authorization

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Screen** | **User** | **Sales** | **Design** | **Production** | **Manager** | **Admin** |
| Home |  |  |  |  |  |  |
| <<View Home Page>> | X | X | X | X | X | X |
| Login |  |  |  |  |  |  |
| <<Login>> | X | X | X | X | X |  |
| Sign Up |  |  |  |  |  |  |
| <<Sign Up>> | X |  |  |  |  |  |
| Blog |  |  |  |  |  |  |
| <<View>> | X | X | X | X | X | X |
| <<Create/Edit/Delete>> |  |  |  |  |  | X |
| User Profile |  |  |  |  |  |  |
| <<View Profile>> | X | X | X | X | X | X |
| Profile Edit |  |  |  |  |  |  |
| <<Edit Profile>> | X |  |  |  | X | X |
| Online Price |  |  |  |  |  |  |
| <<View Current Prices>> | X | X | X | X | X | X |
| <<Update Prices>> |  |  |  |  |  | X |
| Dashboard |  |  |  |  |  |  |
| <<View>> |  | X | X | X | X | X |
| Jewelry Information |  |  |  |  |  |  |
| <<View Info Detail>> | X | X | X | X | X | X |
| <<Update Info>> |  |  |  |  |  | X |
| Custom Request |  |  |  |  |  |  |
| <<Submit Request>> | X |  |  |  |  |  |
| <<View Submitted>> | X | X |  |  | X |  |
| Order Detail |  |  |  |  |  |  |
| <<View Order Detail>> | X | X | X | X | X |  |
| <<Update Order Status>> |  | X | X | X |  |  |
| Payment Form |  |  |  |  |  |  |
| <<Submit Payment>> | X |  |  |  |  |  |
| <<Confirm Payment>> |  | X |  |  | X |  |
| Receipt |  |  |  |  |  |  |
| <<View>> | X | X |  |  | X |  |
| Request Confirmation |  |  |  |  |  |  |
| <<Forward For Approval>> |  | X |  |  |  |  |
| <<Include Quote>> |  | X |  |  |  |  |
| Forwarded Request |  |  |  |  |  |  |
| <<View Forwarded Request>> |  |  |  |  | X |  |
| <<Approve Request>> |  |  |  |  | X |  |
| <<View Included Quote>> |  |  |  |  | X |  |
| Request Detail |  |  |  |  |  |  |
| <<View Request Detail>> |  | X |  |  | X |  |
| Quote |  |  |  |  |  |  |
| <<Approve Quote>> |  |  |  |  | X |  |
| Staff Management |  |  |  |  |  |  |
| <<View Staff List>> |  |  |  |  | X |  |
| <<Add/Edit/Delete>> |  |  |  |  | X |  |
| <<Assign>> |  |  |  |  | X |  |
| Website Management |  |  |  |  |  |  |
| <<Modify>> |  |  |  |  |  | X |
| User Management |  |  |  |  |  |  |
| <<View User List>> |  |  |  |  |  | X |
| <<Modify>> |  |  |  |  |  | X |
| Chat |  |  |  |  |  |  |
| <<Use chat>> | X | X | X | X | X |  |
| <<View History>> |  |  |  |  |  | X |

# NON-FUNCTIONAL Requirements

[This section describes the non-functional requirements of the system. Some examples are listed as below]

## Usability

[This section includes all those requirements that affect usability. For example,

specify the required training time for a normal users and a power user to become productive at particular operations

specify measurable task times for typical tasks or base the new system’s usability requirements on other systems that the users know and like

specify requirement to conform to common usability standards, such as IBM’s CUA standards Microsoft’s GUI standards]

### <Usability Requirement One>

[The requirement description goes here.]

* Training Time:
* Normal Users: The system should be intuitive enough for a normal user to become productive within 1 hour of training.
* Power Users: Power users should be able to efficiently navigate and utilize advanced features within 2 hours of training.
* Accessibility:
* The system should be accessible to users with disabilities, following WCAG (Web Content Accessibility Guidelines) standards.
* Text should have sufficient color contrast for readability, and interactive elements should be easily distinguishable.
* Task Efficiency:
* The system should allow users to complete common tasks, such as placing an order or approving a design, within 3 minutes on average.
* Complex tasks, like managing production orders or generating reports, should not take longer than 10 minutes for experienced users.
* User Interface Design Standards:
* The system's user interface should adhere to common usability standards, such as Microsoft's GUI standards or web accessibility guidelines like WCAG (Web Content Accessibility Guidelines).
* Navigation should be intuitive, with clear labeling and consistent layout across all pages.
* Feedback and Error Handling:
* The system should provide clear feedback to users for successful actions, errors, and system responses.
* Error messages should be informative and suggest corrective actions to users.
* Customization and Personalization:
* Users should be able to customize their dashboard layout and preferences to suit their individual workflow.
* Personalized recommendations or shortcuts based on user behavior should enhance user experience.
* Mobile Responsiveness:
* The system's interface should be responsive and optimized for mobile devices, ensuring usability across various screen sizes and resolutions.
* Mobile-specific features, such as touch gestures, should be utilized to enhance usability on smartphones and tablets.
* Performance:
* Web Pages should fully download in an average of 5 seconds or less with a 35 megabits/second internet connection to ensure swift access and responsiveness.
* Response time for common actions, such as loading a page or submitting a form, should be under 2 seconds to maintain user engagement.

## Reliability

[Requirements for reliability of the system should be specified here. Some suggestions follow:

Availability—specify the percentage of time available ( xx.xx%), hours of use, maintenance access, degraded mode operations, and so on.

Mean Time Between Failures (MTBF) — this is usually specified in hours, but it could also be specified in terms of days, months or years.

Mean Time To Repair (MTTR)—how long is the system allowed to be out of operation after it has failed?

Accuracy—specifies precision (resolution) and accuracy (by some known standard) that is required in the system’s output.

Maximum Bugs or Defect Rate—usually expressed in terms of bugs per thousand lines of code (bugs/KLOC) or bugs per function-point( bugs/function-point).

Bugs or Defect Rate—categorized in terms of minor, significant, and critical bugs: the requirement(s) must define what is meant by a “critical” bug; for example, complete loss of data or a complete inability to use certain parts of the system’s functionality.]

### <Reliability Requirement One>

* Availability:
* The system should be available for use 99.9% of the time, excluding scheduled maintenance windows.
* Maintenance windows should be scheduled during off-peak hours, preferably during weekends or non-business hours, with advanced notice provided to users.
* In the event of system maintenance or unexpected downtime, a degraded mode of operation should be available, allowing users to access essential functions such as viewing orders and communicating with customers.
* Mean Time Between Failures (MTBF):
* The system should have a Mean Time Between Failures (MTBF) of at least 1000 hours of continuous operation.
* Mean Time To Repair (MTTR):
* The Mean Time To Repair (MTTR) for any system failure should not exceed 2 hours during business hours and 4 hours during non-business hours.
* Accuracy:
* The system output should have a precision (resolution) of at least 0.01 units for all numerical values.
* Accuracy should be maintained within 95% confidence intervals of known standards for all calculations involving pricing, material quantities, and production costs.
* Maximum Bugs or Defect Rate:
* The maximum acceptable bugs or defects rate should not exceed 0.1 critical bugs per thousand lines of code (bugs/KLOC).
* Bugs or defects are categorized as minor if they do not significantly impact system functionality, significant if they affect usability or performance, and critical if they result in complete loss of data or inability to use essential system functions.

## Performance

[The system’s performance characteristics are outlined in this section. Include specific response times. Where applicable, reference related Use Cases by name.

Response time for a transaction (average, maximum)

Throughput, for example, transactions per second

Capacity, for example, the number of customers or transactions the system can accommodate

Degradation modes (what is the acceptable mode of operation when the system has been degraded in some manner)

Resource utilization, such as memory, disk, communications, and so forth.

### <Performance Requirement One>

* Response Time:
* The average response time for processing a transaction, such as creating a quote or updating a production status, should not exceed 2 seconds.
* The maximum response time for any transaction should not exceed 5 seconds to ensure timely user interaction and feedback.
* Throughput:
* The system should support a minimum throughput of 10 transactions per minute during peak usage hours.
* During off-peak hours, the system should be capable of handling up to 20 transactions per minute to accommodate increased user activity.
* Capacity:
* The system should be able to accommodate at least 100 concurrent users without experiencing performance degradation.
* It should have the capacity to manage a minimum of 500 production orders simultaneously without affecting system responsiveness.
* Degradation Modes:
* In the event of high traffic or system overload, the system should prioritize essential functions such as order processing and communication with customers.
* Non-essential features, such as generating reports or accessing historical data, may experience slower response times or temporary unavailability during peak usage periods.
* Resource Utilization:
* Memory utilization should not exceed 70% of available system memory under normal operating conditions.
* Disk space usage should be monitored regularly, and alerts should be generated when disk space reaches 80% capacity to prevent performance degradation.
* Network communications should be optimized to minimize latency and ensure smooth data transfer between system components.
* Interfaces:
* The system should provide intuitive user interfaces for both customers and internal staff, supporting multiple devices such as desktops, tablets, and smartphones.
* User interfaces should be responsive, with fast loading times and efficient navigation to enhance user experience.
* Integration with third-party payment gateways and communication channels (e.g., email, chat) should be seamless and reliable to facilitate customer interactions and transactions.

## Supportability

[This section indicates any requirements that will enhance the supportability or maintainability of the system being built, including coding standards, naming conventions, class libraries, maintenance access, and maintenance utilities.]

### <Supportability Requirement One>

* All code written for the system shall adhere to a standardized set of coding standards and naming conventions.
* Coding standards should be based on industry best practices and established guidelines for the selected programming languages and frameworks (e.g., Python, Django, React.js).
* Naming conventions for variables, functions, classes, and other code entities should be descriptive, consistent, and follow a logical naming scheme to enhance readability and maintainability.
* The use of meaningful comments and documentation within the codebase should be encouraged to provide clarity and context for future developers and maintainers.
* Code reviews shall be conducted regularly to ensure compliance with coding standards and to identify opportunities for improvement in code quality and maintainability.
* The development team shall maintain a documented coding style guide that outlines the specific coding standards and naming conventions to be followed throughout the project's lifecycle.

## Design Constraints

[This section indicates any design constraints on the system being built. Design constraints represent design decisions that have been mandated and must be adhered to. Examples include software languages, software process requirements, prescribed use of developmental tools, architectural and design constraints, purchased components, class libraries, and so on.]

### <Design Constraint One>

* Integration with Existing Systems:
* The system must seamlessly integrate with the company's existing Customer Relationship Management (CRM) system, Salesforce, to ensure real-time data exchange and consistency in customer information.
* Technology Stack:
* The system must be developed using specific technologies: Python for programming language, Django for web framework, React.js for frontend, PostgreSQL for database management, Git for version control, and Docker containers managed with Kubernetes for deployment.
* Coding Standards and Naming Conventions:
* All code written for the system must adhere to industry-standard coding practices, follow a consistent coding style guide (such as PEP 8 for Python code), and use meaningful and descriptive naming conventions to enhance readability and maintainability.

[The requirement description goes here.]

## On-line User Documentation and Help System Requirements

[Describes the requirements, if any, for o-line user documentation, help systems, help about notices, and so forth.]

* User Manual:
* A comprehensive user manual shall be provided, covering all aspects of system functionality, including but not limited to:
* User registration and account management.
* Creating and managing production orders.
* Communicating with customers.
* Approving quotes and designs.
* Updating production statuses.
* Accessing historical data and reports.
* Context-Sensitive Help:
* Context-sensitive help shall be available throughout the system, providing relevant guidance and instructions based on the user's current location or task.
* Help icons or buttons shall be strategically placed within the user interface to allow users to access relevant help content easily.
* Searchable Knowledge Base:
* A searchable knowledge base shall be implemented, containing articles, FAQs, troubleshooting guides, and best practices related to system usage and maintenance.
* Users shall be able to search for specific topics or keywords to quickly locate relevant help articles.
* Interactive Tutorials:
* Interactive tutorials or walkthroughs shall be provided for key system functionalities, guiding users through common tasks and workflows step by step.
* Tutorials shall include interactive elements such as tooltips, annotations, and simulated interactions to enhance user engagement and learning.
* Responsive Design:
* The online user documentation and help system shall feature a responsive design, ensuring optimal viewing and usability across different devices and screen sizes.
* Users shall be able to access help content seamlessly from desktop computers, tablets, and smartphones.
* Versioning and Updates:
* The documentation shall be versioned to align with system releases and updates, ensuring that help content remains accurate and up to date with the latest system features and changes.
* Users shall be notified of documentation updates and changes, with release notes highlighting new additions or revisions.
* Accessibility:
* The online user documentation and help system shall adhere to accessibility standards (e.g., WCAG) to ensure accessibility for users with disabilities.
* Text alternatives for images, keyboard navigation support, and other accessibility features shall be implemented to enhance usability for all users.

## Purchased Components

[This section describes any purchased components to be used with the system, any applicable licensing or usage restrictions, and any associated compatibility and interoperability or interface standards.]

* Salesforce CRM Integration:
* The system will integrate with Salesforce CRM as a purchased component to manage customer relationship data.
* Licensing and usage restrictions: The company holds a valid license for Salesforce CRM usage.
* Compatibility and interoperability: The integration will adhere to Salesforce API standards to ensure seamless data exchange between systems.
* Payment Gateway:
* A third-party payment gateway will be utilized to facilitate online payments for production orders.
* Licensing and usage restrictions: The company has entered into a service agreement with the payment gateway provider.
* Compatibility and interoperability: The system will integrate with the payment gateway's API to securely process online transactions and handle payment information.
* Cloud Hosting Services:
* The system will be hosted on a cloud platform, such as Amazon Web Services (AWS) or Microsoft Azure.
* Licensing and usage restrictions: The company holds subscriptions or usage agreements with the cloud hosting provider.
* Compatibility and interoperability: The system architecture will be designed to leverage cloud services effectively, ensuring scalability, reliability, and security.
* Development Tools and Libraries:
* Various development tools and libraries may be purchased or licensed for use during system development, such as IDEs (Integrated Development Environments), code libraries, and testing frameworks.
* Licensing and usage restrictions: Usage rights and licensing agreements for these tools and libraries will be ensured in compliance with vendor terms.
* Compatibility and interoperability: Development tools and libraries will be selected based on compatibility with the chosen technology stack and adherence to industry standards.

## Interfaces

[This section defines the interfaces that must be supported by the application. It should contain adequate specificity, protocols, ports and logical addresses, and the like, so that the software can be developed and verified against the interface requirements.]

### User Interfaces

[Describe the user interfaces that are to be implemented by the software.]

### Hardware Interfaces

[This section defines any hardware interfaces that are to be supported by the software, including logical structure, physical addresses, expected behavior, and so on.]

### Software Interfaces

[This section describes software interfaces to other components of the software system. These may be purchased components, components reused from another application or components being developed for subsystems outside of the scope of this SRS but with which this software application must interact.]

### Communications Interfaces

[Describe any communications interfaces to other systems or devices such as local area networks, remote serial devices, and so forth.]

* User Interfaces:

1. Customer Interface:

* Description: Web-based interface for customers to interact with the system.
* Protocols: HTTP/HTTPS.
* Port: Standard web ports 80 (HTTP) and 443 (HTTPS).
* Logical Address: URL of the web application (e.g., https://jewelrymanagement.com).
* Expected Behavior: Customers can access the system via a web browser, create accounts, place orders, view order history, and provide feedback.

1. Staff Interface:

* Description: Web-based interface for sales, design, and production staff.
* Protocols: HTTP/HTTPS.
* Port: Standard web ports 80 (HTTP) and 443 (HTTPS).
* Logical Address: URL of the web application (e.g., https://jewelrymanagement.com).
* Expected Behavior: Staff members can access the system via a web browser, log in with their credentials, manage customer requests, create quotes, update production statuses, and communicate with customers.
* Hardware Interfaces:
* Server Hardware:
* Description: Hardware components hosting the software application.
* Logical Structure: Servers hosting the application code, databases, and other necessary components.
* Physical Addresses: IP addresses or domain names of the servers.
* Expected Behavior: The servers run the application, handle user requests, and store data.
* Software Interfaces:

1. Salesforce CRM Integration:

* Description: Interface for integrating with Salesforce CRM.
* Protocols: RESTful API.
* Logical Address: API endpoint provided by Salesforce (e.g., https://api.salesforce.com).
* Expected Behavior: The system communicates with Salesforce CRM to synchronize customer data, orders, and communications.

1. Payment Gateway Integration:

* Description: Interface for integrating with a third-party payment gateway.
* Protocols: HTTPS.
* Logical Address: API endpoint provided by the payment gateway provider.
* Expected Behavior: The system communicates securely with the payment gateway to process online payments for production orders.
* Communications Interfaces:

1. Internal Communication:

* Description: Communication between different modules and components of the software system.
* Protocols: HTTP/HTTPS.
* Logical Address: Internal API endpoints.
* Expected Behavior: Modules communicate via RESTful APIs to exchange data and trigger actions within the system.

1. External Communication:

* Description: Communication with external systems such as email servers or SMS gateways.
* Protocols: SMTP, SMS API.
* Logical Address: SMTP server address for email communication, SMS gateway API endpoint for SMS communication.
* Expected Behavior: The system sends notifications and alerts via email and SMS using the respective protocols and interfaces.

## Licensing Requirements

[Defines any licensing enforcement requirements or other usage restriction requirements that are to be exhibited by the software.]

* Third-Party Components:
* Any third-party components or libraries used in the software must be compliant with their respective licenses.
* Developers must ensure that the usage of third-party components adheres to the terms and conditions specified in their licenses.
* Proprietary Code:
* Any proprietary code developed specifically for the Jewelry Production Order Management System remains the property of the company.
* Usage of proprietary code is restricted to authorized personnel for system development, deployment, and maintenance purposes.
* Software Distribution:
* The software may not be distributed or sublicensed without explicit permission from the company.
* Users may only access the software through authorized channels provided by the company.
* Usage Restrictions:
* The software is intended for internal use by the company and its authorized users only.
* Unauthorized reproduction, modification, or reverse engineering of the software is strictly prohibited.
* Compliance with Regulations:
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## Applicable Standards

[This section describes by reference any applicable standard and the specific sections of any such standards which apply to the system being described. For example, this could include legal, quality and regulatory standards, industry standards for usability, interoperability, internationalization, operating system compliance, and so forth.]

* ISO 9001:2015 (Quality Management Systems):
* Section 7: Support - This section covers requirements related to documentation, resources, competence, awareness, and communication, which are relevant for ensuring the quality of the software development process.
* ISO/IEC 27001:2013 (Information Security Management Systems):
* Section 6: Planning - This section outlines requirements for risk assessment, treatment, and control, which are crucial for ensuring the security of customer data and sensitive information within the system.
* GDPR (General Data Protection Regulation):
* Articles 5, 6, 7, 9, 17, 20 - These articles specify requirements related to data protection, lawful processing, consent, data subject rights, data minimization, and accountability, which must be adhered to for handling customer data in compliance with EU data protection regulations.
* PCI DSS (Payment Card Industry Data Security Standard):
* Requirements 3, 6, 7, 9, 10 - These requirements address security controls for protecting payment card data, including network security, access control, encryption, vulnerability management, and monitoring, which are relevant for ensuring the security of online payment transactions.
* WCAG (Web Content Accessibility Guidelines):
* Level AA - These guidelines provide recommendations for making web content more accessible to people with disabilities, including visual, auditory, physical, speech, cognitive, language, learning, and neurological disabilities, which are important for ensuring accessibility compliance of the user interfaces.
* HTTP/HTTPS Protocol Standards:
* RFC 7230, RFC 7231, RFC 7232, RFC 7233 - These RFCs define the HTTP/1.1 protocol standards for message syntax and routing, request and response semantics, conditional requests, and range requests, which are relevant for implementing secure and efficient communication between clients and servers.

# Supporting Information

[The supporting information makes the SRS easier to use. It includes:

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Appendices

These may include use-case storyboards or user-interface prototypes. When appendices are included, the SRS should explicitly state whether or not the appendices are to be considered part of the requirements.]