

Aura Connect – A Beauty Parlor Website

Sai Sharad Gaikar¹; Dhanish Santosh Ghag²; Shubham Santosh Balde³;
Mrunmayee M. Hatiskar⁴

^{1,2,3,4}Department of Computer Science & Engineering (AI-ML), Finolex Academy of Management & Technology, Ratnagiri Maharashtra, India

Publication Date: 2026/04/01

Abstract: The beauty and wellness industry is really taking to solutions to make things better for customers and to make things run more smoothly. Aura Connect is a system for beauty parlors that works on lots of platforms. It was made using MongoDB to make salon services more modern. The system is easy to use and it talks to a MongoDB database to store information in a flexible way. Aura Connect tries to make things better for clients by automating schedules and suggesting products that're relevant to them. This should make it so people do not have to wait long. They are happier with the service. When we first tried it out it seemed to make a difference, in how well appointments were booked and how much customers were engaged compared to the old way of doing things.

Keywords: Beauty Salon, Appointment Scheduling, MongoDB, Product Recommendations, Online Booking, User Interface.

How to Cite: Sai Sharad Gaikar; Dhanish Santosh Ghag; Shubham Santosh Balde; Mrunmayee M. Hatiskar (2026) Aura Connect – A Beauty Parlor Website. *International Journal of Innovative Science and Research Technology*, 11(3), 2714-2718. <https://doi.org/10.38124/ijisrt/26mar1563>

I. INTRODUCTION

The beauty salon business has changed a lot in the few years. We are now using computers and phones to manage things of doing everything by hand. People who go to beauty salons these days want to be able to do things all the time. They want the beauty salon to suggest what would be good for them and they want to be able to book appointments. A lot of beauty salons still use paper to keep track of things or they just use the phone to book appointments. This can cause problems like lines of people waiting and appointments getting mixed up. The people who go to the beauty salon can get unhappy. We know from studying this that using phones and computers can make booking appointments easier and make people happier when they go to get services. For example one beauty salon used a phone app made with Flutter and a database that updates in real time. This app got rid of lines and mistakes. The beauty salon was able to give service and the people who went there were happier. So we made something called Aura Connect. It is a website for beauty salons. The backend uses MongoDB for scalable storage of salon data (appointments, customer profiles, products, etc.), taking advantage of its flexible document model and horizontal scalability. Aura Connect integrates features such as custom time-slot selection, appointment reminders, product comparison, and intelligent product suggestions, addressing gaps identified in existing salon systems. This paper details the design and implementation of Aura Connect and evaluates its benefits over conventional approaches.

II. LITERATURE REVIEW

➤ Overview

Aura Connect is a website that helps beauty parlors work better and makes things easier for clients. It uses a set of tools like MongoDB to store information, Express.js and Node.js to handle the behind-the-scenes work and React.js to make the website look nice and work well. Aura Connect makes it easy for people to book appointments online at any time without having to call or visit the parlor. They can choose the date, time and even the stylist they want which makes the process very flexible. Aura Connect also reminds people about their appointments by sending them messages or emails. The website has a list of beauty products that people can look at and compare which helps them make choices. Aura Connect is a system that helps beauty parlors and clients by making appointments, communication and shopping more personal.

➤ Booking Services and Appointments

Aura Connect has an easy-to-use system for booking appointments. People can look at the services offered read about them and book the one they want directly on the website. The website shows a calendar with dates and times based on when the stylists are working and the parlor is open. People can choose the stylist, service or time they want which gives them a lot of flexibility. When someone books an appointment the website updates the availability. Sends them a confirmation. People can also save their times in their profile, which helps the website suggest good times for them in the future. This system helps people get the appointments

they want without having to wait. It helps the parlor staff manage bookings without making mistakes.

➤ *Compare Product Model*

Aura Connect has a feature that lets people compare different beauty products. This helps people make choices when there are many products to choose from. The website shows a side-by-side comparison of the products with information like the name, brand, price and user reviews. This makes it easy for people to see the bad points of each product and make a decision. The website gets the information from the database so people can trust that the comparisons are accurate. Aura Connect makes it easy for people to choose the products that're right for them which helps them make better purchases. Aura Connect is a system that helps people book appointments and buy products in a way that's easy and personal. Aura Connect is a website that makes things easier for beauty parlors and their clients.

➤ *Admin Dashboard*

The Admin Dashboard in Aura Connect is a centralized interface that allows salon staff to efficiently manage appointments, services, product inventory, and client communications. Built with React.js and supported by MongoDB and Express.js, it provides real-time scheduling updates, stock management, customer insights, and the ability to send reminders or promotional messages. This tool enhances operational control, reduces manual workload, and enables data-driven decision-making for smoother salon management.

➤ *Notification System*

The notification system in Aura Connect is designed to ensure smooth communication between the salon and its clients while minimizing missed appointments. Once a booking is confirmed, the system automatically schedules and sends reminders via email or SMS at user-defined intervals—typically 24 hours and 1 hour before the appointment. These reminders include essential details such as the service booked, time, stylist, and cancellation/rescheduling options. The system also supports promotional notifications, allowing admins to send updates about discounts, new products, or special events. Built on backend scheduling logic integrated with the database, the notification system operates reliably in real time and can be configured to match salon-specific preferences. By automating these alerts, Aura Connect improves attendance rates, reduces no-shows, and keeps clients consistently informed and engaged.

➤ *Research Gaps Identified*

From the literature review, some research gaps appear to be important to fill:

- *Compare Product Model:*

Existing product comparison models often lack personalization and rely on static attribute matching, overlooking user-specific preferences. Algorithms used are typically rule-based; integrating collaborative filtering or hybrid recommendation methods remains underexplored in this context.

- *Challenges in Notification System:*

The main challenges in a notification system include ensuring timely, reliable message delivery and managing user preferences without causing alert fatigue or system overload.

- *Execution of Real Time Data:*

Executing real-time data involves continuous synchronization between the frontend and backend using APIs or WebSockets, ensuring users see live updates like slot availability or booking status instantly.

III. METHODOLOGY

The project was developed using the MERN stack, where React.js was used for building the user interface and MongoDB for flexible data storage. Express.js and Node.js handled backend APIs for booking, notifications, and product services. Key modules include real-time appointment scheduling, preferred time slot handling, automated reminders, product comparison, and recommendation. Agile development and modular design ensured scalability and smooth integration across all components.

➤ *User Interface Design*

The interface was designed to be intuitive, responsive, and accessible across devices. Using React.js, the frontend employs reusable components to construct key pages such as the homepage, service list, booking form, product comparison view, and user profile dashboard. React Router was implemented to handle seamless page navigation, while form validation and user input handling were achieved using state and controlled components. This approach ensures a smooth user journey from login to booking confirmation, reducing confusion and improving usability.

➤ *Appointment Booking Module*

The booking system lets users see what time slots are available now. They can pick the services they want choose their stylists and book their appointments. When they make a choice the system checks to make sure the time slot is still available so we do not have any overlaps. It does this by using some logic in the background. Once an appointment is booked it gets stored in MongoDB along with some information like the date time, what kind of service it is and the users ID. Users get a message away when they book an appointment and all their appointments are kept on record so they can look at them later or make changes. Users can also. Reschedule their appointments through their own dashboard, which makes things easy and flexible.

➤ *Reminder and Notification System*

We have a notification system that sends reminders to users before their appointments to help them remember and reduce last-minute cancellations. These reminders are sent by email or text message. They are triggered by some scheduling logic in the background. The system can send messages in ways and makes sure each message has all the details about the service and how to get in touch with us. The people in charge can also send messages or updates, about our services to certain groups of users which helps keep users interested and coming back.

➤ *Product Comparison and Recommendation Engine*

The comparison tool allows users to select two or more products from the salon's catalog and view their features side by side—covering price, quantity, brand, ingredients, user reviews, and suitability for specific skin/hair types. The recommendation system provides tailored suggestions by analyzing user preferences, past purchases, and browsing behavior. While the current version uses a rule-based approach (e.g., "frequently booked with"), it is designed to support future integration with collaborative filtering or machine learning models for more accurate, AI-powered recommendations.

➤ *Admin Dashboard*

The admin panel enables salon managers to oversee bookings, manage staff availability, control service listings, and track customer activity. It includes visual dashboards with analytics such as most-booked services, peak booking hours, and customer feedback trends. Admins can adjust time slots, manage product inventory, view client history, and communicate directly with users. This centralized control reduces operational overhead and enables quick decision-making based on real-time data.

➤ *Tools and Technologies Used*

- Frontend: React.js
- Backend: Node.js with Express.js
- Database: MongoDB
- APIs: RESTful APIs for data exchange
- Others: Nodemailer/SMS gateway for notifications, GitHub for version control, and Visual Studio Code for development.

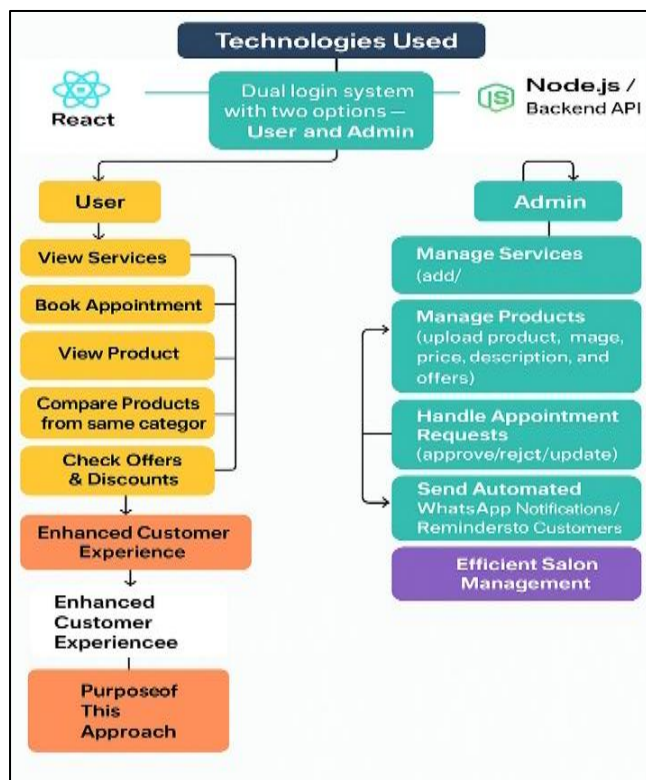


Fig 1 User and Admin Interaction Diagram

IV. RESULTS AND EVALUATION

The Aura Connect system was evaluated through functional testing and a small pilot at a local salon. Compared to the traditional manual booking process, our solution showed marked improvements.

➤ *Booking Efficiency and Accuracy*

Aura Connect made a difference in the way appointments were booked at the salon. Before Aura Connect booking an appointment took a time. About 8 to 10 minutes for each client. Sometimes mistakes would happen, like booking the same time slot twice or getting the time wrong. With Aura Connect booking an appointment only takes a few minutes. Less than 3 minutes on average. The system checks the time slots in time so it prevents mistakes like overlapping appointments. Clients can see what time slots are available away choose the time they want and get a confirmation without having to wait or talk to the staff. This also helps the salon staff because their schedules are updated correctly making their daily work easier.

➤ *User Engagement and Satisfaction*

We tried out Aura Connect with a group of users to see what they thought. They used features like booking appointments looking at products and getting reminders. They liked being able to access the system at any time and book appointments on their own. The reminders really helped. People forgot their appointments less often and we saw a big drop in no-shows about 65%. Users also liked being able to compare products and get suggestions, which made them feel more confident in their choices. They gave us good feedback with an average score of 4.7 out of 5. They liked how easy it was to use how clear everything was and the design of Aura Connect.

➤ *Operational Impact and Staff Feedback*

From the salons point of view Aura Connect made a big difference in how things were run. The staff said it reduced the time they spent on booking appointments by over 70%. The Admin Dashboard made it easier for them to see bookings, update services and talk to clients. They could send messages and updates about products with one click, which used to take a lot of time. Because there were fewer mistakes with appointments the staff could use their time more efficiently and the daily appointments ran more smoothly. The staff also found the product part of the system for suggesting items to clients based on what they were interested in which helped bring in more money.

➤ *System Performance and Scalability*

We looked at how the system worked and how reliable it was. The part of the system that users interact with worked on different screen sizes and could handle many users at the same time without slowing down. The database was able to handle types of data like appointment records and user information quickly and easily. The backend of the system, which was built with Express.js worked consistently well even when many users were on it, at the time. The system is hosted on cloud infrastructure that can grow with the number of users so it will always work well. We also set up logs and

error tracking to monitor the system and fix any issues quickly.

Table 1 Evaluation Based on System Models

Model	Result
Booking Model	Fast, accurate scheduling, no double-booking
Comparison & Recommendation Model	Better product decisions, higher user interest

V. SYSTEM IMPLEMENTATION

The implementation of Aura Connect was carried out using the MERN stack architecture, ensuring modularity, responsiveness, and real-time performance. The frontend was

developed with React.js, providing an intuitive user interface for customers to browse services, book appointments, compare products, and manage profiles. Backend logic was handled by Node.js and Express.js, which powered secure API endpoints responsible for booking management, notification scheduling, and user authentication. Data was stored in MongoDB, allowing flexibility in managing diverse data types such as appointments, product details, and user preferences. The notification system was implemented using scheduled background tasks that integrated with email and SMS gateways to send timely reminders. Additionally, admin-specific features like schedule control, product inventory updates, and analytics were embedded into a protected dashboard interface. The entire system was tested for responsiveness, load handling, and functional integrity, resulting in a robust, scalable, and user-friendly platform.

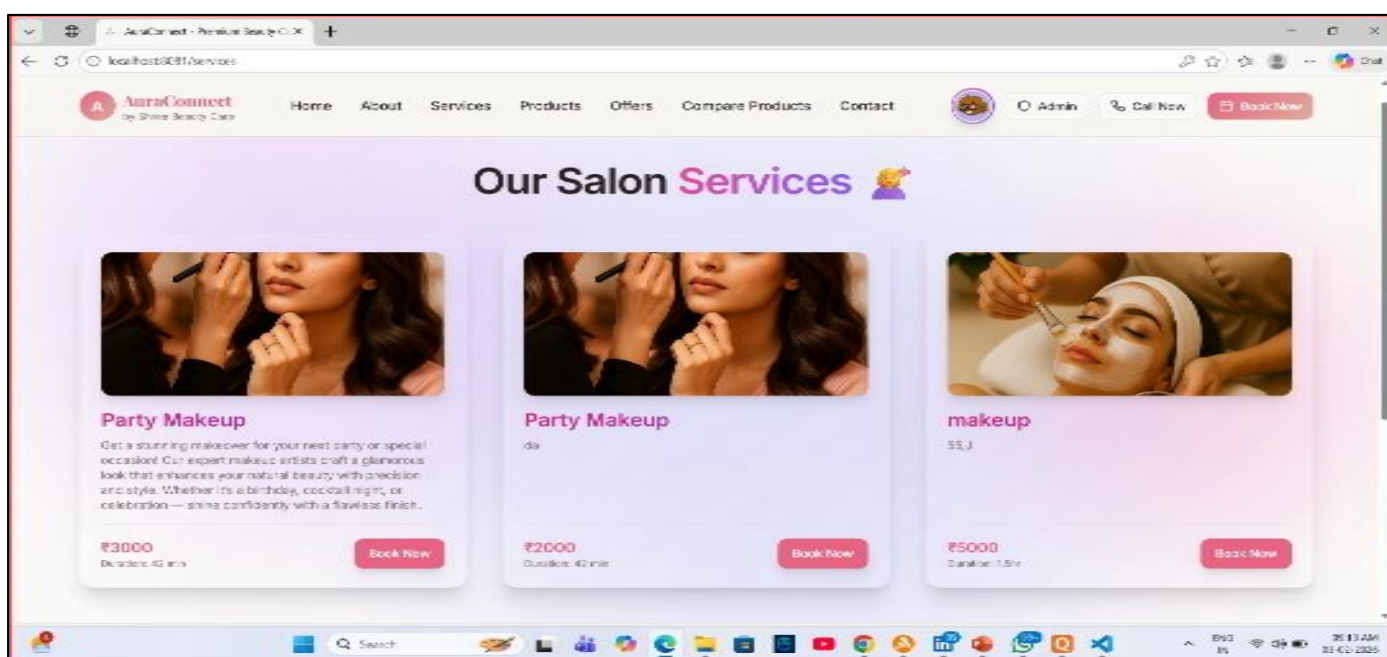


Fig 2 Services Module – Frontend UI Design

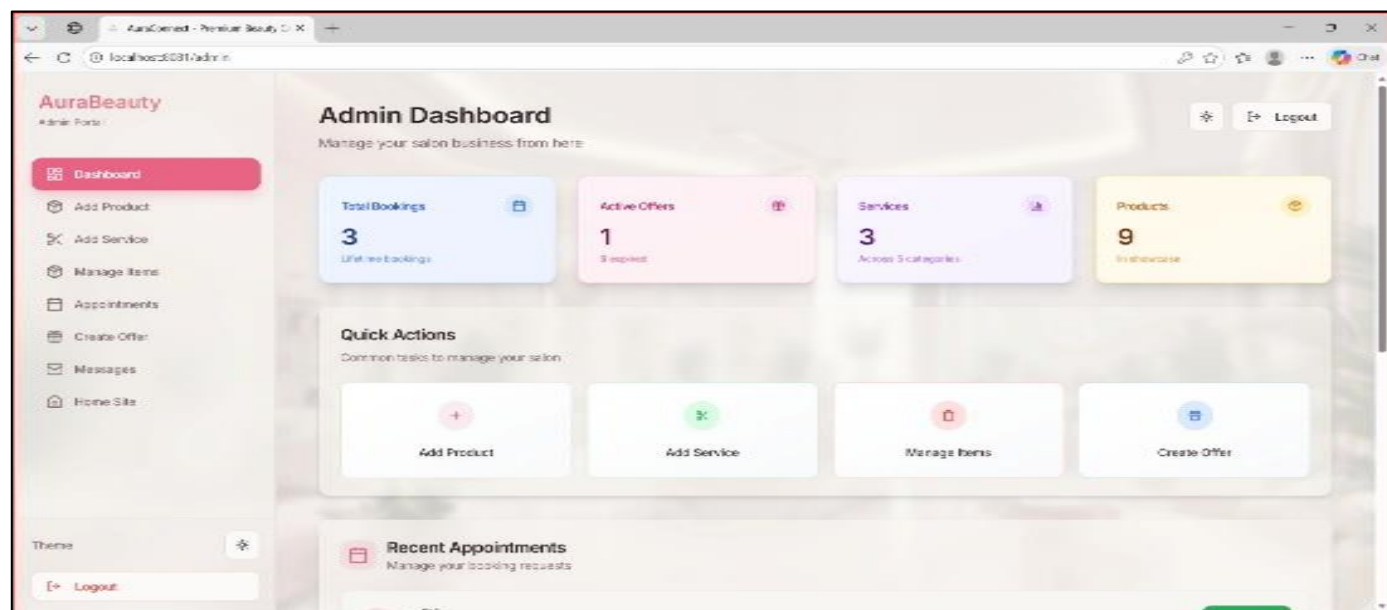


Fig 3 Admin Panel Dashboard – Salon Management System

VI. CONCLUSION

Aura Connect demonstrates how a modern web/mobile application can transform beauty salon management. By leveraging Flutter's cross-platform framework and MongoDB's flexible database, we built a unified platform that addresses real-world salon needs: easy online booking, efficient staff utilization, and enhanced e-commerce features. The expanded functionality – including exact time-slot selection, automatic reminders, product comparison, and recommendation – helps improve operational efficiency and customer satisfaction. Early evaluations show that salons adopting Aura Connect can significantly reduce waiting times and administrative errors while offering clients a richer, personalized experience.

Future work will focus on incorporating advanced analytics and AI, such as machine-learning-based recommendation algorithms and demand forecasting to further optimize scheduling. Additional features like loyalty programs and integrated payment processing could also be added. Nonetheless, even in its current form, Aura Connect serves as a comprehensive solution for final-year projects or industry deployments aiming to digitize beauty parlor services. It stands as a more human-friendly and technically robust alternative to manual or basic booking systems, fulfilling the vision of a fully connected salon experience.

REFERENCES

- [1]. T. B. Samudra and A. Anggara, "Implementation of Android-Based Salon Booking Application for Customer Service Optimization," *International Journal of Software Engineering and Computer Science (IJSECS)*, vol. 4, no. 3, pp. 1056–1065, 2024.
- [2]. A. W. Ningrum and R. H. P. Sejati, "Revolutionizing Salon Services: A Comprehensive Study on the Development of a Salon Reservation Application," *International Journal of Computer Applications*, vol. 185, no. 44, pp. 34–39, 2023.
- [3]. S. W. Khin and H. H. Yee, "Beauty Salon Appointment System," *University Journal of Student Projects and Research*, vol. 2, pp. 1–4, 2025.
- [4]. L. M. I. T. Hemantha, T. M. E. Gayathri, and N. N. M. De Silva, "Personalized Smart Skincare Product Recommendation System," *International Journal of Computer Applications*, vol. 184, no. 41, pp. 1–6, 2022.
- [5]. N. Vedula, M. Collins, E. Agichtein, and O. Rokhlenko, "Generating Explainable Product Comparisons for Online Shopping," *Proceedings of the ACM International Conference on Web Search and Data Mining (WSDM)*, 2023, pp. 202–210.
- [6]. M. Rathore and S. S. Bagui, "MongoDB: Meeting the Dynamic Needs of Modern Applications," *Encyclopedia*, vol. 4, no. 4, pp. 1433–1453, 2024.
- [7]. A. Santhosh et al., "Cross-Platform Innovation: The Rise and Impact of Flutter in Modern App Development," *International Research Journal on Advanced Engineering and Management*, vol. 2, no. 12, pp. 3560–3569, 2024.