System Requirements Document: Intelligent Day Planner for Hair Salons

I. Introduction

The Intelligent Day Planner for Hair Salons is a web-based application designed to optimize the scheduling process for hair salons. The application will automate scheduling, streamline management, eliminate upfront costs, and provide a seamless experience for customers to cancel appointments. This document outlines the system requirements for the project.

II. Functional Requirements

1. Automated Scheduling:

- The application should be able to automatically assign customers to available stylists based on their preferences and availability.
- The application should be able to schedule appointments considering the stylist's workload, customer preferences, and the salon's capacity.
- The application should be able to handle last-minute changes or cancellations without disrupting the overall schedule.

2. User Roles and Permissions:

- The application should have different user roles for salon owners, stylists, and customers.
- Each user role should have specific permissions and access levels to ensure data security and efficient management.
 - The application should allow salon owners to manage user roles and permissions.

3. Cancellation Process:

- The application should allow customers to cancel appointments easily and seamlessly.
- The application should notify the salon owner and stylist of the cancellation.
- The application should automatically update the schedule and availability of the stylist.

4. Stylist Assignment:

- The application should be able to assign stylists based on their workload, customer preferences, and the salon's capacity.
 - The application should allow salon owners to manage stylist assignments and availability.

5. Cost Optimization:

- The application should be able to optimize the scheduling process to minimize costs and maximize revenue.
 - The application should be able to handle different pricing models and promotions.

III. Non-Functional Requirements

1. Performance:

- The application should be able to handle a large number of users and appointments without compromising performance.
 - The application should be able to respond quickly to user input and provide timely updates.

2. Security:

- The application should ensure the security and integrity of user data and the scheduling process.
- The application should comply with relevant data protection regulations and industry standards.

3. Usability:

- The application should be user-friendly and easy to navigate for salon owners, stylists, and customers.
 - The application should provide clear and concise instructions and feedback to users.

4. Scalability:

- The application should be able to scale up or down as needed to accommodate changes in the salon's operations.
 - The application should be able to handle different hardware and software configurations.

IV. Technical Requirements

1. Hardware Requirements:

- The application should be able to run on a variety of hardware configurations, including desktops, laptops, and mobile devices.
 - The application should be able to handle different screen resolutions and display settings.

2. Software Requirements:

- The application should be able to run on popular web browsers and operating systems.
- The application should be able to integrate with other software and systems used by the salon.

3. Database Requirements:

- The application should use a reliable and scalable database management system.
- The application should be able to store and retrieve large amounts of data efficiently.

V. Testing Requirements

1. Unit Testing:

- The application should be tested for individual components and features to ensure they function correctly.
- The application should be tested for different scenarios and edge cases.

2. Integration Testing:

- The application should be tested for integration with other software and systems used by the salon.
- The application should be tested for compatibility with different hardware and software configurations.

3. User Acceptance Testing:

- The application should be tested by salon owners, stylists, and customers to ensure it meets their needs and expectations.
- The application should be tested for usability, performance, and security.

VI. Conclusion

The Intelligent Day Planner for Hair Salons is a comprehensive system that automates scheduling, streamlines management, eliminates upfront costs, and provides a seamless experience for customers to cancel appointments. This system requirements document outlines the functional, nonfunctional, technical, and testing requirements for the project.