# ****Project Vision and Scope****

## Project Overview

**Project Name:** Salon Management System with E-Commerce Integration

**Project Purpose:** The purpose of this project is to develop an online **Salon Management System** that allows users to book salon appointments, enables stylists to manage their schedules, and allows the admin to oversee the system efficiently. Additionally, a **basic e-commerce module** is integrated, allowing users to purchase salon-related products. The admin has full control over product management.

## Scope

**Admin**: Manage users, oversee appointments, maintain the system, and manage e-commerce products.

**Stylist**: Accept or reject appointments and update availability. **Stylists have no control over the e-commerce system.**

**User**: Book appointments, select services, purchase salon-related products, and make payments.

## Project Objectives

**Admin Objectives:**

Manage user accounts (Create, Edit, Delete).

Oversee salon schedules and appointment bookings.

Manage and update products in the e-commerce module.

Generate reports on salon activities and product sales.

**Stylist Objectives:**

Manage personal schedule and availability.

View and confirm/cancel bookings.

Provide service history for customers.

**User Objectives:**

Register and maintain their account.

Book appointments and select available services.

Make payments via online or cash on arrival.

Browse and purchase products from the e-commerce store.

# Product Backlog

|  |  |  |  |
| --- | --- | --- | --- |
| **Epic** | **User Story** | **Acceptance Criteria** | **Priority** |
| Admin | Manage users | Admin should be able to add, update, and remove users | Must Have |
| Admin | Manage appointments | Admin should see all appointments and edit if necessary | Must Have |
| Admin | Manage products | Admin should be able to add, update, and delete products | Must Have |
| Stylist | View appointments | Stylists should be able to confirm or reject appointments | Must Have |
| User | Book appointment | Users should select a service, stylist, and time slot | Must Have |
| User | Purchase products | Users should be able to buy salon products | Must Have |
| User | Payment processing | Users should pay via online or cash on arrival | Should Have |

# Risk Management Plan

|  |  |  |
| --- | --- | --- |
| **Risk** | **Impact** | **Mitigation Strategy** |
| System Downtime | High | Implement auto-backup and redundancy |
| User Data Security | High | Use secure authentication (JWT, bcrypt hashing) |
| Feature Creep | Medium | Define clear scope and use agile sprints |
| Payment Gateway Failure | High | Provide multiple payment options (Online & COD) |
| Inventory Mismanagement | Medium | Implement stock tracking and update logs |

# Diagrams

## Activity Diagram

• Booking process for Users

• Managing appointments for Stylists

• User authentication for Admin

• E-commerce product purchase flow

1.4.1 Use-Case Diagram

• Login and role-based dashboard access

• Appointment booking and confirmation process

• User product browsing and purchase process

• Admin product management

1.4.2 Class Diagram

• User class with Admin, Stylist, and Customer roles

• Appointment and Service classes

• Product, Order, and Payment classes

1.4.3 Sequence Diagram

• User books an appointment → Stylist confirms → System sends notification

• User adds product to cart → Completes purchase → Admin receives order

1.4.4 ER Diagram

• Relationship between Users, Appointments, Payments, and Services

• Product-Order relationship with Users and Admin

1.5 5. UI/UX Design

• Login Page (Admin, Stylist, User Login)

• Dashboard View for Admin & Stylists

• Appointment Booking Interface

• Payment and Confirmation Page

• E-commerce Product Page & Shopping Cart

• Admin Panel for Product Management

1.6 6. Work Breakdown Structure (WBS)

Task Subtasks Duration

System Setup Database, Server, Frontend 2 Weeks

Authentication Login, JWT Security, User Roles 1 Week

Appointment System Booking, Calendar, Status Updates 2 Weeks

E-commerce Integration Product Management, Order Processing 2 Weeks

Payment Integration Online & COD 1 Week

1.7 7. Gantt Chart

Task Week 1 Week 2 Week 3 Week 4

System Setup ✅ ✅

Authentication ✅ ✅

Appointment System ✅ ✅

E-commerce Integration ✅ ✅

Payment Integration ✅

1.8 Conclusion

This artifact outlines the critical elements of the Salon Management System with E-Commerce, ensuring a structured approach to development, risk assessment, and role-based access management. The project is designed to streamline salon operations and enhance customer experience through seamless appointment scheduling and online product purchases.