

Systematic literature of Online Beauty Industry Service Management System

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Abstract:

To achieve specific business goals in the most effective and efficient manner, "Management" is one of the most important aspects we have considered. Efficiency in management helps to complete tasks within a specific timeline for better results.

This study investigates the impact of the internet and online services on the beauty industry and its management. Here we studied the different case studies related to the topic which contributes to the importance of online services. Our results show the limitations, solutions and also advantages over traditional methodology. An effort has been made by the researcher in this paper to review various essentials of beauty services, related technology, marketing approach, existing issues, and possible solutions by reviewing the available literature

The results of the study can assist the beauty industry to evolve in a way that advances towards better management strategies for their services.

Keywords- *Web application system, online appointment booking service, Customer management system, Beautician Appointment Booking System.*

Introduction:

Nowadays, different organizations and companies are using internet-based management services to expand their business and growth strategy. The Internet has revolutionized the way business works and beauty services are no exception. Internet-based management systems provide more accessibility to the marketplace, more connectivity and agility. So, there are many internet-based management systems available with online E-commerce applications to Online reservation systems ranges.

Earlier, people were only conscious about their health but these days people also want to look attractive so they are taking care of their health as well as their body care and skin care which leads to the growth of the Beauty industry.

Beauty Salons and Parlors are one of the fastest growing businesses with a great profit margin. But there are some problems faced by both customers as well as the owner. The main problem in this business, customers complain about the lengthy wait times regarding services. due to reasons such as miscommunication, less connectivity, and poor slot management. Along with that, the customers' data is also stored offline, which creates a problem for the owner in analyzing the stuff.

According to the survey[5], the use of the internet in Indonesia is extending to rise as the internet is easily accessible in Indonesia most of businesses are shifting towards the online mode and Beauty Salons and parlors are also one of them. A similar situation is there in India right now which can result in the expansion of the beauty industry in online mode.

Literature on the beauty industry is presented in the following section. Part III, will cover the related techniques, while the study will be concluded in the final part.

Literature review:

In the world of e-commerce, we need some new techniques in the management field. Every field nowadays needs e-commerce websites to manage their businesses and to reach customers. The main aim of such management systems is to make things easier for both the customer and business authorities. It provides the ease of time and research required in the offline mode. The expectation from such sites is that customers should receive the accurate timing and best service available at reasonable rates. Below is a brief summary of the all expected components in management systems given by the researchers.

Sr.No	Author	Name of the Paper	Date	Description
1	Maryani Hendro Nindito Hendra Alianto (Information Systems Department, School of Information Systems Bina Nusantara University Jakarta, Indonesia 11480 hendraalianto@binus.ac.id)	Prototype Development For Online Reservation System in Barbershop and Salon Industry	19-20 August 2019	Online barber shop and salon reservation system analysis and design that can reduce the waiting time for each barbershop and salon
2	Adarsh Kumar Aamir Khan	Salon Management System	5 may 2021	This research paper talks about a system that aims to connect users and Salons on an online platform where users can browse salons and their services.
3	Akshay V Anish Kumar S Alagappan RM Dr.Gnanavel S	BOOKAZOR - an Online Appointment Booking System	2019	Online booking system is all in one application for all type of bookings eg.

				health , electronics , beauty salon. It also provided chatbot and suggestions.
4	P.P.L. Leung, C.H. Wu, W.H. Ip, G.T.S. Ho, K.K.Y. Kwong V.W.S. Cho The Hong Kong Polytechnic University Hong Kong	Customer Loyalty Enhancement of Online-to-Offline Marketing in Beauty Industry	2016	This paper is a study of critical factors which contributes to customer loyalty of online to offline marketing in the beauty industry
5	1st Sarwindah 2nd Marini 3rd Hengki 4th Sherlly Febriyanti	A Development of Web-based Customer Relationship Management (CRM) system for Beauty Clinic.	October 23-24, 2020	It is basically a Customer Management System. Where all the information about the customer and the previously used products is saved . for easy and time saving applications .
6	Yixiu Yu School of Economics and Management Tongji University Shanghai, China yuyixiu@gmail.com Sisheng Liang	Sale System Analysis and Design for the Online Cosmetic Store Based on JSP	2011	This is a business to Customer management System providing the features to login, query and view goods, order, leaving messages, comments and other personalized service. This system is constructed with JSP

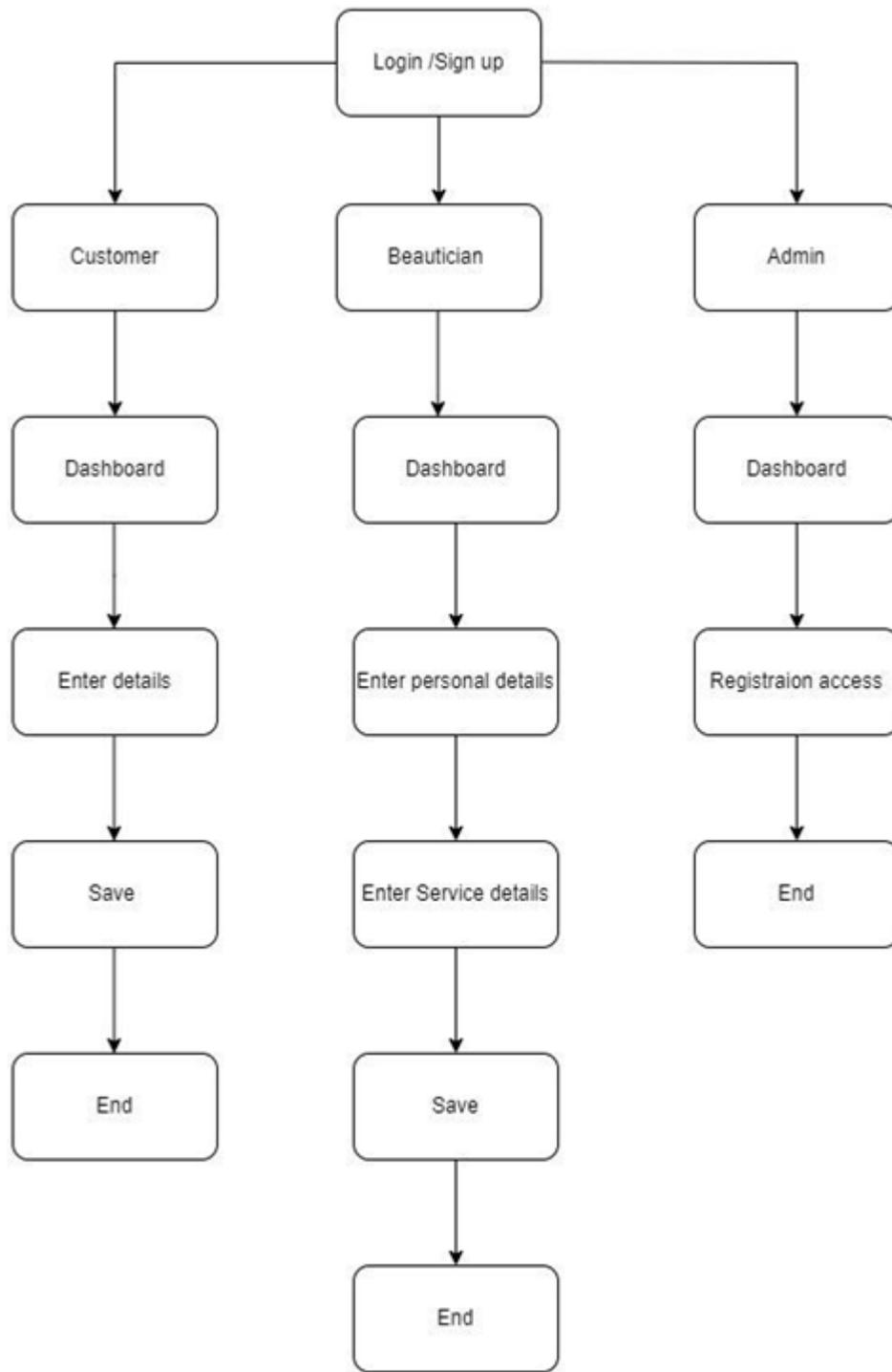
	School of Electronics Information and Engineering Tongji University Shanghai, China shinesliang@gmail.com			and JSP . considering the need of customers the unique packages are also provided in this.
7	Natalya V. Razmochaeva1 , Viktor P. Semenov2 , Artem A. Bezrukov3 Faculty of Economics and Management Saint-Petersburg State Electrotechnical University "LETI" Saint-Petersburg, Russia 1 razmn@mail.ru, 2 vps@etu.ru, 3 aabezrukov@etu.ru	Role of Process Automation in Quality Management of Enterprises in Perfumery and Cosmetic Industry		This process focuses not only on the management and automation of cosmetics and perfume industry but the quality management to maintain the healthy and fair competition in the market , And the AI plays a vital role in the automation of the manufacturing and management process .
8	afrozah Nadeem Department of Computer Science, Lahore Garrison University Syeda Benish	A Step Towards Nexus Salon: Integration of All Top Salons at Single Platform	2018	This research paper talks about a new platform for the collaboration of different top salons at one place to advertise all their services, prices, contact details and

	Zahra Department of Computer Science, Lahore Garrison University sundus Munir Department of Computer Science, Lahore Garrison University			bookings just within a few clicks exactly as you need it.
9	Prof. Khaire R.B, Pankaj Suryawanshi, Abhijeet Kadtan, Jayesh Dayalani, Tejas Sonavane Department of Computer Engineering, MGM's Polytechnic, Aurangabad, India pankajsuryawa nshi504@gmail .com	Beauty Parlour Management System	May-June- 2021	It helps us both customer and the salon as customers can easily find the best salon in their locality and can check the review of other customers based on that customers can take choose accordingly.

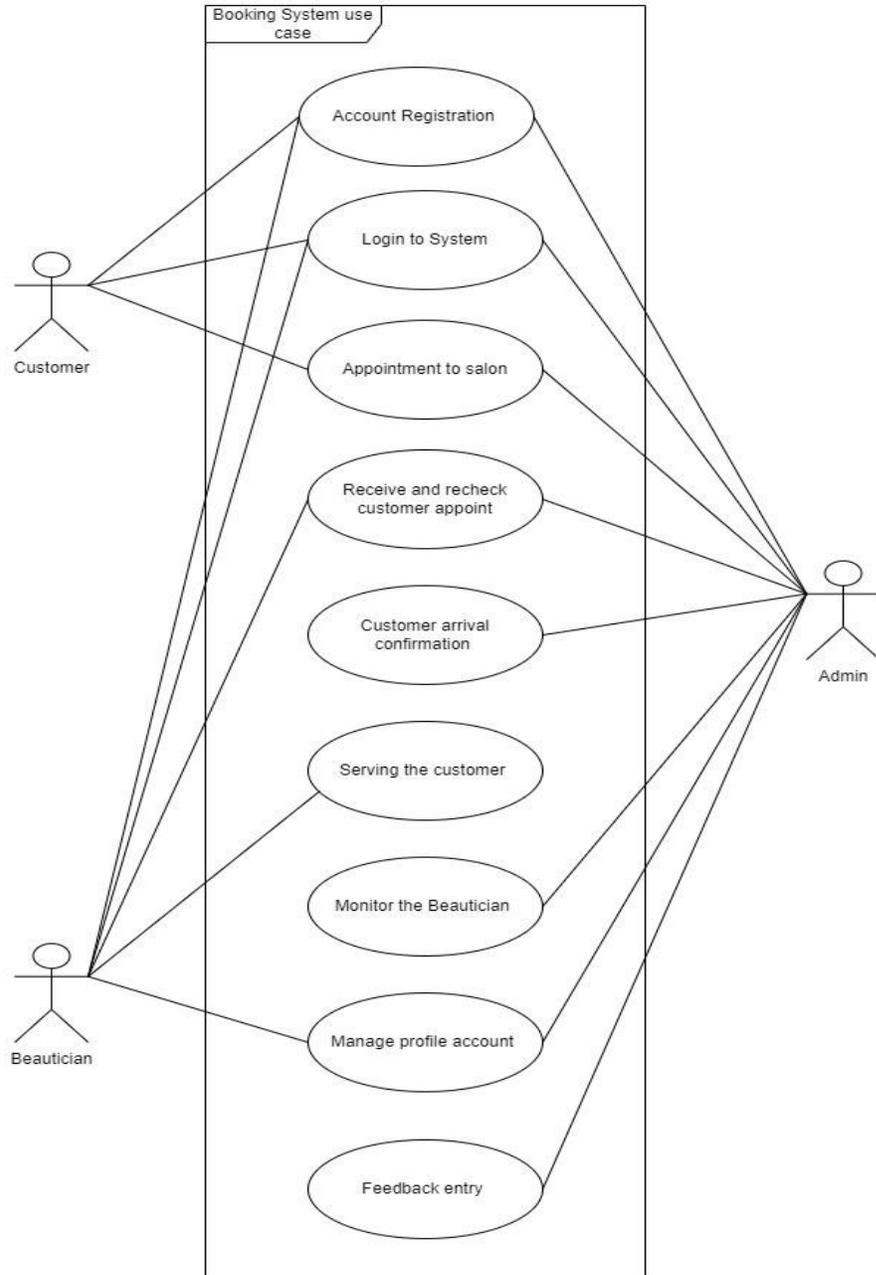
Proposed system:

1. We ought to make a beauty services management system.
2. We aim to make a web-based service application with an appointment scheduling system.
3. In this application users shall be allowed
 - a) To review beauty services & make an appointment online.
 - b) Users shall also be given the option to chat with beauticians & give feedback regarding the services.
 - c) This system will help solve the problem of finding the best services in the nearby localities.

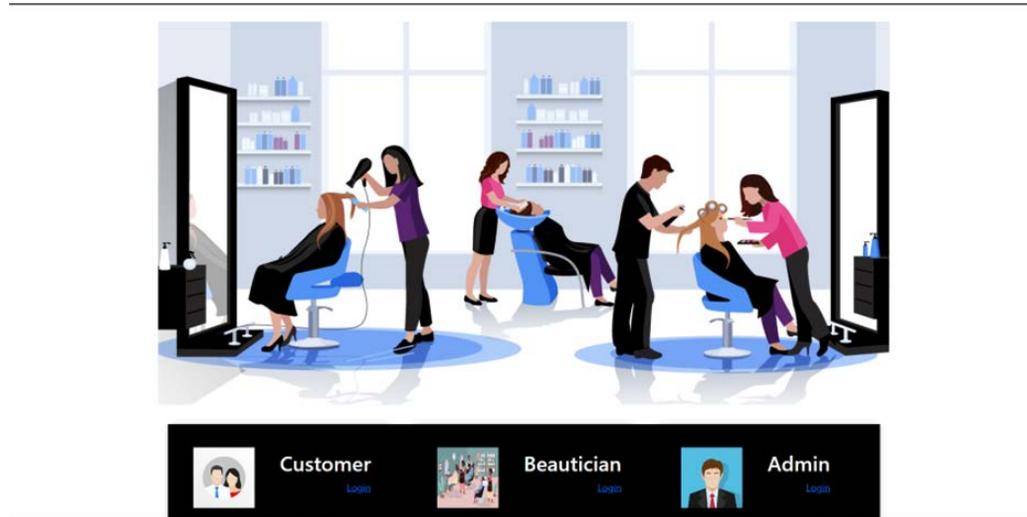
Flow Diagram



Use Case Diagram



Login Page:



Customer:

1. To check history

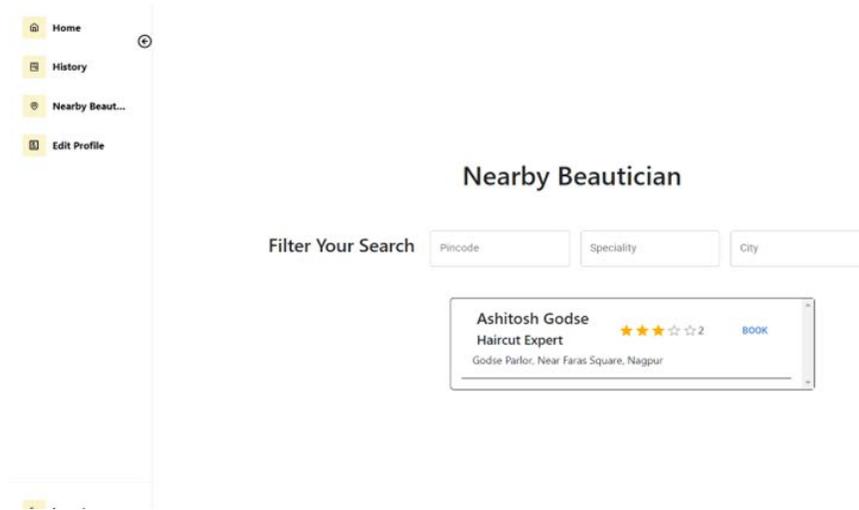
- [Home](#)
- [History](#)
- [Nearby Beaut...](#)
- [Edit Profile](#)

History

Filter Your Search

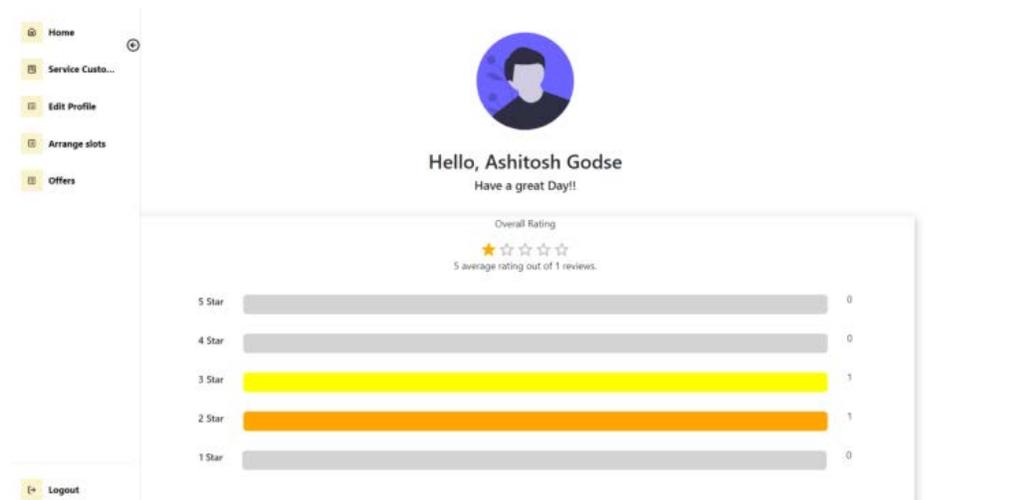
Date Visited	Beautician Name	Parlor Name	Parlor Address	Parlor Fees
2021-09-09T18:30:00.000Z	Rohan Mangle	Mangle Parlor	Mangle Parlors, Godhni Road, Nagpur	200
Fri Nov 25 2022 14:21:49 GMT+0530 (India Standard Time)	Ashtosh Godse	Godse Parlor		
Fri Nov 25 2022 16:01:43 GMT+0530 (India Standard Time)	Ashtosh Godse	Godse Parlor		
Fri Dec 29 2022 20:15:14 GMT+0530 (India Standard Time)	Ashtosh Godse	Godse Parlor		

0. To search for nearby beauticians



Beautician:

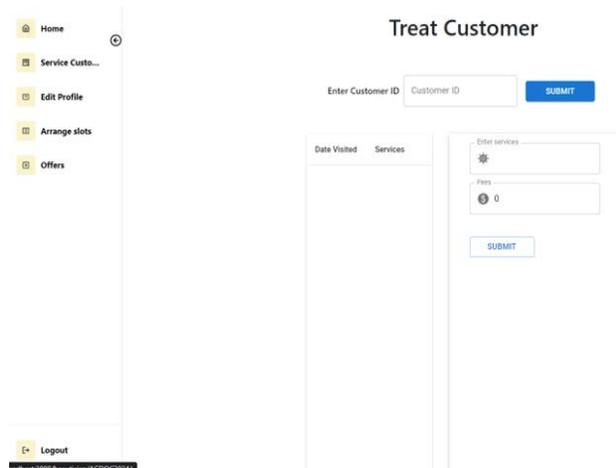
1. Dashboard



2. Slots of beautician



0. Treatments



Admin:

1. Data of customers and beauticians

Enter Customer ID:

Customer ID	First Name	Last Name	Age	Gender	Email	Address	City	State	Pincode	Date of Birth	Phone No.

Date Visited	Services	Parlor Name	Parlor Fees	Parlor Address
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2. Registration of customers from the admin side

User Type:

Personal Details

First Name:

Last Name:

Date of Birth:

Age:

Gender:

City:

Pincode:

Address:

Email:

Contact Number:

Password:

Confirm Password:

3. Registration of beautician form the admin side:

The image shows a web application interface for registering a beautician from the admin side. On the left is a sidebar with navigation options: Home, Display Data, Approve Req..., Register User, and Logout. The main content area features a registration form. At the top right, there is a 'User Type' dropdown menu set to 'Beaut...'. The form is divided into two main sections: 'Personal Details' and 'Beautician's Details'. The 'Personal Details' section includes fields for First Name, Last Name, Date of Birth (12/08/2022), Age, Gender, City, and Pincode. The 'Beautician's Details' section includes fields for Parlor/salon Name, Beautician Speciality, Parlor City, and Parlor Pincode. A 'SUBMIT' button is located at the bottom of the form.

Methodology and Techniques:

The interface build should be evolving with newer ideas and technologies. In online appointment booking systems, the website's main architecture is based on receiving the request of the user and successfully adding that new task to the schedule of both the customer and the company. The platform should provide the facility to search for the best services available in the given range of the area at a reasonable amount. For this purpose, the frameworks such as NodeJS and angularJS can be used. Also, the firebase plays a vital role in managing the database, analytics, messaging, and crash reporting. Recommendations and reviews play a vital role in management systems. It serves users with more features to choose the right services. This system uses

The beauty sector has been growing internationally recently. One of Hong Kong's most advanced businesses has been the beauty sector. Professionals, including beauticians, make-up artists, and beauty advisors, are connected to the registered institutions that cater to the beauty industry. Because of the effective information flow and well-developed information technology, consumers of the beauty industry are more likely to perform online research before making a purchase. In recent years, these have increased commercial potential for online marketing and offline business strategy.

A new business model is the online marketing and offline business strategy. The store means the offline business and the online environment are integrated by this concept. Online channels, like websites and e-commerce platforms, are used to draw potential clients to first purchase online then stimulate later in the physical stores through redemption. Firms can use the figures and statistics gathered from purchases and sales in the business model paradigm to offer engaging promotion or marketing activities. The strategy is expected to improve shop attendance and sales rather than have any impact on online sales.

The employment of offline marketing and internet marketing methods in tandem has increased by the evolution of business models. This business model refers to the collaborative application of online and offline marketing methods.

Online marketing and offline business strategy is a latest technique that initially draws users to the Internet and then encourages those potential customers to return to the physical store to purchase goods or services. Many businesses from many industries have embraced this marketing strategy.

Prior Online marketing and offline business strategy research has mainly examined the design or idea of this prototype or the effectiveness of this model execution strategies. Additionally, studies in marketing and customer correlation have shown that several variables, including corporate position of service provider, consumer worth, consumer faith, consumer gratification and consumer shifting price have a positive impact on consumer loyalty. Consumer gratification can be attained through better service standard, product standard and incentives, whilst consumer shifting costs can be additionally split into money and time costs respectively.

Consumer faith can be impacted by consumer security, interaction, and referrals from others. In contrast, consumer worth can be quantified in terms of practical actions, consumer experience, and cost price. Last but not least, businessmen's reputation, advertising, and website design can all help to create a company's image.

This study surveys to ascertain whether factors influencing Online marketing and offline business strategy and consumer commitment, affect the market. This study addresses the business openings created by Online marketing and offline business strategy, the need of consumer commitment for continuing organizational lead over competitors, and the lack of verified information weighing the factors like corporate position of service provider, consumer worth, consumer faith, consumer gratification and consumer shifting price helping in improvement of consumer commitment using Online marketing and offline business strategy in the beauty industry. Using the Analytic Hierarchy Process, their importance is also ranked in order of priority (AHP).

In the current salon systems, admins manage customer records on the register so it is very difficult to find out old appointment details in the system. It is a very tiresome task to make report for the salon business on the register. To overcome the problem the beauty service management system allows the salon to manage stylists and services, promote sales to customers and track customer satisfaction.

Salon Management System: This research paper discusses a system that aims to connect users and Salons on an online platform where users can browse salons and their services. By using a platform that helps connect clients and businesses, both sides can enjoy the perks of digitalization. It has been observed that customers face huge trouble when it comes to finding the perfect beautician in a new locality or area. Also, there has been an increased demand in need of a time-efficient solution for overcoming the waiting time outside of a salon.

Making an online appointment at their favorite salon can not only help the clients save time but it will also help the beauticians to manage their schedule and workload in a better and more efficient way. This in turn adds to customer satisfaction and on-time delivery of services. With the increase in customer engagement, business profits can be increased in a strategic way. Analyzing the data collected from these sources can help take major decisions on the end of the beautician/hairdresser. This system also aims at reducing the amount of manual work that both the end user and the business owners have to practice.

The Recommendation and Ratings feature helps in making the perfect decision in a very short time and also helps in increasing the revenue of only the skilled places. Filtering the ratings can help to choose a salon based on its service costs hence helping save some bucks on the customer's end.

The beauty parlor system helps both customers and salons as customers can find the best suitable salons according to their reviews and customer's budget, In the given range of the area. This is one of the most important features called flexibility they have implemented.

This Parlor management system connects salons, clients, and stylists in an online community allowing users to browse salons and stylists and book or cancel their appointments. The list of work and the services they offer at their salon can be specified. Users can read and write reviews of particular salons and the stylist working there. Salon admins can arrange the appointments they have to complete on a particular date. In this system, by giving valid usernames and passwords users can log in to the system. After login users can search for any salon in the system, with the help of a search box and they can check their upcoming appointments with the parlor. The system helps users in decision-making while choosing the services of a particular salon with the help of the reviews given by other customers. In the current salon systems, admins manage customer records on the register so it's very complicated to find out about the history of the customer's previous appointments. It is a very tiresome task to make the report for the salon business on the register. To overcome the problem the beauty service management system allows the salon to manage services and stylists, and promote sales and track customer satisfaction with a review system. Testing plays a very important role in website development. The main purpose of testing is to check the browser compatibility, speed of loading pages and to look out for broken links. Also via testing the validation of HTML, CSS, and spell check in the website content is done. Building the altering solutions for the correction of the mistakes and also checking the functional parts

of the web-Application like registration, payment, and postal services as per the planning and requirement.

Online reservation systems in the Barbershop and salon industry: This web- application resolves the problem of time required for the barber and the customer. The methodology used in this system to analyze the system requirements is to disseminate the list of questions with the help of google docs and also analyze it using partial correlations. The research demonstrates that the majority of the crowd visiting the salon are young, and also have digital devices like smartphones which makes our idea of making the online application for salon management have a broad scope. According to research the crowd is young people aged between 21 and 30 years (52%) or aged between 17 and 20 years (43%) with the student profession (85%).

The time for the nexus salon: The all-in-one salon based on gen Z evolving platforms requirement. The collaboration of different top salons in one place to advertise all their services, contact details, prices, and bookings. To make it easier with few clicks as per the expectations. The idea is based on self-grooming which is becoming a part of the personality.

Role of process automation in the management and automation of cosmetics: This system implements the AI solution for process automation for manufacturing and quality management of cosmetics and perfume products. The automation saves money and time and can also be used for other processes such as staff recruitment. Although it is impossible to use all the information in AI for feature extraction, AI automated applications are highly in the competition. Because it uses most of the information technology available and automates the whole process, decreasing human intervention, and time required and enhancing the features such as perfection and transparency.

Sale System analysis and design for the online cosmetics This system uses JSP and SQL. This provides the business-to-customer marketing mode. The platform allows users to register, see the current sale products, order the product, give feedback, comment, and personalize the services. The application keeps track of the purchase history. As we already know, if the organization has a strong online commerce platform for its product the organization is highly competitive.

Conclusion:

This study investigates the impact of the internet and online services on the beauty industry and its management. Here we studied the different papers related to the topic which contributes to the importance of online services. Our results show the limitations, solutions and also advantages over traditional methodology. We studied papers related to technology, marketing approach, existing issues, and possible solutions which helped in our results. The findings of the study can help the beauty industry to develop a way that advances toward better management strategies for their services.

Online Beautician Management System is a web-based application aimed to reduce the waiting time of customers by scheduling appointments, to receiving the notification of appointments on time. To help customers to choose suitable beauticians by using features of the web app. The system provides various features such as suggestions based on the reviews given by previous users. Various applications studied during the research have also provided additional features such as suggestions, connections, and chatbots also some applications provide an all-in-one platform for various streams. The top features provided by the beautician management system are real-time time management and scheduling, recommendation, revenue based on skills, and flexibility of time.

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