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**BARBERSHOP SERVICE BOOKING APPLICATION**

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**BACKGROUND OF STUDY**

A barbershop is a thriving business in its own right, it holds promising long-term potential. This industry thrives on the fact that human hair continues to grow, offering a constant demand for its services. The key distinction between a barbershop and a salon lies in the specialization of their stylists: barbers are typically trained to expertly use clippers for men's hairstyles, while salon stylists are skilled in the art of hair cutting and styling with scissors. Some individuals choose to visit a barbershop not only for haircuts while others visit to access services that extend beyond the traditional offerings, such as beard and mustache trimming, hair coloring, hair massages, and more (Sulistyawati, et al., 2022). Beauty salons and barber shops serve as influential institutions for communities. They are uniquely positioned to influence the health of their clients by tapping into health education and their position as a community space (Johnson et al., 2023).

Hunting for the finest barbershops or hair salons nearby can be a cumbersome endeavor. Also, Arriving at a barbershop without a pre-booked appointment may result in long queues and unnecessary waiting time, consuming your valuable time. To address this issue, I have proposed a Mobile-based barbershop application. This app simplifies the process by generating a list of nearby barbershops based on your current location.

The proposed consists of three users, the customer, the barber and the admin, each user would have to register before being able to use the application. The customer’s operations include: viewing and selecting a nearby barber, viewing a selected barber’s service and also booking an appointment. While the barber’s operations include: update the service they render, see appointments.

**STATEMENT OF THE PROBLEM**

In today's fast-paced world, convenience and efficient time management are paramount for individuals seeking grooming services at barbershops. However, the traditional process of booking appointments at barbershops often poses significant challenges which range from Walk-in customers frequently experience long waiting times due to a lack of real-time scheduling, resulting in frustration and inconvenience. Customers struggle to access essential information such as service availability, stylist details, pricing, and reviews before making a booking decision. Barbershop owners face difficulties in efficiently managing appointments, leading to potential loss of business due to missed opportunities and idle time. To address these challenges, there is a need for an innovative solution that uses mobile technology to create a user-friendly, and efficient booking system for both customers and barbershop owners.

**AIM AND OBJECTIVES**

The aim of this system is to develop a mobile based application for BarberShop Service Booking App which will revolutionize the way grooming services are scheduled, enhancing customer satisfaction and optimizing business operations. The stated aim will be achieved in the following objectives:

* Examine and understand the existing system.
* Design and develop an improved system.
* Test the efficiency of the new system for booking a barbershop.

**LITERATURE REVIEW**

Article Title: Barbershop Service Booking Application for Hair Emotion Matrix Saloon

Authors: Cheong Wai Feng, Mohd Zainuri Saringat

**Summary of the work**

The Booking Barber Service System is a solution for efficiently managing customer appointments. It was developed to address the challenge of handling a high influx of customers simultaneously, which can lead to a decline in service quality for shopkeepers. This system facilitates the booking of barber services by customers, collecting and presenting relevant information to both barbers and owners. Additionally, it provides business-related data to the owner, filtered based on specified criteria. The application enables customers to schedule appointments without conflicts with other clients, enhancing their loyalty to the shop. The system also employs secure authentication methods for user logins.

**Methodology**

The system development life cycle for the project is prototype model which based on comments and feedback from the user about the working prototype of the software. The methodology is to ensure the activities for the project can meet the requirements within reasonable time frame.  
Java programming language was used to build the system  
Xampp was employed as the cross-platform server, and MySQL was the chosen database server.

**Recommendation**

The researchers recommended that To further improvement for the future system are include the development device for iOS system, the subsystem for managing the employee whereby having the track of daily in and out record so can details up their working hour.

**Research Gap**

The system can only be used by android based user. The barbers on the system can't be filtered based on location.

Article Title: Design and Development of The Online Booking Application at Dankie website-Based Barbershop using the web Framework and payment Gateway

Authors: Alwan Muhamad Fauzi, Marwanto Rahmatuloh, ST, MT, Widia Resdiana, SS., M.Pd.

**Summary of the work**

The application was aimed at reducing waiting times for customers at Dankie barbershop. This app enables users to schedule their arrival, view available time slots, select their desired services, choose a specific hair artist, and review the total payment before confirming their appointment. The app also provides detailed and accurate information about the barbershop's services, staff, and facilities, helping minimize errors related to barbershop details.

**Methodology**

Observation method was used when designing the system, HTML5 CSS mobile were used as the front-­end. CodeIgniter framework from PHP was used to develop the system while MYSQL for the database.

**Recommendation**

It was recommended that in the future phases of development, this web-based system can be extended to a mobile platform, also allowing customers to rate each hair artist or employee upon completion of their selected service, enabling prospective customers to gauge the quality of the staff based on assessments from previous clients.

**Research Gap**

The system is limited to Danke Barbershop, other Barber shops can’t use it

**Article Name:** Get Your Cut

**Author:** Oladimeji Adekanmbi

**Summary of the work**

Get Your Cut is a hybrid mobile app designed to empower customers by enabling them to book haircuts and appointments conveniently from their mobile devices. This platform offers customers full control over their schedule and expenses. Users can access a list of nearby barbershops based on their location or city. After selecting a preferred barbershop, they can view the menu and pricing details. Customers can then choose their desired date and time and complete the booking process with a simple tap, securing their appointment.

**Methodology**

HTML5 CSS and jQuery mobile were used as the front-­end. PHP is the server-side language used to communicate with the MYSQL database. Ajax to make asynchronous calls to the database and I used JSON to return the value to the client side

**Recommendation**

The researcher recommended that the following features can be added to the application

* Ability to see which barbers they have and Select which barber they want for their hair appointment.
* Notification feature, either through the application or the native device to notify the user once the tie for their appointment draws near.

**Research Gap**

The customer needs to input the city they are in before being able to see the nearest barber available

Article Title: Salon Management System

Author(s): Adarsh Kumar Gulshan, Amir Khan

**Summary of the work**

A salon management system is a web-based platform designed to oversee appointment scheduling. This system establishes an online connection between users and salons, allowing users to explore various salons and their services. Users are also able to write and read reviews about the salon and its operations. The salon management system addresses this need in a manner that is responsive, user-friendly, and efficient, meeting the demands of the industry.

**Methodology**

In this project, MySQL and PHP are used to back the interface with strong database functionality and for the Frontend, HTML, CSS and JavaScript are used.

**Recommendation**

The researchers recommend the implementation of a web calendar automation, ensuring that completed tasks trigger automatic updates on the calendar.

**Research Gap**

The exact location of the salon shop is not gotten.

Article Title: Geographic Information System for Booking Beauty Salon and Barber Shop with an Android-Based E-CRM Approach

Authors: I Kadek Dharma Krisna Putra, I Nyoman Piarsa, I Made Sukarsa

**Summary of the work**

The system operates across both mobile and web platforms. Customers utilize the mobile app, while administrators and vendors access the system through the web platform. The research project's primary objective is to create a system that facilitates interaction between the service providers of beauty salon and barbershop with customers. The system addresses the absence of essential e-CRM features, including promotions, chat functionality, ratings, and reviews. It consists of three core modules: administration, vendor, and customer.

**Methodology**

Beauty Salon and Barber Shop Information Systems use waterfall-based lifecycle development software in designing systems. The SDLC model with the waterfall method has 5 stages in developing software, including analysis, design, implementation, testing, and maintenance. The system was developed using the Java programming language assisted by the Android Studio IDE for the frontend, while PHP was employed for the backend.

**Recommendation**

**Research Gap**

The vendor's activities on the system is on the Web platform, this can be moved to the mobile platform. The mobile platform can only be used by Android based users making it unusable for the iOS users

**PROPOSED METHODOLOGY**

The methodology to be used in this system include direct observation of the existing system and the internet. These methods provide reliable information and required knowledge for this research and proper guidance; Flutter will be used to develop the frontend, Django for the backend, Django REST Framework for the web API, and SQLite for database. GPS coordinates are required for the program to determine the customer's current location.

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