Software Requirements Specification

for

Perfect धागा

Version 1.0 approved

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1. Introduction

1.1 Purpose

The purpose of this Software Requirements Specification (SRS) document is to describe the functional and non-functional requirements for the "Perfect धामा" custom clothing application. This document will provide a detailed overview of the application's capabilities, including its main functionalities, user interactions, and the various components that make up the system. This SRS covers the entire system, detailing the features and operations for the customers, tailors, and fabric merchants.

1.2 Document Conventions

This SRS follows the IEEE Std 8301998 standard for software requirements specifications. The document uses a standard font and format throughout, with headings and subheadings clearly delineated. Priorities for requirements are indicated as High, Medium, or Low, and each requirement is uniquely identified with a sequence number or tag.

1.3 Intended Audience and Reading Suggestions

This SRS is intended for various stakeholders, including:

Developers: To understand the functional and nonfunctional requirements of the system.

Project Managers: To plan and manage the development process.

Marketing Staff: To understand the product's features and target audience.

Users: To gain insight into the platform's capabilities and how it meets their needs.

Tailor: Maintain its dashboard and accept the orders

Vendor: Maintain its dashboard and accept the orders

Testers: To develop test cases and ensure the system meets the specified requirements.

1.4 Product Scope

Perfect धाना is a webbased platform that facilitates the connection between customers, tailors, and raw material providers. The scope of this project includes:

A userfriendly interface for customers to search and select tailors based on various criteria.

A mechanism for tailors to showcase their skills and previous work.

A system for tailors to confirm customer requests and communicate with customers.

A recommendation system to suggest tailors if customers are unable to make a selection.

An interface for raw material providers to list their products and manage inventory.

1.5 References

IEEE Std 8301998, IEEE Recommended Practice for Software Requirements Specifications

2. Overall Description

2.1 Product Perspective

Perfect **ETIT** is a web-based platform that serves as a bridge between customers seeking custom tailoring services and skilled tailors. It also integrates with raw material providers to offer a comprehensive solution for custom garment creation. The platform aims to streamline the process of finding tailors, selecting materials, and commissioning garments, making it convenient for customers to get their desired clothing tailored precisely to their specifications.

2.2 Product Functions

- Customer Interface: Allows customers to search for tailors, view their profiles, and request tailoring services.
- Tailor Interface: Enables tailors to manage their profiles, view customer requests, and confirm or decline service requests.
- Provider Interface: Allows providers to list their products, manage inventory, and fulfill orders.
- Recommendation System: Suggests tailors to customers based on their service requests.

2.3 User Classes and Characteristics

- -Customers: Individuals seeking custom tailoring services. They are looking for convenience, quality, and a wide selection of tailors and materials.
- -Tailors: Skilled professionals who offer tailoring services. They need a platform to showcase their skills and manage their workload efficiently.
- -providers: Entities that supply raw materials to tailors. They require a system to list their products and manage inventory.

2.4 Operating Environment

Perfect धाना will operate in a web-based environment, accessible through standard web browsers on desktop and mobile devices. The system will be hosted on a cloud-based server, ensuring high availability and scalability.

2.5 Design and Implementation Constraints

Customers: Individuals seeking custom tailoring services. They are looking for convenience, quality, and a wide selection of tailors and materials.

Tailors: Skilled professionals who offer tailoring services. They need a platform to showcase their skills and manage their workload efficiently.

Providers: Entities that supply raw materials to tailors. They require a system to list their products and manage inventory.

- The system must be compatible with the latest web browser and mobile devices.
- The user interface must be responsive and adapt to different screen sizes.
- The system must adhere to data protection regulations and ensure secure data storage and transmission.

2.6 User Documentation

- User Manual: A comprehensive guide for customers, tailors, and providers, detailing how to use the platform.
- Online Help: Contextual help available within the platform to assist users with common tasks.
- FAQs: Frequently Asked Questions to address common user queries.

2.7 Assumptions and Dependencies

- The platform assumes a stable internet connection for users.
- The system depends on third-party payment gateways for secure transactions.
- The availability of raw materials is contingent on providers inventory.

3. External Interface Requirements

3.1 User Interfaces

- The platform will provide a clean and intuitive user interface for customers, tailors, and providers.
- User interfaces will be designed to be user-friendly, with clear navigation and easy access to all features.
- The system will include forms for customers to request services, tailors to manage profiles, and providers to list products.

3.2 Hardware Interfaces

- The system will be accessible through standard web browsers and mobile devices, with no specific hardware requirements.
- Users will need a device with internet access to use the platform.

3.3 Software Interfaces

- The System will integrate with third-party payment gateways for secure transaction.
- The platform will interface with email services for notifications and communication between users.
- The system may integrate with social media platforms for user authentication and sharing.

3.4 Communications Interfaces

- The platform will support inbuilt for notifications and service requests.
- The system will include in-app messaging for direct communication between customers and tailors.
- The platform may support integration with SMS services for additional notification channels.

4. System Features

4.1 Customer Interface

4.1.1 Description and Priority

The Customer Interface allows users to search for tailors, view their profiles, and request tailoring services. This feature is of High priority.

4.1.2 Stimulus/Response Sequences

- 1. User enters search criteria (e.g., location, type of service).
- 2. System displays a list of matching tailors.
- 3. User selects a tailor and views their profile.
- 4. User requests a specific tailoring service.
- 5. System notifies the selected tailor.

4.1.3 Functional Requirements

- REQ-1: The system shall allow users to search for tailors based on location and type of service.
- -REQ-2: The system shall display a list of tailors matching the search criteria.
- REQ-3: The system shall allow users to view detailed profiles of tailors, including their skills and previous work.
- REQ-4: The system shall enable users to request tailoring services from selected tailors.
- REQ-5: The system shall notify tailors of new service requests.

4.2 Tailor interface

4.2.1 Description and Priority

The Tailor Interface allows tailors to manage their profiles, view customer requests, and confirm or decline service requests. This feature is of High priority.

4.2.2 Stimulus/Response Sequences

- 1. Tailor logs into the system.
- 2. System displays the tailor's dashboard.
- 3. Tailor updates their profile and previous work.
- 4. Tailor views pending service requests.
- 5. Tailor confirms or declines a service request.

4.2.3 Functional Requirements

- REQ-6: The system shall allow tailors to create and manage their profiles, including their skills and previous work.
- REQ-7: The system shall display pending service requests to tailors.
- REQ-8: The system shall allow tailors to confirm or decline service requests.
- REQ-9: The system shall notify customers of the tailor's response to their service request.

4.3 Vendor Interface

4.3.1 Description and Priority

The Raw Material Provider Interface allows providers to list their products, manage inventory, and fulfill orders. This feature is of Medium priority.

4.3.2 Stimulus/Response Sequences

- 1. Provider logs into the system.
- 2. System displays the provider's dashboard.
- 3. Provider lists products and manages inventory.
- 4. Provider fulfills orders from and to tailors.

4.3.3 Functional Requirements

- REQ-10: The system shall allow providers to list their products and manage inventory.
- REQ-11: The system shall enable providers to fulfill orders from tailors.

4.4 Recommendation System

4.4.1 Description and Priority

The Recommendation System suggests tailors to customers based on their service requests. This feature is of Medium priority.

4.4.2 Stimulus/Response Sequences

- 1. Customer requests a service but does not select a tailor.
- 2. System analyzes the request and recommends suitable tailors.

4.4.3 Functional Requirements

- REQ-12: The system shall analyze customer service requests and recommend suitable tailors.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

- The system shall respond to user requests within 2 seconds under normal load.
- The system shall handle up to 100 concurrent users without significant performance degradation.

5.2 Safety Requirements

- User data, including personal information and payment details, shall be stored securely and encrypted.
- Access to user accounts shall be protected with multi-factor authentication.

5.3 Security Requirements

- The system shall comply with GDPR and other relevant data protection regulations.
- Regular security audits shall be conducted to identify and address vulnerabilities.

5.4 Software Quality Attributes

- Usability: The system shall have an intuitive user interface that is easy to navigate. All functions shall be clearly labeled, and the system shall provide contextual help when necessary.
- Reliability: The system shall be available 99.9% of the time, excluding scheduled maintenance periods. Critical functions shall be backed up with redundant systems to ensure continuous operation.
- Maintainability: The system shall be designed with modular components that can be easily updated or replaced. A comprehensive set of maintenance tools and documentation shall be provided to facilitate system updates and troubleshooting.
- Portability: The system shall be designed to run on multiple platforms and devices, including desktop computers, laptops, tablets, and smartphones.
- -Availability: The System is accessible and usable when needed. It includes uptime, response time, fault tolerance, and disaster recovery.
- -Scalability: The System shall be designed so that it can scale in future as future trends changes.

5.5 Business Rules

- Tailors must have a minimum of three customer reviews to be listed on the platform.
- Tailors must update their profiles and previous work examples at least once every six months.
- Providers must maintain accurate inventory levels and update them in real-time.
- Providers must fulfill orders within the specified delivery timeframes.
- Customers must provide detailed and accurate service requests to ensure that tailors can provide accurate quotes and confirmations.

6. Other Requirements

6.1 Legal and compliance Requirement

- The system shall comply with all relevant laws and regulations, including but not limited to data protection, consumer rights, and intellectual property laws.
- The system shall include terms of service and privacy policy documents that are accessible to all users.

6.2 Internationalization

- The system shall support multiple languages to accommodate users from different regions.

6.3 Accessibility

- The system shall meet the Web Content Accessibility Guidelines (WCAG) 2.1 to ensure that it is accessible to users with disabilities.
- The system shall provide alternative text for images and other non-text content to enhance accessibility.

6.4 Data Management

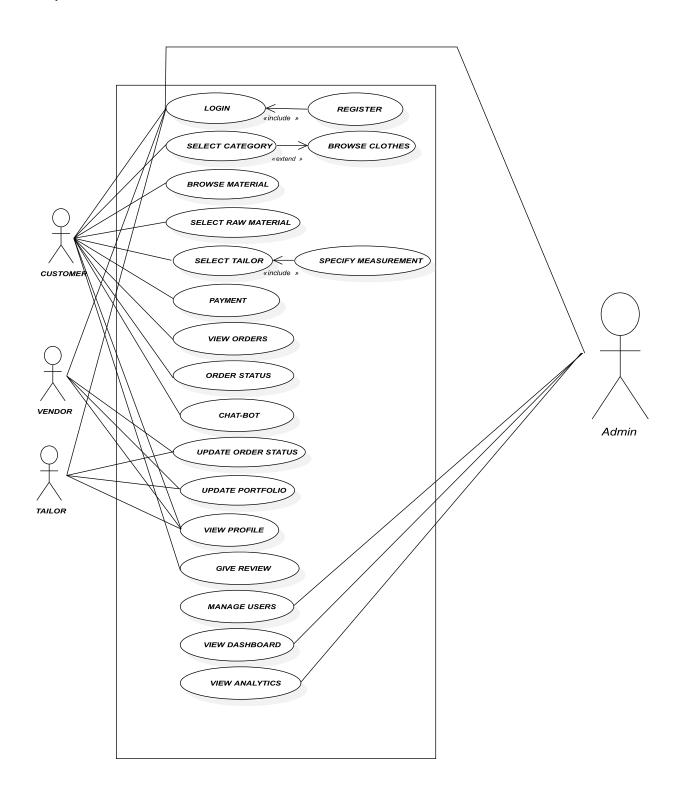
- The system shall implement a robust data backup and recovery plan to ensure that all data is secure and can be restored in the event of a system failure.
- The system shall provide tools for data analysis to help tailors and providers manage their businesses more effectively.

Appendix A: Glossary

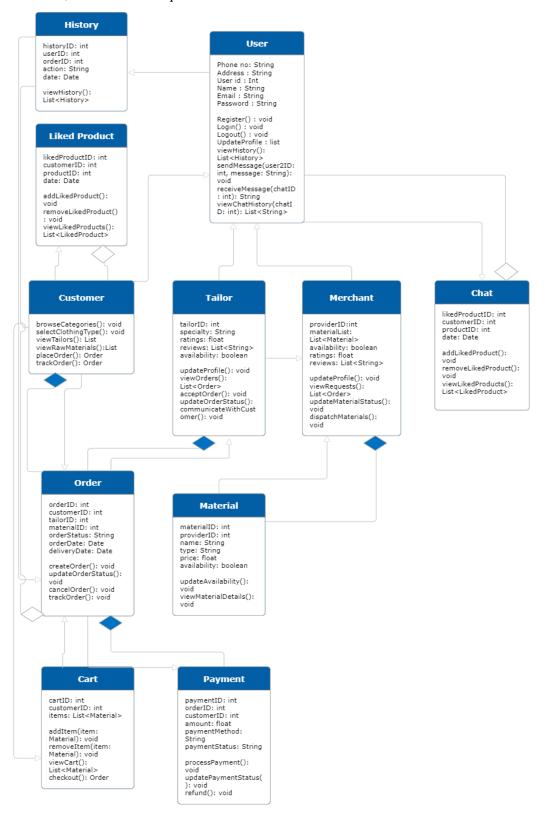
- Customer: An individual or entity that uses the **Perfect धामा** platform to request tailoring services.
- Tailor: An individual or entity that provides tailoring services through the **Perfect 4771** platform.
- Provider: An individual or entity that supplies raw materials to tailors through the **Perfect धाना** platform.
- Service Request: A request made by a customer for a specific tailoring service.
- Profile: A collection of information about a tailor or provider, including their skills, previous work, and contact details.

Appendix B: Analysis Models

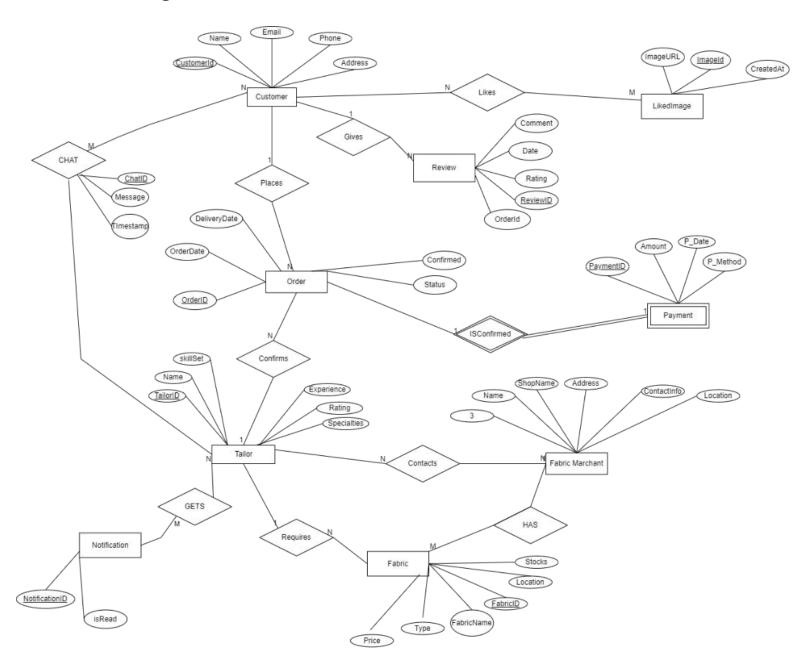
- Use Case Diagram: A diagram that shows the relationships between actors and use cases within the system.



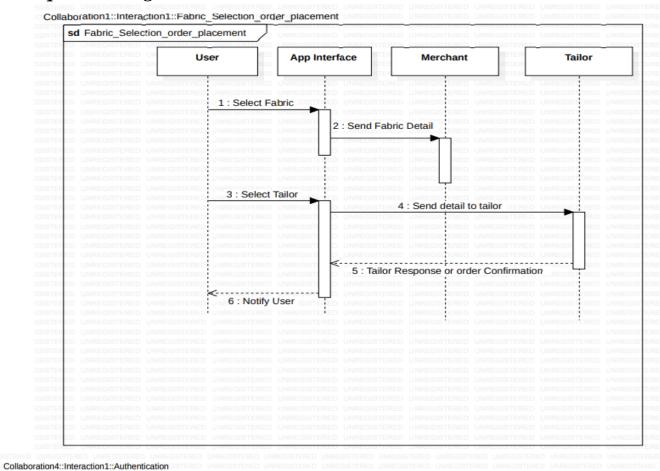
- Class Diagram: A diagram that represents the static structure of the system, including classes, attributes, and relationships.

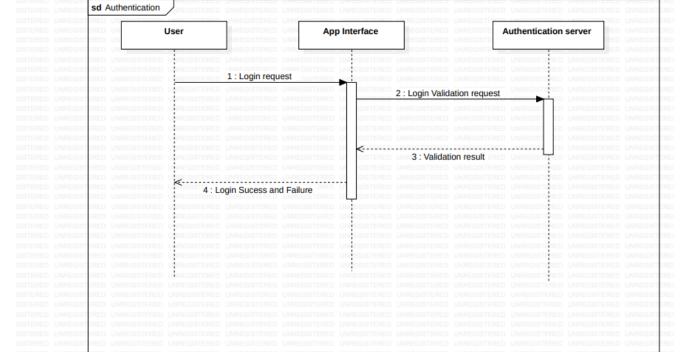


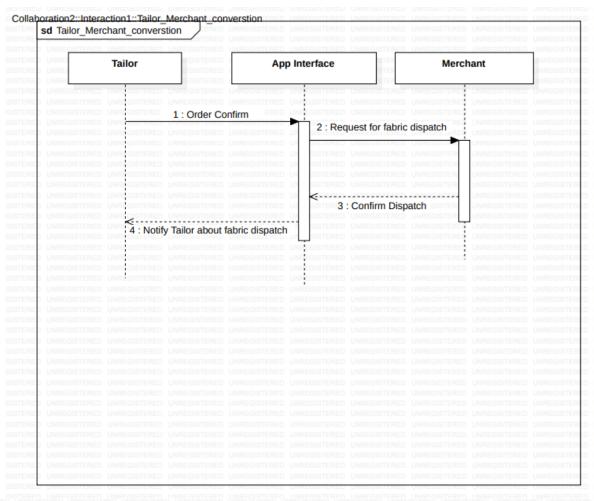
- ER Diagram

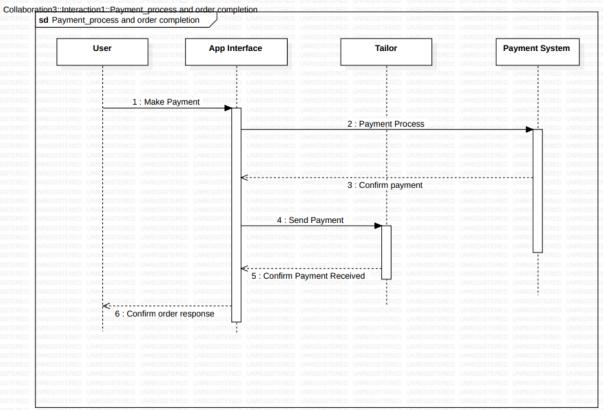


Sequence Diagram

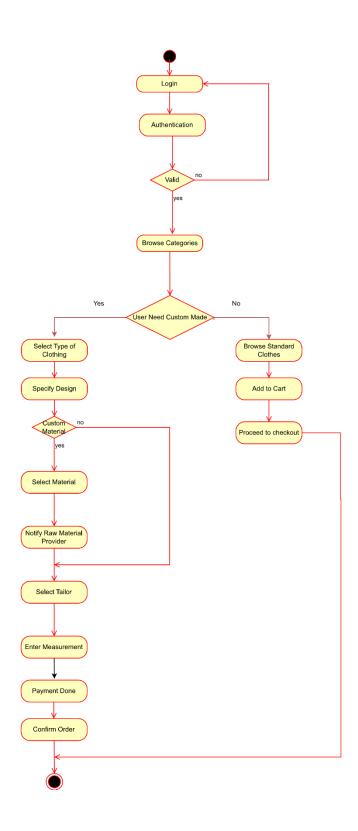




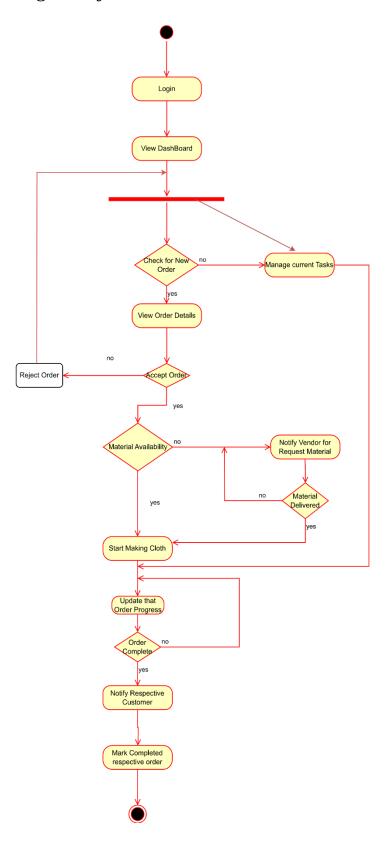




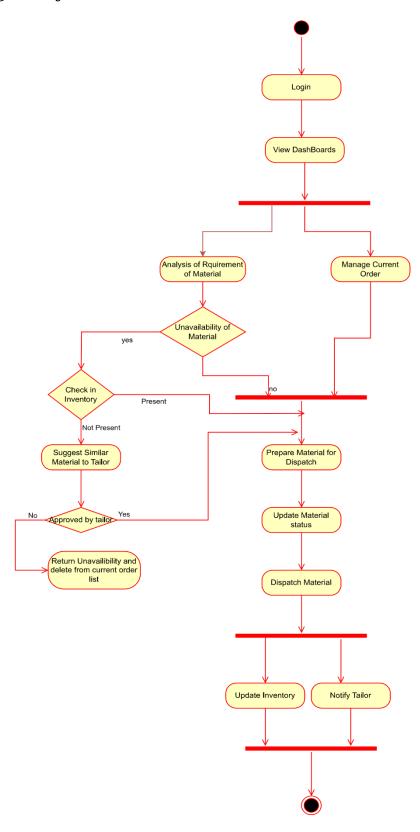
Activity Diagram: Activity Diagram of Customer



Activity Diagram of Tailor:



Activity Diagram of Fabric Merchant



Appendix C: To Be Determined List

- TBD-1: Specific security protocols and encryption methods to be used for data protection.
- TBD-2: Detailed design specifications for the user interface.
- TBD-3: Exact scheduling and delivery mechanisms for tailoring services.