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STAFFORDSHIRE UNIVERSITY

BSc (Hons) in Computing

Level 5

INDIVIDUAL ASSIGNMENT

Module Code & Title:
COMP50016 – Sever Side Programning-2

Prepared By:

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MARKING CRITERIA	%	MARKS OBTAINED
TOTAL (%)		

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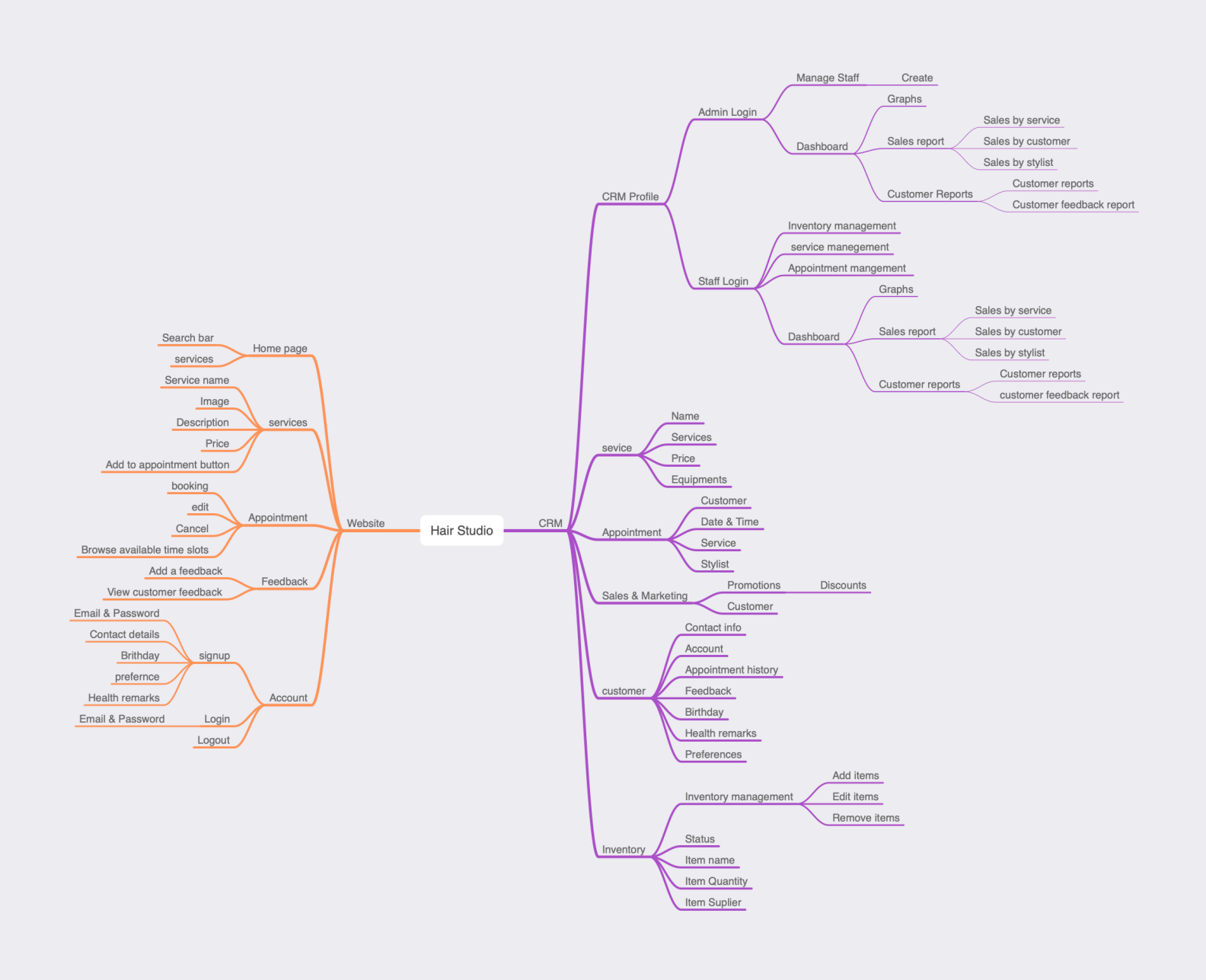
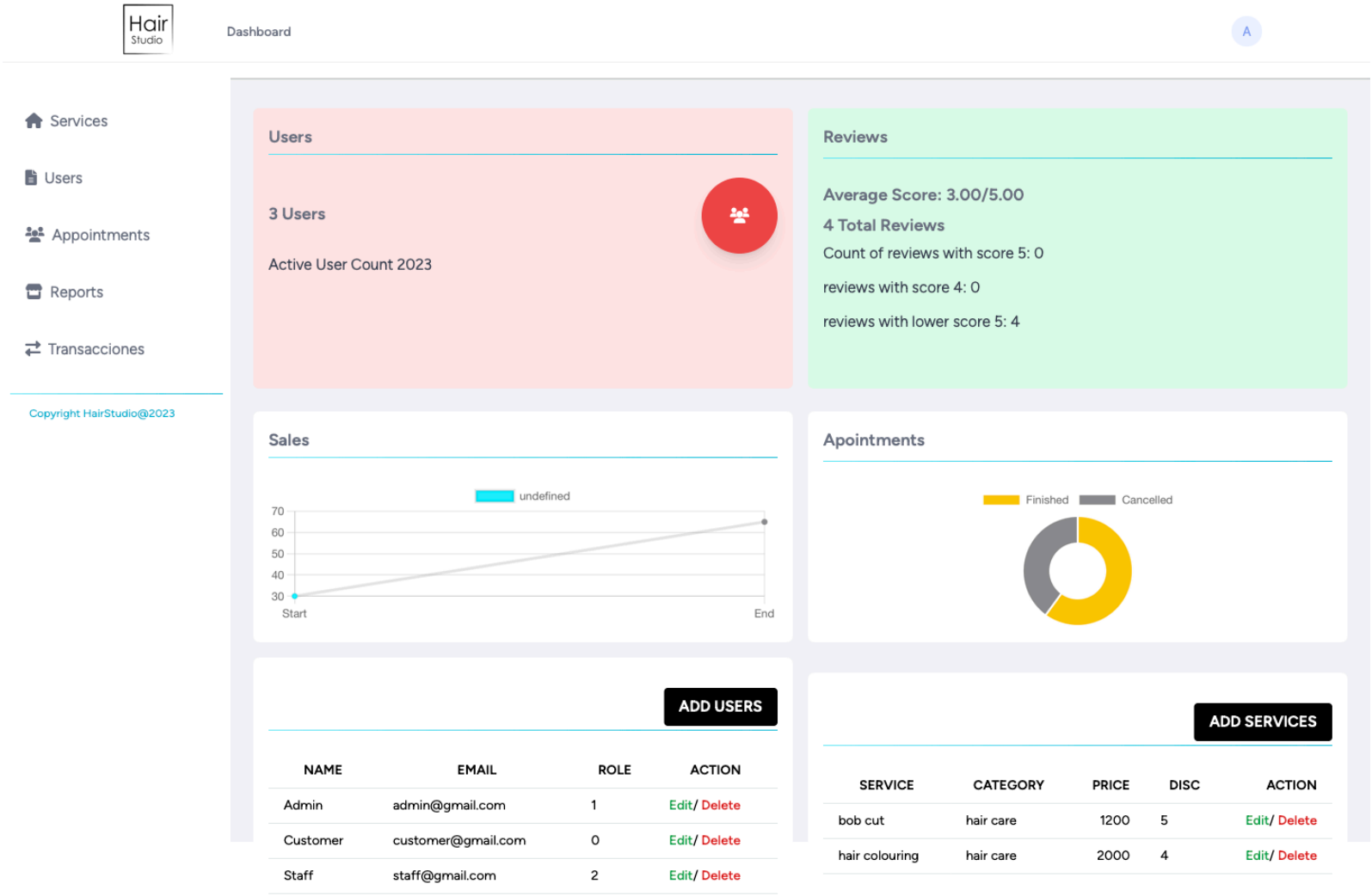
1. Mind map


Hair Studio
Website
Home page
Search bar
services
services
Service name
Image
Description
Price
Add to appointment button
Appointment
booking
edit
Cancel
Browse available time slots
Feedback
Add a feedback
View customer feedback
Account
signup
Email & Password
Contact details
Brithday
prefernce
Health remarks
Login
Email & Password
Logout
CRM
CRM Profile
Admin Login
Manage Staff
Create
Dashboard
Graphs
Sales report
Sales by service
Sales by customer
Sales by stylist
Customer Reports
Customer reports
Customer feedback report
Staff Login
Inventory management
service manegement
Appointment mangement
Dashboard
Graphs
Sales report
Sales by service
Sales by customer
Sales by stylist
Customer reports
Customer reports
customer feedback report
sevice
Name
Services
Price
Equipments
Appointment
Customer
Date & Time
Service
Stylist
Sales & Marketing
Promotions
Discounts
Customer
customer
Contact info
Account
Appointment history
Feedback
Birthday
Health remarks
Preferences
Inventory
Inventory management
Add items
Edit items
Remove items
Status
Item name
Item Quantity
Item Suplier

2. Interfaces

There are three interfaces for clint,



Hair Studio

Dashboard Subscribe Feedback

EXCLUSIVE SERVICES

Hair Cuts

Bridal

Nail Care

Consultaion

Hair Cuts

Bridal

Nail Care

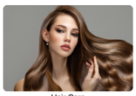
Consultaion

Festival Deals

Nail Care
Pedicure

Bridal
Silver Package

Hair Care
Roots Touch Up


Hair Care
Keratine Treatment

Popular Services

Hightlights

Bob Cut

Deep pore cleansing

Acrylic Nails

Why Hair Studio?

We are at Hair Studio are incredibly proud to stand for the highest standards in the hair industry. Our approchto hair, makeup, and other beauty treatments in modelled after and set against a backrop of clean-lined, industrial decor where new and original ideas are developed, refined, and inspired by you, for you. We have confidence in excellence with a heart.

Our dedicated team of beauticias, nail technicians and skin care professionals at Hair Studio have contless years of experince working in the beauty industry.Whether you are a new or returning customer, our staff of highly educated stylists is ready to make you look your very best. We strive to give each customer the best service possible.

Testimonials

Dinee Jarooshan

" It was my first tome at Hair Studio and it was such a great experience. Amazing expertise in hair cuts together with great service. These guys really care about their client's also their staff is friendly and want to make them look good! My haircut was spot on! We'll definitely be returing back and highly recomend this place. "

Amanda

" For the second time I had the keratine treatment at Hair Studio. The service is excellent and products are promising. My keratine treatment service is excellent and products are promising. My keratine treatment lasted for almost a year and that was an excellent job done by Hair Studio. Iwas so happy with their work. Thank you Hair Studio. "

Tharusha Fernando

" I had a hair cut and a hair colour from Hair Studio. They did an amazing job withmy hair. I highly recommend Hair Studio for hair cutting and colouring. I went there with one of my friend who is an Australian and has blonde hair. They did an amazing job on her hair too. Staff is very friendly I'm so happy with my hair after ages. "

QUICK LINKS

Home
Appointments
Team

SERVICES

Hair Cuts
Makeup
Skin Care
Nail Care
Hair Colour
Kids
Bridal
Scalp Treatment

COUSTOMER CARE

011-1200340
071-1900000
No:12, Hope Avenue, Colombo.

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Hair Studio

Dashboard

S

- Services
- Users
- Appointments
- Reports

Copyright HairStudio@2023

Users

3 Users

Active User Count 2023

Reviews

Average Score: 3.00/5.00

4 Total Reviews

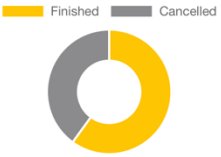
Count of reviews with score 5: 0

reviews with score 4: 0

reviews with lower score 5: 4

Sales

Apointments



3. Database

The initial step is to create the database schema. This entails creating tables for clients, services, appointments, and reviews, as well as outlining the links between them.
Create Eloquent models for each of these tables next. These models serve as a bridge. enabling interaction with the database Following the creation of the models, the following step is to develop and execute database migrations. By conducting these migrations, the tables in your database will be created automatically depending on the models you've established.

4. Testcases

Test case ID	Description	Test inputs	Expected results	Output	Result
T1	Book an appointment	Select a service, a date, a time , click book	Added to the appointments window	Added to the appointments window	Pass
T2	Cancel an appointment	Go to appointments window, click cancel	Removed from the appointment window	Removed from the appointment window	pass
T3	Edit an appointment	Go to the appointment window edit the details	Update the appointment window	Update the appointment window	Pass
T4	Add a review	Fill the review form.	Successfully added review message	Successfully added review message	Pass
T5	Customer Login	Input email and password correctly	Logged and direct to the home page	Logged and direct to the home page	Pass
T6	Customer Registration	Fill the registrations form correctly(first name, full name, email, password)	Registered and direct to homepage	Registered and direct to homepage	Pass
T7	Update user profile	Navigate to profile, edit details (profile picture)	Update the profile with new details	Update the profile with new details	Pass
T8	Confirm the appointment	Ga to the appointment window click confirm	Successfully booked message.	Successfully booked message.	Pass
T9	Admin login	Admin email, password	Direct to admin dashboard of the CRM	Direct to admin dashboard of the CRM	Pass
T10	Create user accounts (customer, staff) only admin	Navigate to create user, name, role, email, default password	Successfully create the user. And display in the user table	Successfully create the user. And display in the user table	Pass
T11	Edit user accounts (customers, staff) only admin	Navigate to edit user, name, role, email only	Successfully edit the user. And updated in the user table	Successfully edit the user. And updated in the user table	Pass
T12	Delete user accounts (customer, staff) only admin	Click delete user	Successfully deleted the user. And removed in the user table	Successfully deleted the user. And removed in the user table	Pass

T13	Staff login	Staff email, password	Direct to staff dashboard of the CRM	Direct to staff dashboard of the CRM	Pass
T14	View appointments	Go to appointments	Display all the appointments with details	Display all the appointments with details	Pass
T15	Add services	Service Id, service name, category staff assigned	Successfully added to service table	Successfully added to service table	Pass
T16	Delete a service	Click delete service	Successfully removed from service table	Successfully removed from service table	Pass
T17	Edit a service	Give details to edit	Successfully update the service table	Successfully update the service table	Pass
T18	Generate reports	Starting date , end date , service id	Successfully generate the reports	Successfully generate the reports	Pass
T19	Mark the appointment status	Completed or canceled by the customer	Successfully marked the status	Successfully marked the status	Pass
T20	Manual appointments	Got to add appointment. Customer name, email, date and time	Successfully added an appointment	Successfully added an appointment	Pass

5. Explanation about the system

A website and a Customer Relationship Management (CRM) tool comprise the Hair Studio system. Hair Studio is a salon business, and this system is intended to increase its web visibility and make client management operations easier. The system serves to two key user groups: website visitors and administrators and employees who utilize the CRM.

Website offers an online platform for users to browse salon services, book appointments, view promotions, and interact with the salon brand. CRM provides admins and staff to manage customer data, schedule appointments, track bookings, analyze sales data, and facilitate customer support.

Website features

- Customers may examine a variety of salon services, such as haircuts, styling, coloring as well as descriptions, price, and available time slots, in the Service Catalogue.
- Users may make appointments online, select individual staff members, and receive booking confirmation emails.
- Customers may establish accounts, log in, and manage their booking history and personal information.
- Promotions and discounts are displayed on the website,
- Provides salon contact information, location, and operating hours.

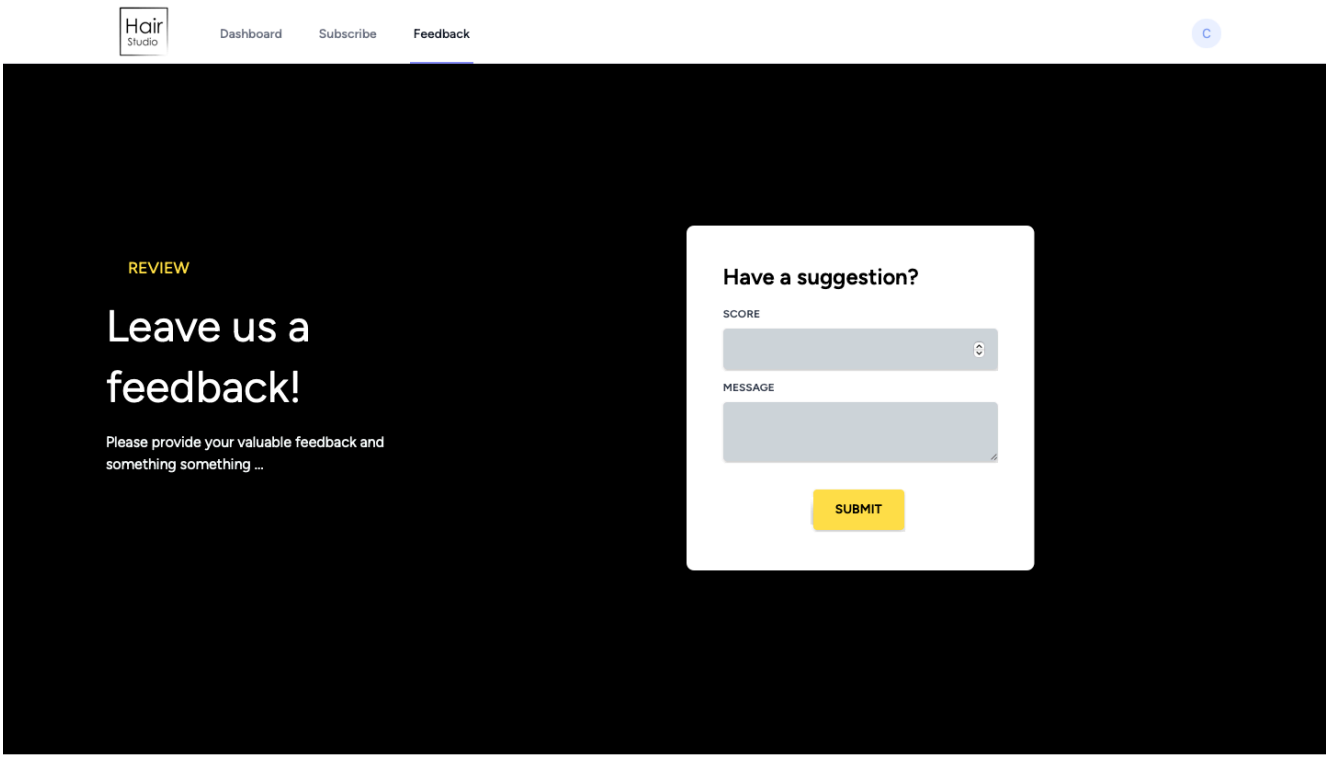
CRM features

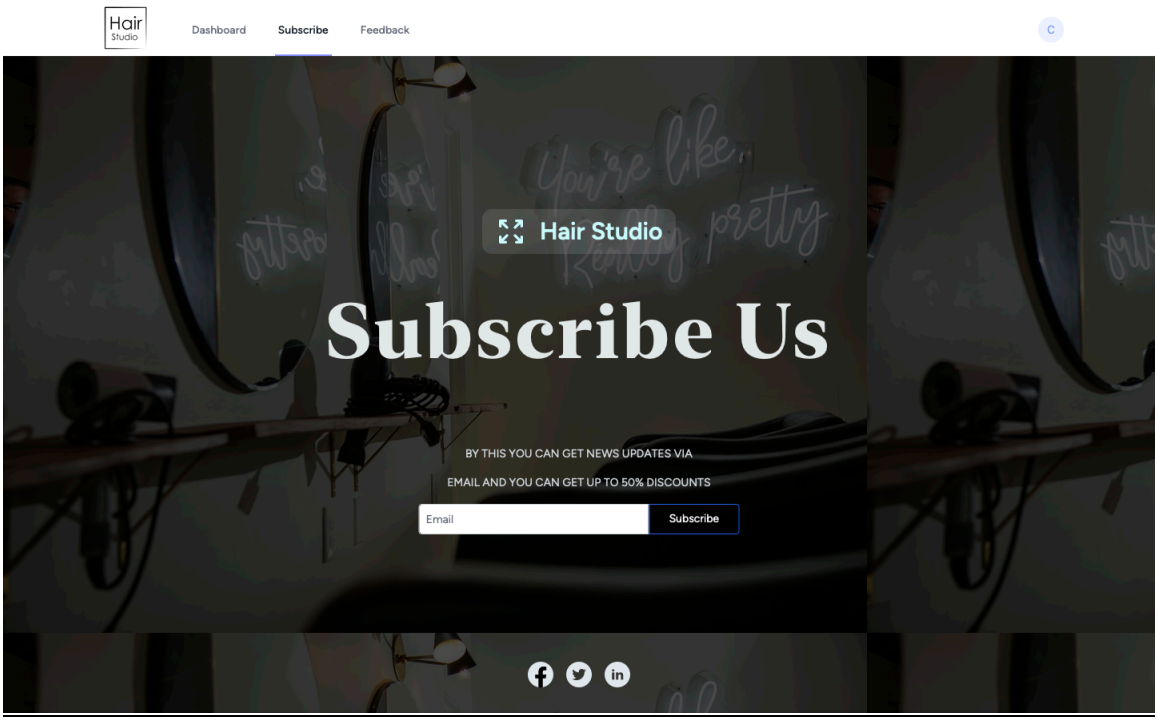
- View and respond to clients reviews and enquiries.
- Keeping track of salon product inventories, ordering supplies, and tracking stock levels.
- Using the CRM's appointment booking system, users may schedule, reschedule, or cancel appointments.
- Admins have access to create, edit and delete client profiles.
- Keep track of appointment histories and manage consumer preferences.
- Generating reports using analytics

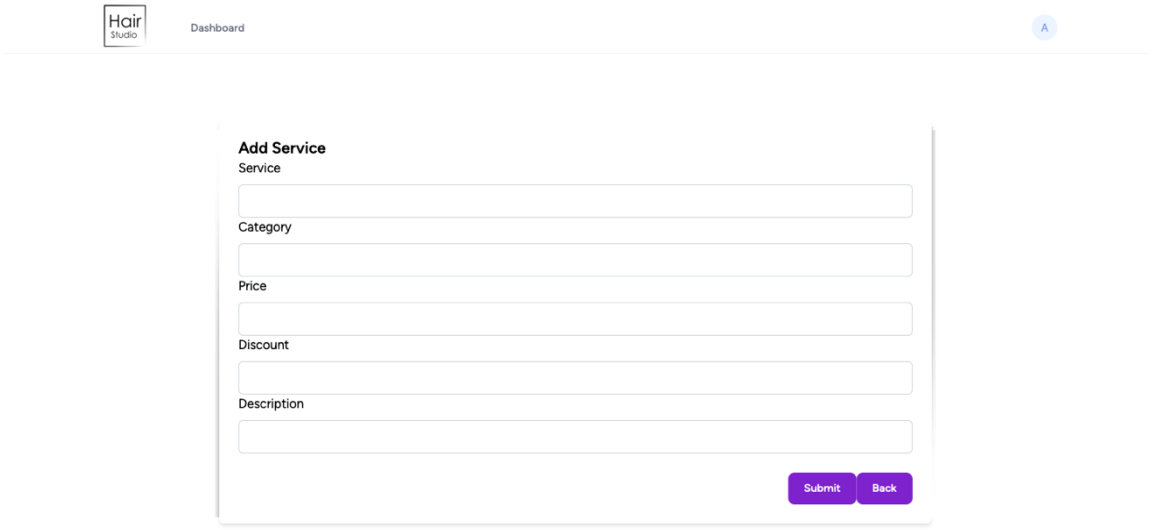
Objectives

- Make it simple for customers to book salon services online.
- Make it easier for clients and employees to schedule, reschedule, and cancel appointments.
- Use CRM technologies to keep client connections strong and to provide personalized services.
- Utilize the CRM to collect and manage consumer comments and reviews in order to enhance services and reputation.
- To decrease waste and assure product availability, use the CRM to track product consumption and optimize inventory levels.

Screenshots




Hair Studio
Dashboard
Subscribe
Feedback
C
Hair Studio
Subscribe Us
BY THIS YOU CAN GET NEWS UPDATES VIA
EMAIL AND YOU CAN GET UP TO 50% DISCOUNTS
Email
Subscribe


Hair Studio
Dashboard
A
Add Service
Service
Category
Price
Discount
Description
Submit
Back

Create Account

UserName

Your email

name@flowbite.com

Role

Your password

Submit Back

Users

3 Users

Active User Count 2023

Reviews

Average Score: 3.00/5.00

4 Total Reviews

Count of reviews with score 5: 0

reviews with score 4: 0

reviews with lower score 5: 4

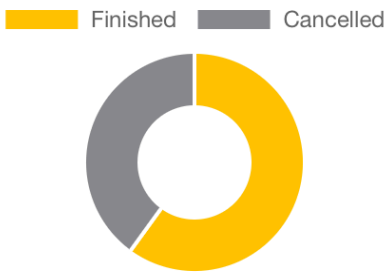
ADD SERVICES

SERVICE	CATEGORY	PRICE	DISC	ACTION
bob cut	hair care	1200	5	Edit/ Delete
hair colouring	hair care	2000	4	Edit/ Delete

ADD USERS

NAME	EMAIL	ROLE	ACTION
Admin	admin@gmail.com	1	Edit/ Delete
Customer	customer@gmail.com	0	Edit/ Delete
Staff	staff@gmail.com	2	Edit/ Delete

Apointments



Contacts

Add New

#	Name	Price		
1	bob hair	1200		View Edit Delete
2	Pedicure	2000		View Edit Delete

Contacts

Add New

#	Name	Address	Telephone	Actions
1	John	chaurch street, colombo	07194556	View Edit Delete
2	Steffanie	sea street, maharagama	031789209	View Edit Delete

Contactus Page

Name

Address

Mobile

Save

6. Quality assurance review process and test cases.

The Quality Assurance (QA) review process and test cases are critical components of assuring the Salon Website and CRM created using Laravel, PHP, and MySQL are reliable, functional, and secure. This describes the QA review process and includes test cases to ensure that the system is proper and resilient.

In the planning phase, comprehend system functioning, go over project requirements and user stories. Create a detailed test strategy that includes test goals, resources, and timeframes.

Execution phase, verify that all features and functionality of the salon website and CRM work as expected. Assess the user interface for usability and friendliness. Performance testing is used to evaluate the responsiveness, load management, and scalability of the system. Check for vulnerabilities and assure data security using security testing. Regression testing ensures that new upgrades do not break current features.

Test case	Objective	Steps	Outcome	Analysis
Online booking	To ensure that clients may book salon services online.	Use a registered user account to log in. Go to the reservation page. Choose a service, a date, and a time. Select the "Book Now" option. Check to see if a booking confirmation is presented. Verify the booking record in the database.	The booking procedure was successful, and the booking was recorded.	The test case ensures online booking of salon services, ensuring customer convenience and preventing potential business losses due to failures in the booking process, user authentication, and confirmation messaging
Data security	To ensure that user data and sensitive information are securely safeguarded.	Unauthorized access to the admin/staff panel is attempted. Log in with incorrect credentials. Examine your system for SQL injection flaws.	Unauthorized access and security flaws are avoided.	The test case aims to verify system security, focusing on protecting user data and sensitive information. It exposes vulnerabilities like unauthorized access, SQL injection,
User registration	The goal is to ensure that clients may successfully register on the website.	Go to the registration page. Fill out the required registration information (name, email, and password). Select the registration option. Check to see whether a confirmation message appears. Examine the database to check that the new user's record has been created.	The registration is successful, and the user data is saved	This test case ensures customer registration on the website, ensuring successful account creation and booking, and covers user input validation, database record creation, and feedback.

Appointment scheduling	The goal is to ensure that personnel can book and manage appointments.	Log in using your staff/admin credentials. Use the appointment scheduling feature to get started. Make a new appointment for a client. Check that the appointment has been entered to the calendar. An current appointment can be edited and rescheduled. Check that the modifications have been reflected in the calendar.	Staff will be able to organise and manage appointments more efficiently.	This test case ensures staff can effectively schedule and manage appointments using the CRM, preventing staff inefficiency, missed appointments, and customer dissatisfaction.

7. Future upgrade plan to ensure the system is future-proofed.

As technology advances, it is critical for HairStudio to adapt and remain competitive in the salon business. The transformation of the old salon CRM and website into a Software as a Service (SaaS) solution is a big step towards future-proofing the organization. This transition will not only improve the system's functionality and scalability, but will also allow HairStudio to advertise and sell its SaaS solution to other salons, opening up new revenue streams.

Phase: 1

The first step in future proofing HairStudio is to upgrade the technological stack. The existing system, which was created with Laravel, PHP, and MySQL, needs be upgraded to a more scalable and cloud-native design. , as well as cloud databases like PostgreSQL or AWS Aurora. This upgrade will provide the system more flexibility and scalability, which is crucial for a SaaS solution.

Enabling the application to be deployed and scaled seamlessly across several cloud providers. Ensures system stability and performance by providing automated load balancing, fault tolerance, and optimal resource utilization.

Implement a multitenancy architecture to serve many salon branch customers on a single instance. Within the same system, each salon will have its own segregated database schema. This method protects and separates data while optimizing resource utilization.

Divide the large application into microservices. Appointment scheduling and billing are separated into various services. This strategy improves scalability by allowing each component to be developed and deployed independently.

To improve website speed, use caching methods and content delivery networks (CDNs). Cached material, such as photos and static assets, can be supplied over CDNs to minimize load times for website visitors.

Phase: 2

Integrate an email marketing system to allow salons to efficiently communicate with their clientele. For instance email service catalogues, discount services, and seasonal offers. Automated appointment reminders, promotional emails, and newsletters may all be part of this connection.

Implement powerful analytics and reporting services that provide salon owners vital information into the operation of their business. Client retention rates, revenue patterns, and staff productivity measures are examples of this.

Phase: 3

End-to-end data encryption should be used to secure sensitive information such as customer and payment information. Use industry-standard encryption technologies while adhering to data protection standards such as GDPR.

Conduct frequent security audits and penetration tests to discover vulnerabilities and ensure the security of HairStudio's SaaS product. Maintain current knowledge of security best practices and swiftly fix any detected vulnerabilities.

Phase: 4

Create a versatile licensing model for the SaaS product. Provide tier pricing based on the number of employees, features, or consumption levels. To entice new customers, provide a free trial period.

To make subscription administration and payment processing easier, integrate a secure billing and payment system. This should accept a variety of payment methods, such as credit cards and internet payment gateways.

Create an all-encompassing marketing campaign to sell HairStudio's SaaS service to potential salon clients. This can involve things like internet advertising, content marketing, and collaborations with industry influencers.

GitHub: https://github.com/anngithub1234/SalonHair.git