



## AI Powered Salon Booking Application

*Prajakta Mahangare<sup>1</sup>, Srushti Atkare<sup>2</sup>, Rutika Dhembare<sup>3</sup>, Pooja Jagtap<sup>4</sup>, Shital.K.Kawale<sup>5</sup>*

<sup>1</sup>Department of Computer Technology Sou. Venutai Chavan Polytechnic, Pune Email: [prajaktavm01@gmail.com](mailto:prajaktavm01@gmail.com)

<sup>2</sup>Department of Computer Technology Sou. Venutai Chavan Polytechnic, Pune Email: [srushtiatkare2006@gmail.com](mailto:srushtiatkare2006@gmail.com)

<sup>3</sup>Department of Computer Technology Sou. Venutai Chavan Polytechnic, Pune Email: [rutikadhembare4@gmail.com](mailto:rutikadhembare4@gmail.com)

<sup>4</sup>Department of Computer Technology Sou. Venutai Chavan Polytechnic, Pune Email: [poojajagtap4931@gmail.com](mailto:poojajagtap4931@gmail.com)

<sup>5</sup>Lecturer and project guide Department of Computer Technology Sou. Venutai Chavan Polytechnic, Pune Email: [sheetalkawale\\_svc@Sinhagad.edu](mailto:sheetalkawale_svc@Sinhagad.edu)

### ABSTRACT :

The AI Powered Salon Booking Application is a service-based platform enhanced with artificial intelligence (back-end) and React Native (front-end). Its main objective is to offer clients a quick and easy way to schedule appointments, browse salon services, and communicate with salon staff. The application ensures seamless operation on both iOS and Android devices with a user-friendly interface for clients. Key AI-driven features include a chatbot for real-time client inquiries, mood-based recommendations for special occasions like birthdays or weddings, customer sentiment analysis to enhance service quality, and stylist recommendations for customized ideas. These intelligent features work together to create a personalized and efficient experience for clients. With local salons seeking to increase their online presence in a rapidly growing market, this AI-powered solution effectively bridges the gap between salons and their clientele. The app enables salons to provide a modern, user-friendly platform that not only attracts new clients but also enhances offering a personalized experience. By integrating creative features like mood-based recommendations and stylist matching, along with practical service management tools like appointment scheduling and sentiment analysis, the app delivers a comprehensive solution. It stands out in the competitive salon market, providing a smooth, customized experience that meets the needs of clients, helps salons improve service quality, and ultimately boosts client retention and satisfaction.

**Keywords:** AI Salon Booking, React Native App, Salon Services, AI Chatbot, Mood-based Recommendations, Salon Appointment Scheduling.

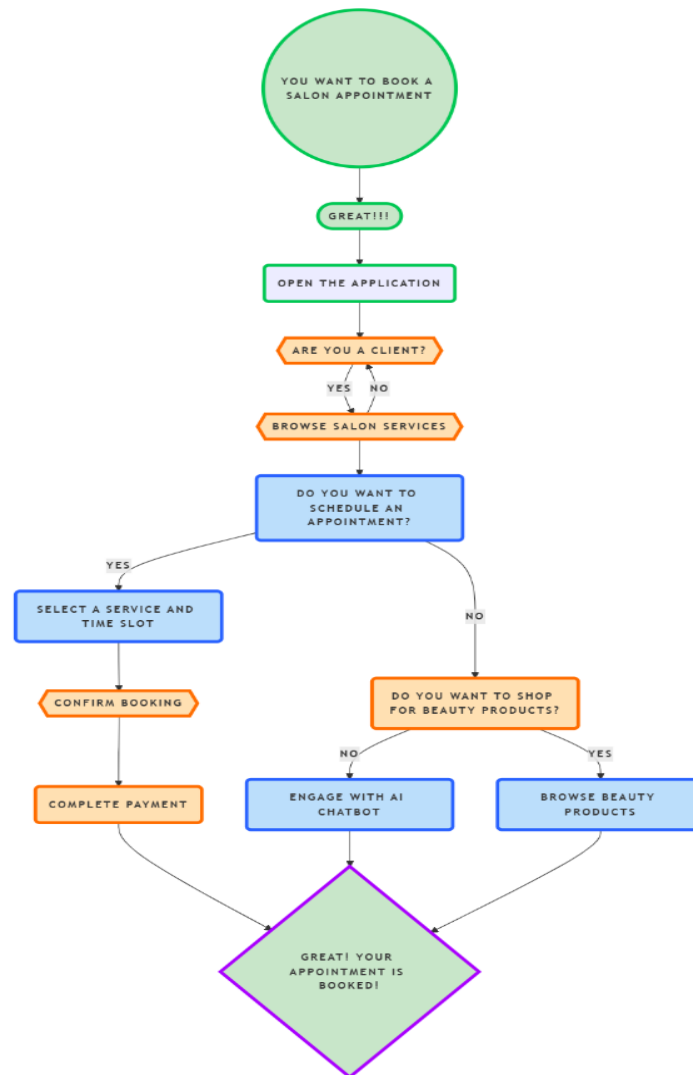
### 1.INTRODUCTION :

The AI Powered Salon Booking Application is an innovative platform designed to revolutionize the beauty and wellness industry by combining cutting-edge artificial intelligence and React Native technology. This user-friendly application allows salon clients to effortlessly schedule appointments, explore available services, and communicate with salon staff, all from their iOS or Android devices.

The application's core focus is on enhancing the client experience through a range of AI-driven features, such as a real-time chatbot for inquiries, mood-based recommendations for special occasions like weddings and birthdays, stylist matching, and customer sentiment analysis to continuously improve service quality. With local salons looking to improve their online presence and attract more clients, this app bridges the gap by providing an easy-to-use, personalized service that keeps customers engaged and satisfied.

As local salons strive to increase their online presence in a competitive market, this app bridges the gap between salons and their clientele by offering a modern, personalized experience. By focusing on user-friendly features and convenience, the AI Powered Salon Booking Application offers a seamless, customized experience that enhances customer satisfaction, loyalty, and overall salon success.

## 2. SYSTEM ARCHITECTURE :



The architecture of the AI-Powered Salon Booking Application is designed with the following components, each serving a specific purpose within the system:

### 1. User Roles and Functions:

- Browse a list of salon services available for booking.
- Select services and schedule appointments.
- Shop for beauty products.
- Engage with the AI-driven ChatBot to assist with queries and service booking.

### 2. Service Booking Process:

- Browsing Services: Clients can easily navigate through a variety of services offered by salons within the application.
- Appointment Scheduling: Clients select a desired service, choose a convenient time slot from available options, and finalize the booking.

### 3. AI Integration:

- AI ChatBot: The ChatBot assists clients by answering their questions, providing real-time guidance, and helping with the booking of services. It is integrated within the system to enhance user experience and engagement.

### 4. Booking and Scheduling:

- Clients are presented with available time slots for each service. Once a service is selected, clients can reserve a slot in real time. This ensures that the salon's availability is accurately represented within the app.

**5.Payment Processing:**

- Once an appointment is confirmed, clients can complete their payment through a secure payment gateway integrated into the application. Payment processing is straightforward, allowing users to pay for their bookings directly within the platform.

**6.Database Management:**

- The system stores essential data, including service descriptions, prices, availability of services, and user bookings. This database is crucial for managing the services offered and maintaining records of booked appointments.

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**3.PROPOSED METHODOLOGY :**

The AI-Powered Salon Booking Application is designed to offer clients a seamless experience for browsing salon services, scheduling appointments, shopping for beauty products, and accessing personalized recommendations through AI-driven features. To achieve a high level of efficiency and flexibility, the development process follows an Agile methodology. This approach emphasizes the iterative development of the application, breaking the project into smaller tasks and delivering updates incrementally, allowing for continuous refinement and improvement of features.

Each phase, or sprint, in the Agile framework targets a specific function within the application. Initial sprints focus on implementing core features such as the service browsing interface and the appointment booking system. In subsequent sprints, more advanced features such as the AI-powered ChatBot, which handles client inquiries, and mood-based recommendations for special occasions, are introduced. The iterative nature of Agile ensures that each feature undergoes thorough testing and feedback cycles, allowing for constant refinement based on real user input and needs.

By adopting the Agile methodology, the project remains adaptable throughout the development process. Feedback from testing and user interactions is gathered at the end of each sprint, enabling the team to make necessary adjustments and improvements in real-time. This iterative approach allows the development team to prioritize features effectively and ensures that the application evolves in line with user expectations, leading to a more intuitive and user-centric final product.

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**4. IMPLEMENTATION :****4.1 Technologies Used**

- Frontend: Developed using React Native for cross platform support on Android and iOS.
- Backend: Express.js (Node.js) handles API requests for booking services and interactions.

**4.2 User Roles**

- Client: can browse services, book appointments, shop for products, interact with the AI Chat-Bot, receive mood-based recommendations, and provide feedback.
- AI ChatBot: Provides real-time assistance, mood-based suggestions, and guides clients through bookings.

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**5. SCOPE FOR FUTURE WORK :**

As the AI-Powered Salon Booking Application continues to grow, its future development will focus on enhancing user experience and expanding its reach. Key areas of improvement will include more advanced AI capabilities, the introduction of a performance analytics dashboard, and a global expansion strategy. With the continuous evolution of AI, the app will offer even more precise and personalized service recommendations, adapting to the changing preferences of users and trends in the beauty industry. Mood-based suggestions and customized stylist recommendations will further refine the client experience, making it more unique and tailored to individual needs. Additionally, the app will introduce a comprehensive performance analytics dashboard, providing users with valuable insights into their booking habits, preferences, and engagement levels. This will not only help clients make better decisions but will also give salons an opportunity to optimize their services based on user behavior. Finally, as the app looks to broaden its user base, localization for international markets will be a key focus. This will involve adapting the app for different languages, currencies, and regional beauty standards, ensuring that it meets the needs of a diverse, global audience. These advancements will ensure that the AI-Powered Salon Booking Application remains a cutting-edge, personalized solution for salon bookings, driving continued success and growth in both local and international markets.

**6. CONCLUSION**

In conclusion, the AI Powered Salon Booking Application offers a forward-thinking solution for the beauty and wellness industry by leveraging artificial intelligence and React Native. This combination provides a personalized, efficient, and seamless experience for salon clients, allowing them to easily access services, schedule appointments, and communicate with salon staff directly from their mobile devices. With key features like mood-based recommendations, real-time chatbot support, stylist matching, and customer sentiment analysis, the app enhances service quality and ensures that salons can cater to individual client preferences.

In addition, the app aids salons in expanding their reach in a competitive sector, which accelerates growth and guarantees their relevance in the most recent era. With the rapid onboarding of technology within beauty centers, where customers require instant and tailor-made service, this application fills the void by providing a simple to use medium that enhances client engagement and interaction. Mood based service suggestions combined with personal stylist bookings significantly increases client satisfaction and in turn, captures repeat business through long term loyalty. The app fosters buildings

business and sustaining loyal clients through its advanced booking system and AI features that enhance client's in-salon experience. This AI solution helps salon clients build better relationships, increasing overall service delivery leading to a more personalized and competitive salon industry.

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