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Faculty of Engineering & Information Technology
Department of Computer Engineering

Software Graduation Project:



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Dedication

To the blink of our mothers' eyes, the toil of our fathers' hands, and the pride of our doctors, we dedicate this.

Acknowledgement

We give God praise for our accomplishments thus far. We would like to express our gratitude to Dr. Muhannad for his unwavering support and help.

Thank you to our brothers, families and friends who were the best help and support, and to everyone who supported us and had a good impact during our academic career.

Disclaimer

This report was written by Nada Abu Shanab and Noura Darwazeh at the Computer Engineering Department, Faculty of Engineering, and An-Najah National University. It has not been altered or corrected, other than editorial corrections, as a result of assessment and it may contain language as well as content errors. The views expressed in it together with any outcomes and recommendations are solely those of the students. An-Najah National University accepts no responsibility or liability for the consequences of this report being used for a purpose other than the purpose for which it was commissioned.

Abstract

When people talk about beauty centers and salons of various types and locations, it occurs to them to go to these salons to book a specific appointment for a specific service or buy a specific product from them, and they may not find a suitable appointment for reservation or a suitable product for purchase, and thus they have wasted their time and effort,

Likewise, they may find the products that suit them, but at unexpected prices, and this also wastes their time, and also do not forget the centers that they may like, but they do not know about them and do not know their location.

In this application, we seek to help people who want to book an appointment in a specific beauty center or buy products from a specific beauty center while avoiding the problems they face, and we also seek to help the owners of beauty centers who want people to know about them, and also often wish People communicate with the owners of the centers to inquire about something.

In this project, we tried to search for these problems and find suitable solutions for them. It is a mobile application that is available to everyone. Nowadays, all people have a smart phone and use applications.

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1 Introduction

1.1 Problem Statement

The idea of our project came to facilitate people's lives. For example, when people want to go to a specific beauty center and book a specific appointment inside the center, they may not find the appropriate appointment for them, so they will have wasted their time. Also, people may search for a specific product and when they find it in a specific beauty center, it turns out that its price is very expensive, so they feel embarrassed and waste their time. One of the problems that we have noticed is that people may search for a specific product that is available in a specific center, but they do not know the name and location of this center, so they cannot buy, and they cannot communicate with the owner of the center or know its exact location.

1.2 Objective

In the project, we provided solutions to these problems, so we made the experience of shopping and searching for beauty products and centers easy and enjoyable, and also booking an appointment in a specific beauty center is convenient. Through the application, the customer can know if the appointments he wants are available or not from within his home and without wasting time, and people can see the beauty products provided by each center and their prices without making an effort and going to the centers in vain, knowing the exact location of each center and the services it provides with all their prices, and we also helped the customer by communicating with the owner of the center while he was at home through chat, and the customer can search for a center A certain

through his name, and we provided the customer with a shopping cart through which he can collect the products he wants from a specific center, so he now has two options, either to go to the center after knowing its location in the Dabak and buy the product after knowing its price, or to order the products he chose and ship them to his home .

This project is a smartphone application and website that provides an option to people who want to book services or shop for beauty products. To register as a customer, whether for the owners of beauty centers in their capacity as the owner of a beauty center, where the owners of these centers can represent their centers and their products with details about them, which enables customers to view them and see their details and prices, and they can also request them in a simple way and view the offers if they are available and they can also communicate with the owners of centers through chat .

1.3 scope of the work

The scope of our project are customers who prefer to buy online and book appointments in beauty centers and owners of beauty centers.

To create the application, we used the Flutter programming language, and we used NodeJs to build and implement the backend using the API and the Mongo DB database.

This report explains our project and the work we have done over the past months.

2 Constraints and earlier work

2.1 Constraints

One of the challenges we faced was the limited time, as we had to work on the project with the pressure of exams and course projects. We also had to learn new programming skills and languages that we did not know before, and this required a long time that we spent on self-learning for new things, then we had to apply what we learned.

2.2 Standards/ Codes

We have used visual studio code to create our application and website, and we have chosen well-designed and eye-catching designs and colors, and our application is easy to use.

2.3 Earlier Work

In this project, we relied on the software and basics that we learned previously, and the web courses that we learned, and we went through a long stage of self-learning and learning new languages.

3 Literature review

The idea of having an application to meet the needs of the customer and the owners of the centers is very important today.

There are few applications that help the customer to buy online and book a specific appointment in beauty centers, but what is new in our project is adding a map so that the customer knows the exact location of the center. Also what is new in our project and what made it different from previous projects is the existence of a chat where the customer can communicate with the owner of the center to inquire about something through chat. As for the search, what distinguishes it for us is that if the customer forgets the exact name of the center, he can write a letter or two from the name of the center, and all centers that contain this letter will appear to him, making it easier for me to reach the center he wants and see its details.

4 Methodology

When we found these problems, we took help from the owners of beauty salons and two types of people, and they are people who go to beauty salons slightly, and the other section is the one who goes to them frequently, so we put forward solutions and asked them about what features they expect if we create an application that facilitates all parties.

4.1 Technical Preference

Of course, there are many different programming languages and development techniques as well, so we have chosen the most suitable one.

4.1.1 Framework

Flutter was used as a front-end programming language to design the user interface, which is an open source framework that is used to develop multi-platforms and also to design front-ends in a professional and fast way, compared to other methods for use in mobile, mobile and desktop applications.

4.1.2 Design

After determining the language in which we want to design the user interface, we need to define a specific idea of what these interfaces will look like, so we first choose the logo that will represent our application, and we used and chose pink colors and their derivatives to suit the nature of the application and for the convenience of the user. Finally, easy-to-use interfaces were designed on the user interface, and the language used in it is also easy for everyone to understand.

4.1.3 Back End

For our project backend we used Node js and built Client-Server Model
Since the client sees the GUI and deals through it, when he requests a specific request or presses a certain button, it is sent to the Back end until the result and the page he wants are shown to him. As for the Server, it is the one that receives

requests from the client by dealing with the API and shows the results to the client.

The data base that we used is the Mongo Atlas, where we stored the data and created the schemas.

4.2 Planning

First, we identified who is the target group for this application? What are the features offered by this application for people to use it? We have developed this application for the owners of beauty centers who want to display their services in order for people to book appointments in the centers and also to display their products. It is to facilitate the process of booking and purchasing products for customers and to alleviate crises in beauty centers through the reservation feature and to facilitate the display of their products through this application.

4.3 Development

In this part, we will discuss how we developed this application.

4.3.1 Common Things for All Users.

Application logo



Figure 1: logo

Boarding Screen

These screens appear to all users, whether they are customers or owners of beauty centers, to be introduced to the application.

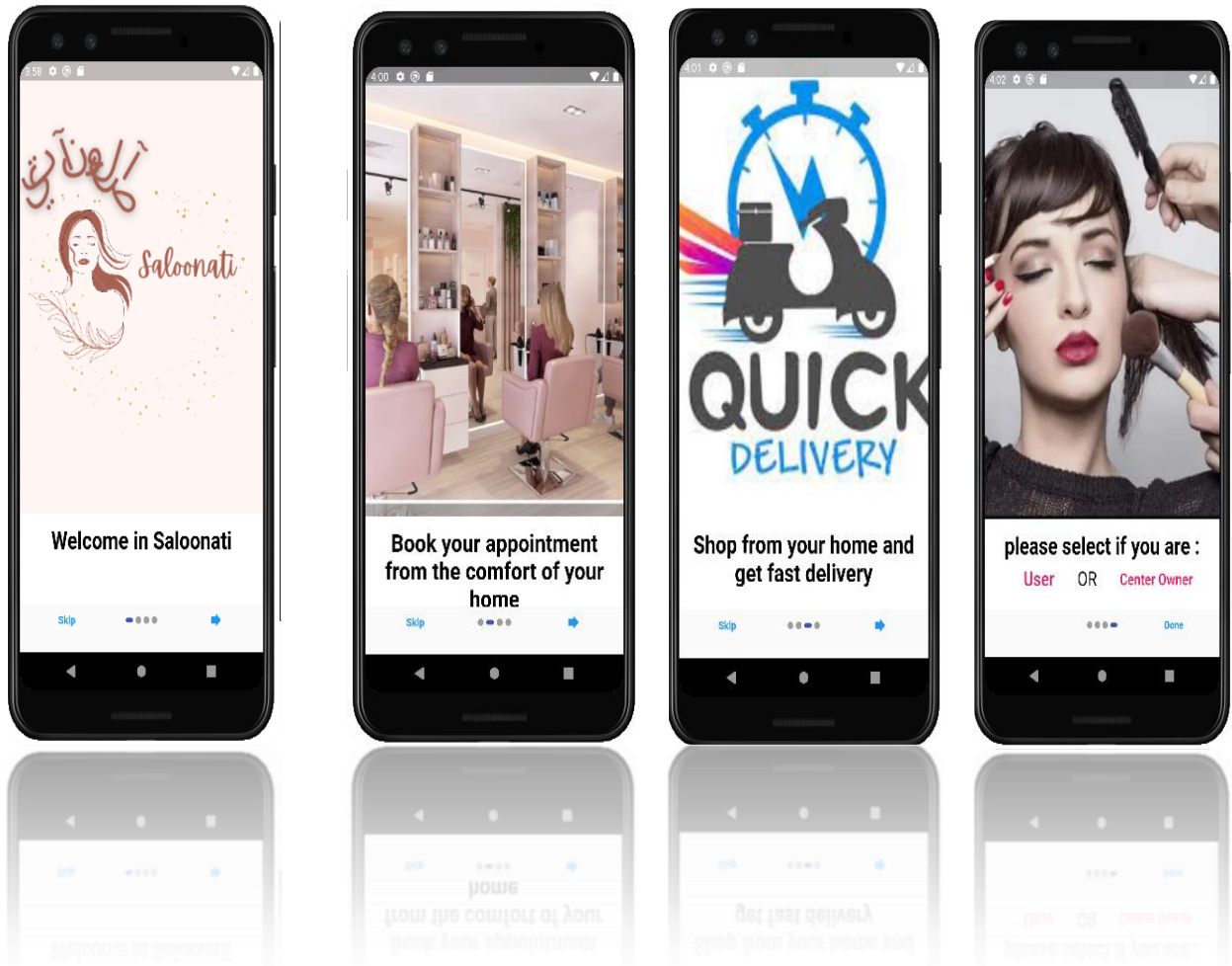


Figure 2: Boarding Screen

Signup for the customers and users

When the customer creates his own account after filling in his information, he will be entered into the main page of the application, which shows him different beauty centers from different cities, while when the salon owner creates an account, a white page will appear for him until the owner of the application enters his center for the application, so reservations, requests and messages begin to appear to the owner of the center.

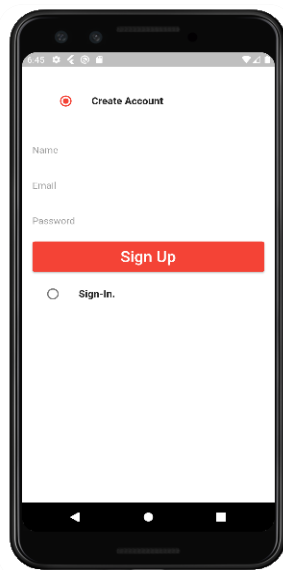


Figure 3:Signup

Login for the customers and users

When the customer logs in, the main page of the customers appears to him, which shows a group of centers from different regions, but when the owner of the center logs in, the main page of the owners of the centers appears, through which he can see the reservations that he receives, orders and messages.

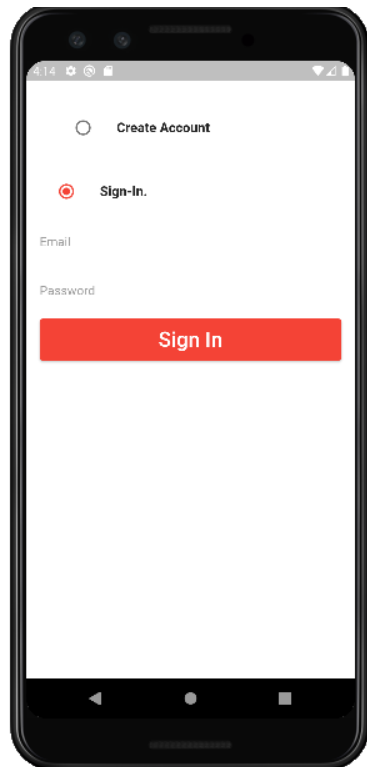


Figure 4: log in

4.3.2 Application Pages

In this part, we will display all the pages that must appear to the customer, the owner of the center, and the owner of the application.

4.3.2.1 Customer

The Main Page

We have tried to make our homepage well-designed and have different features and be easy to use for all users. Now we will show each feature what exactly it does.

Of course, our home page provides a dark mode according to the user's choice.

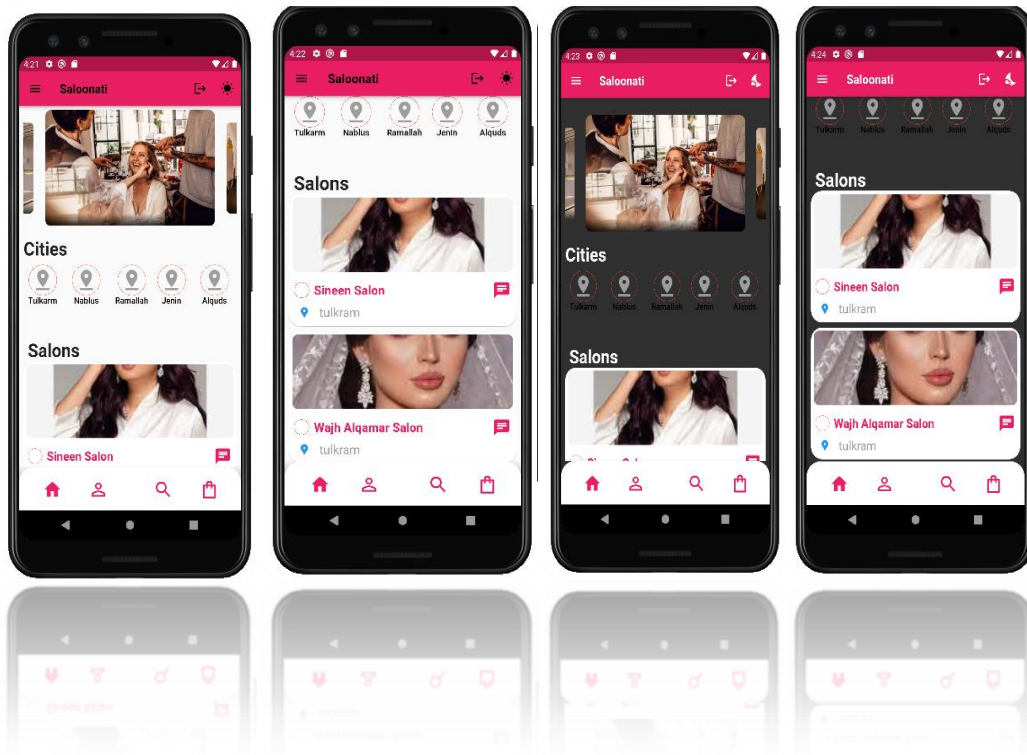


Figure 5: Main Page

Location:

The customer can choose the city he wants from the list, and when he chooses a specific city, all the beauty centers in this city will appear to him.

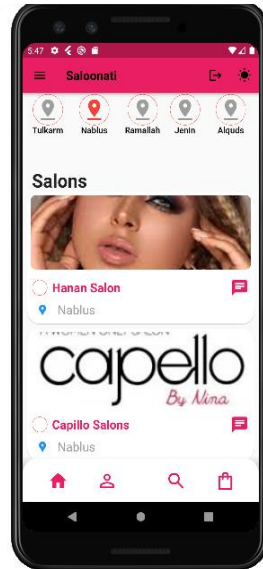


Figure 6: Location.

Search

When the customer wants to search for a specific beauty center, he searches through the name of this center when clicking on the search icon in main page, so the customer writes the name of the center to show him the center, or the customer may write only a specific letter or two letters, so all centers that contain this letter or letters appear to him.

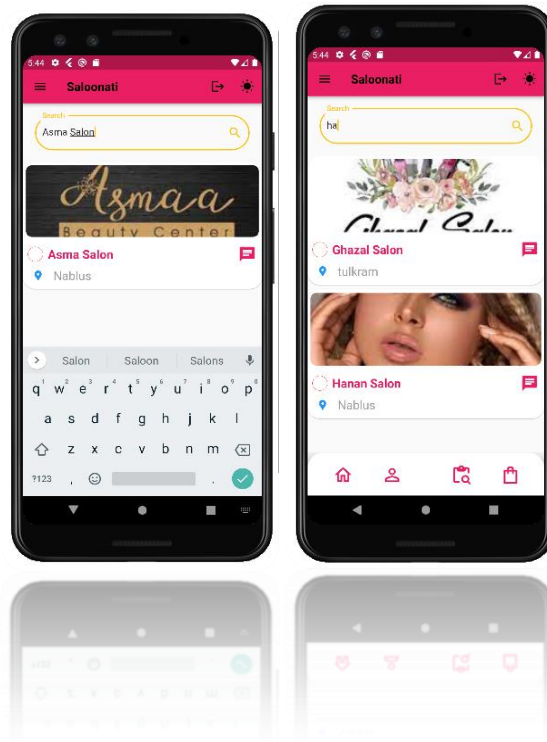


Figure 7: Search.

Drawer

This page appears to the user if he moves it with his finger or if he clicks on the icon. This page contains several options: orders requested by the user from the centers, a page if the user has a beauty center and wants to join our application, a page to contact us about us, Terms of Service and Privacy Policy.

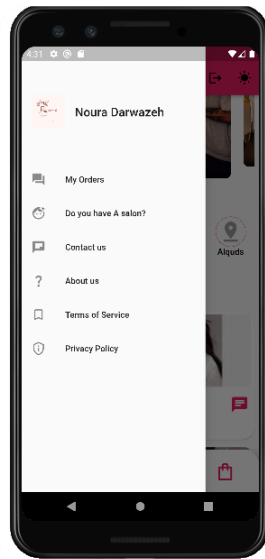


Figure 8: Drawer

Customer Orders

Here the user can see all the requests that he requested with through this application with from the various centers with the details of the request.

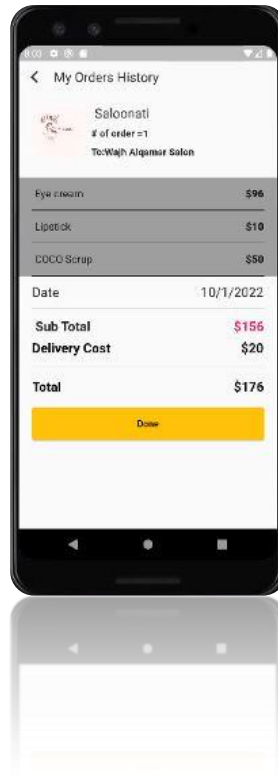


Figure 9: orders.

If customer have a center with notification

If the user have a beauty center and wants to join this application, he requests this through Do you have a salon in drawer and a notification will come that his request has been sent.

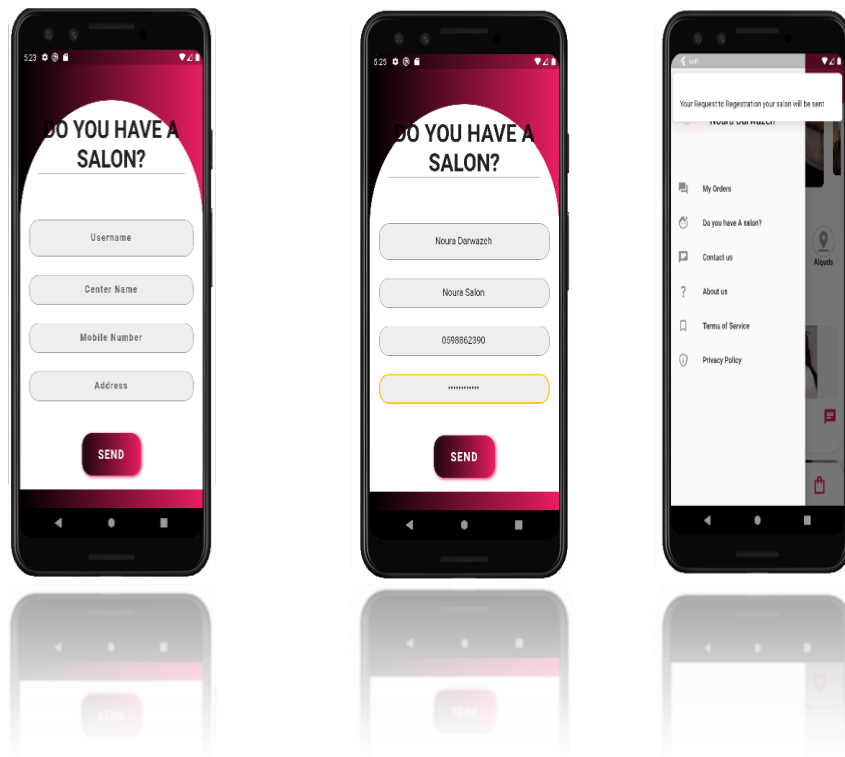


Figure 10: do you have a salon

If customer want to contact us

If the customer wants to send us a message or any remark or objection, he can through contact us in drawer and he will receive a notification when he sends the message.

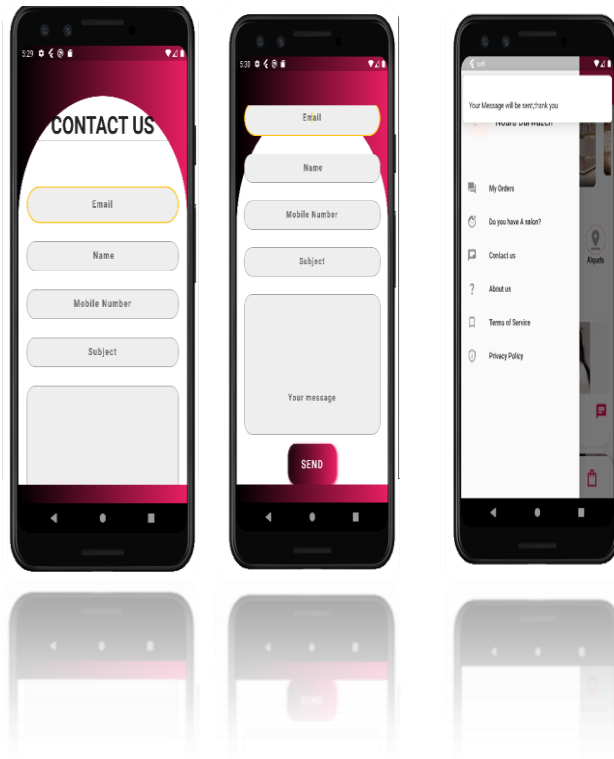


Figure 11: Contact us.

About us in drawer

A description of the application appears here so that the customer can identify it

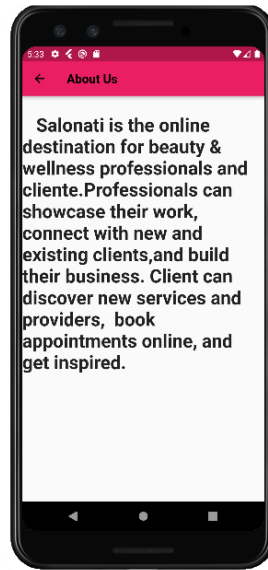


Figure 12: About Us.

Terms of Service in drawer

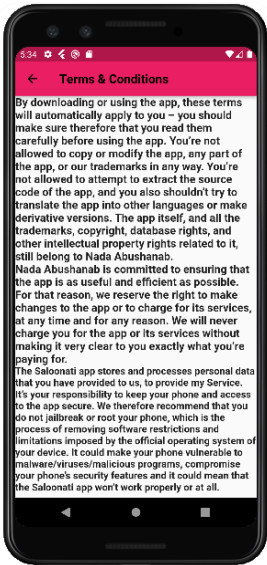


Figure 13: Service of Terms.

Privacy Policy

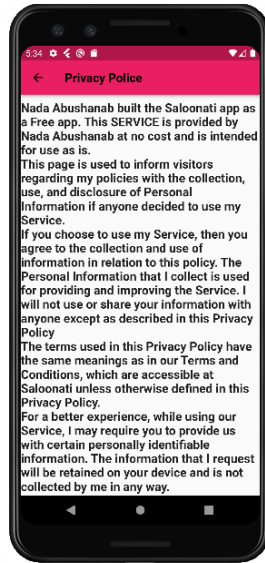


Figure 14: privacy policy.

Centers with chat:

On the home page, many different beauty centers from different cities appear, where when the user clicks on the chat icon located at a specific beauty center next to his name, he starts the conversation with him through the chat.

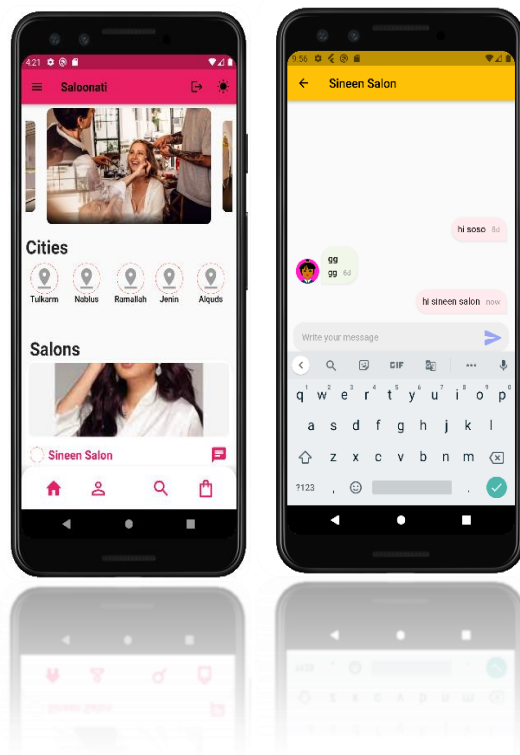


Figure 15: user chat.

Center's Profile

When the customer clicks on the name of the center, the main page of the center appears to him, which contains the center's information: the center's phone number when clicking on the phone icon, pictures of its work when clicking on the pictures icon, working hours, its location on Google Map, and offers if available at The center and the services provided by the center with their prices and a button for products. If the customer presses it, all the products provided by the center will appear to him, and there is another button that allows the customer to book an appointment inside the center.

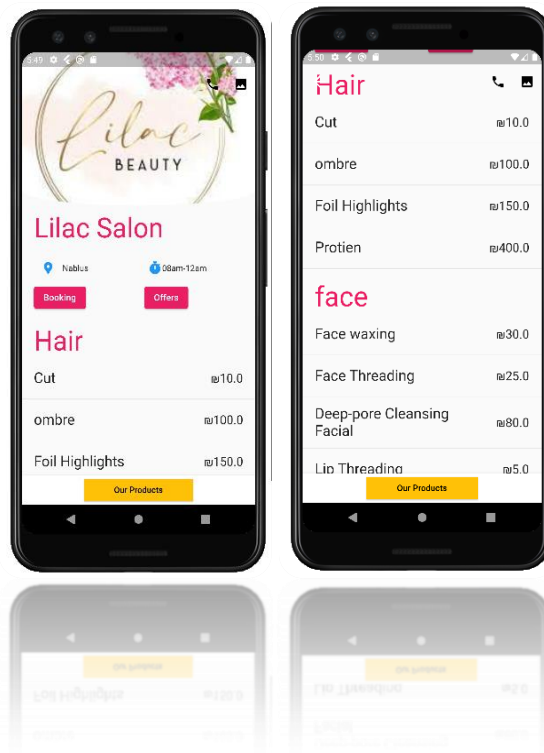


Figure 16: salon Page

Phone:

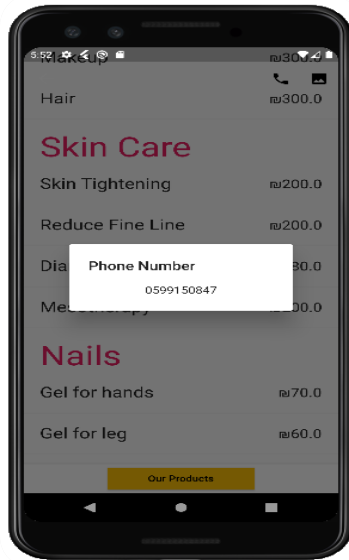


Figure 17: salon -phone.

Our Work:

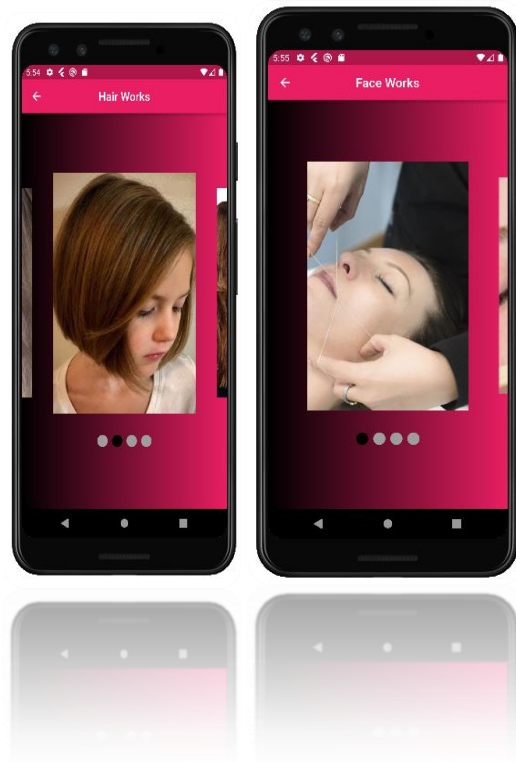


Figure 18: our work.

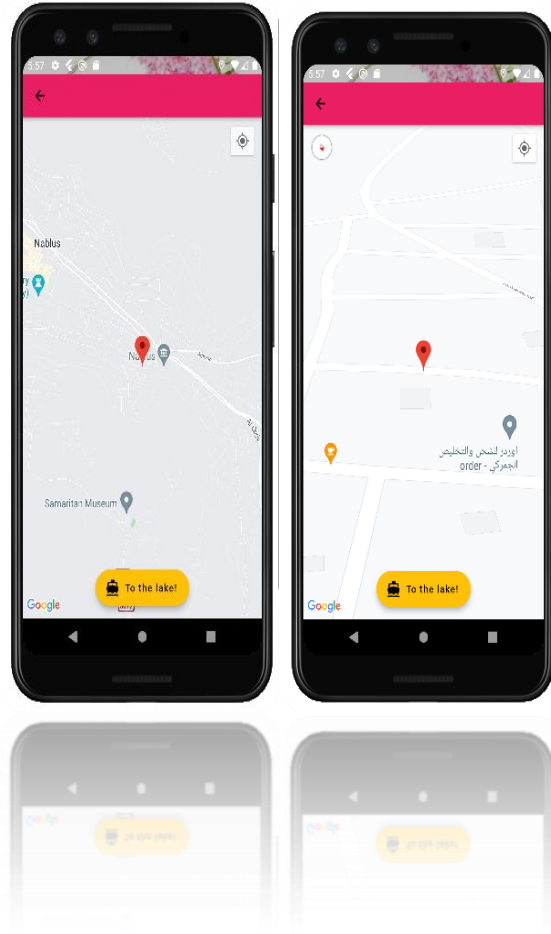


Figure 19: Salon location.

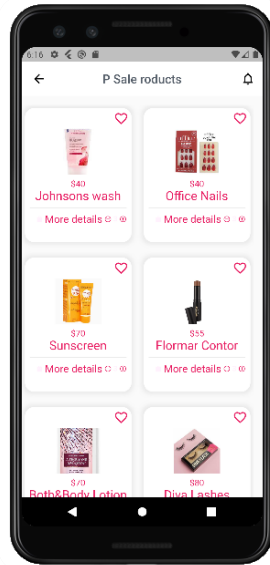


Figure 20: Salon offers.

Center's Product Page

When the customer clicks on our products button at the bottom of the center's home page, all the products offered by this center appear to him.

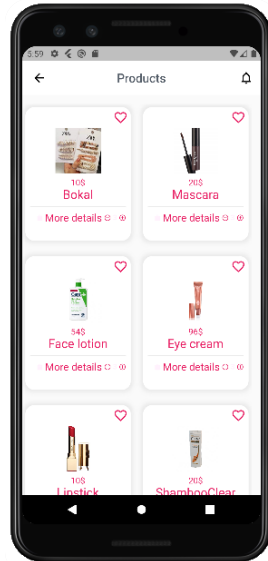


Figure 21: Salons products.

When the customer chooses a specific product, a page appears for him that contains product details: the image of the product, its price, and a description of it. There is a button called Add to Cart. When clicking on it, the product is added to the customer's shopping cart.

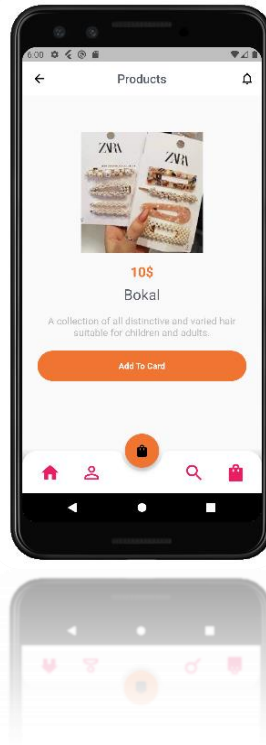


Figure 22: product details.

Each user has his own shopping cart. When he clicks on the Add to Cart button on the Product details page, the product is added to this cart, so this cart contains all the products that the user wants to buy, and he can delete a specific product from this cart by pressing the x button, and he can increase the quantity From the same product through the + sign, and he can also reduce the quantity of the same product through the - sign. There is a Check Out button to complete the purchase.

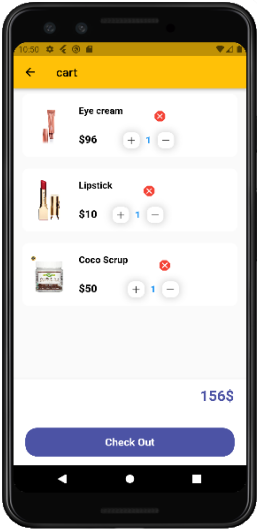


Figure 23: cart.

Check Out Page

This page appears when the customer finishes entering the products he wants to buy in the quantities he wants in his shopping cart and presses the Check Out button on the cart page to complete the purchase process, then he enters his full information and sends it, and a page appears telling him that the purchase has been completed.

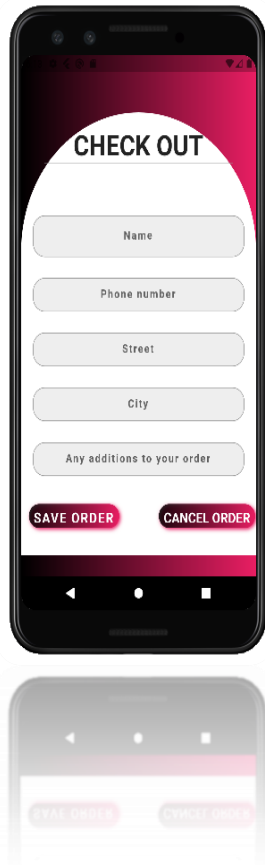


Figure 24: checkout page

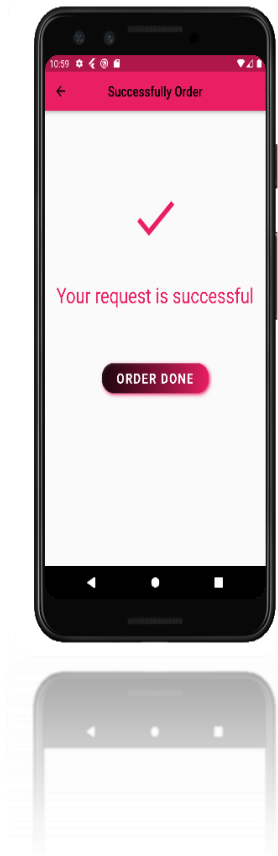


Figure 25: Successfully Order

Book an appointment at a specific beauty center

When the customer wants to book a specific appointment in a specific beauty center, he presses the reservation button on the main page of the center, and a page appears that contains a list of appointments, so the customer chooses the time he wants, then presses the confirmation button.

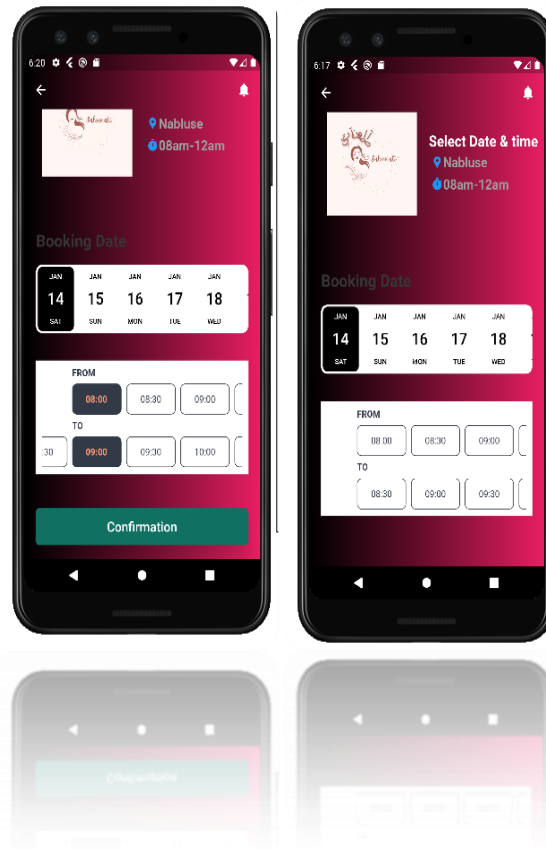


Figure 26: Booking page.

When the user clicks on the Confirmation button, a page appears for him, in which he must enter his information related to the reservation: his name, phone number, the service he wants, and the number of people. Then it will show him the message that the booking has been successful.

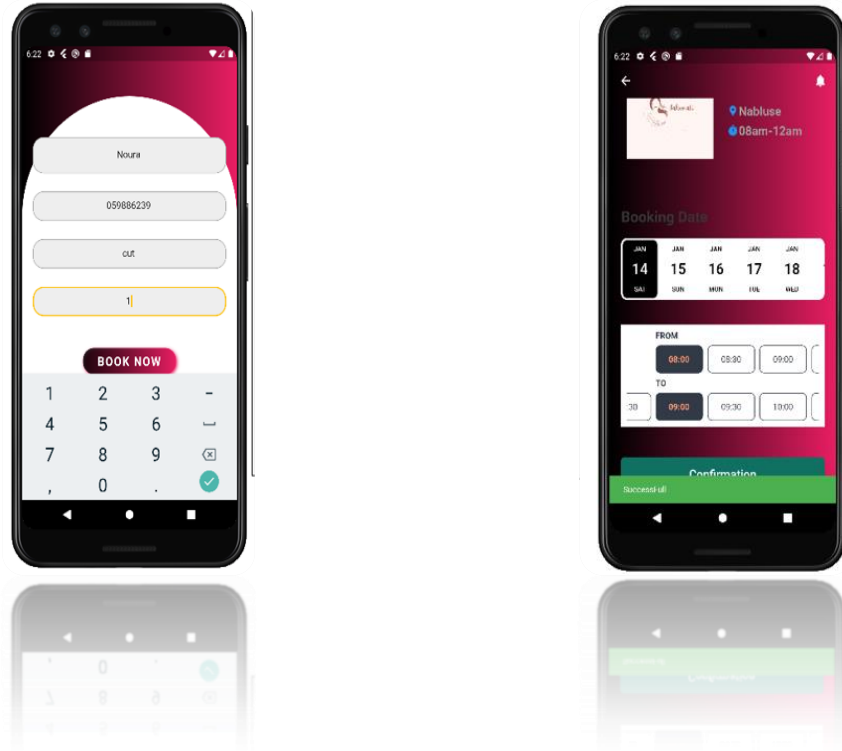


Figure 27: Booking Success.

But if the customer wants to book a specific date, and this date is reserved by another customer, the application will not allow him to book at this date, and a sentence will appear to him that the appointment is reserved.

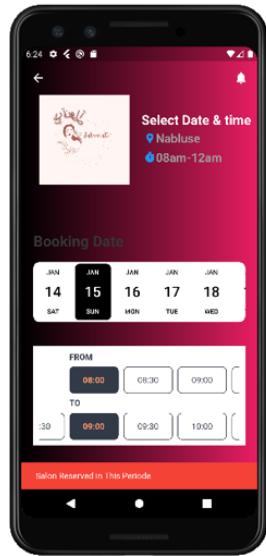


Figure 28: Booking failed.

4.3.2.2 Center Owner

Main Page

After the owner of the beauty center logs in, the home page of the owner of the center appears to him, which contains the reservations that customers have booked with details: the customer's name, date of reservation, time, type of service, etc.



Figure 29: List of booking

Also, when the owner of the center clicks on the chat icon that is next to his name, he starts his conversation with the customer.

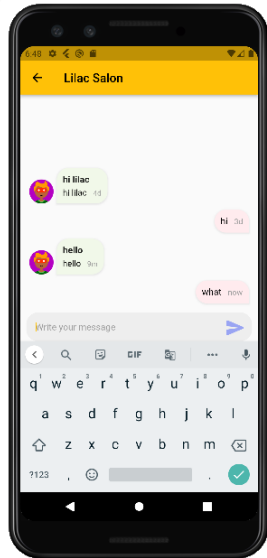


Figure 30: chat owner

And when he clicks on Button Orders, which is at the top of the home page, orders from customers appear to him.

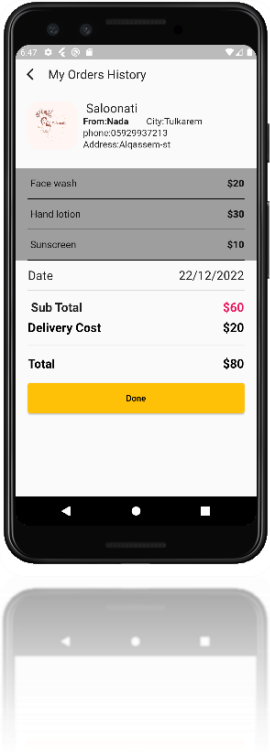


Figure 31: owner order

4.3.2.3 Admin

The owner of the application works through the website

Log in page

The username and password are entered for the admin to enter the admin pages.

localhost:3000/admin/login

home

login page

username
admin

password
.....

login

Activate Windows
Go to Settings to activate Windows.

Figure 32: Admin login

Main page

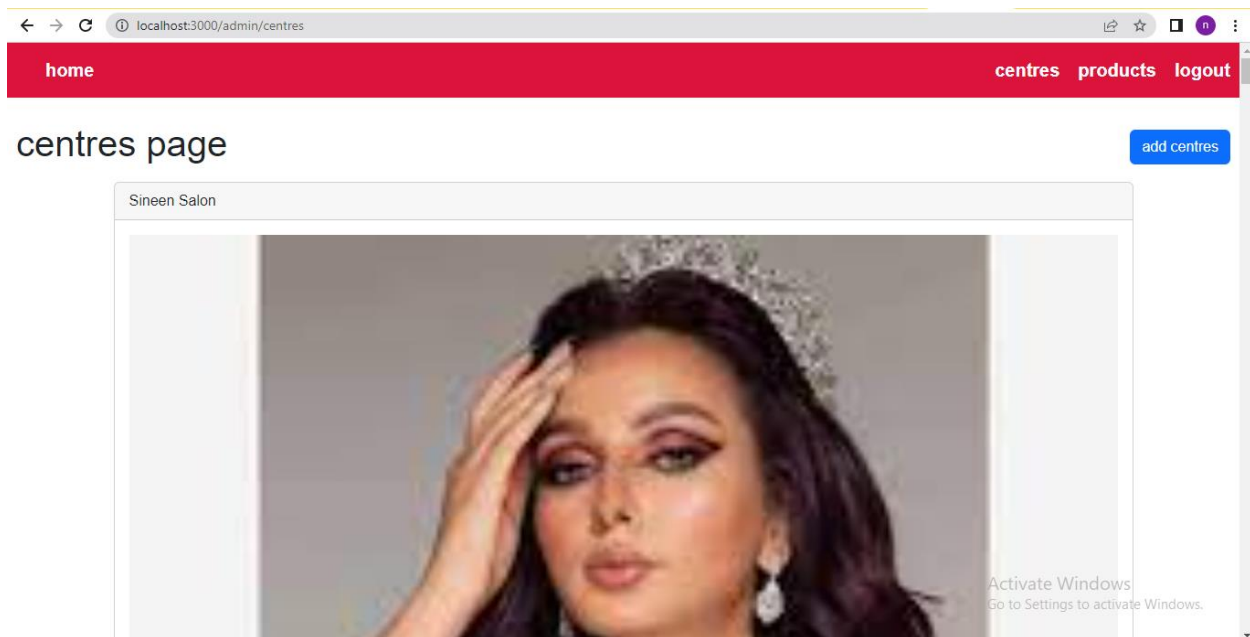
Through the main page, the admin can choose what he wants from the top bar. If he wants to look at the existing centers, he clicks on Centers. If he wants to look at the products, then he clicks on the products. If he wants to log out, he clicks on Logout.



Figure 33: Admin Home page

Centers

When admin click on the Centers button from the main page, a page appears that contains all the centers that have been added to the app and contains the center's image and name. There are also two buttons for each center, one to update the center information and the other to delete the center.



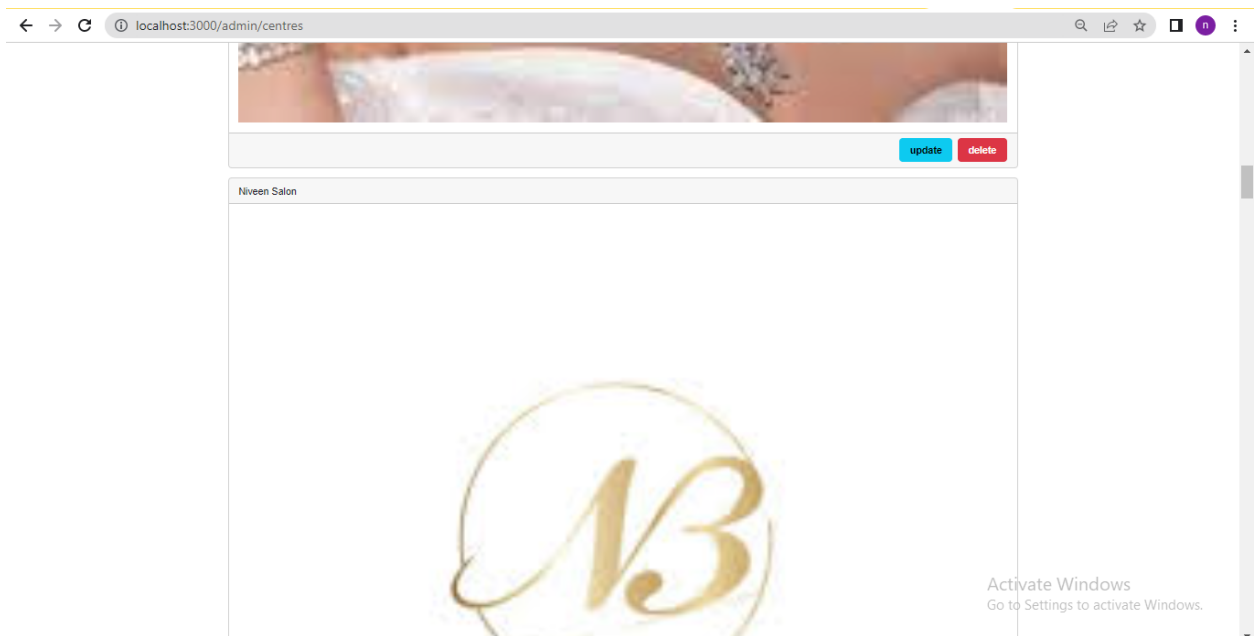
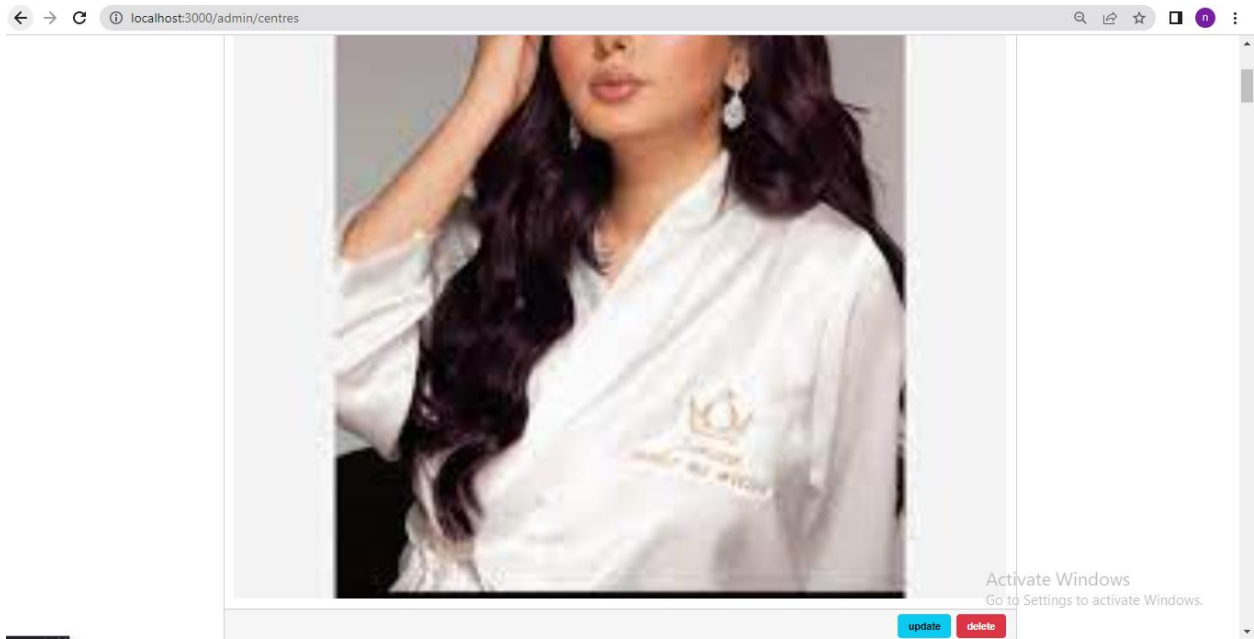
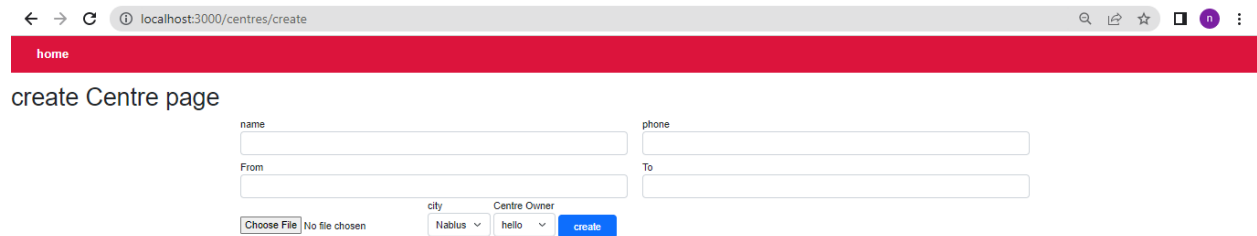


Figure 34: Admin Centers Page

Add Center to the app

When clicking on the add Center button, a page appears asking the admin to enter all the necessary information to add the center, namely: its name, working hours, phone, and the city in which it is located, and to attach the logo used for the center. Also, who is the owner of the center is determined, then the Create button is pressed.



The screenshot shows a web browser window with the address bar displaying 'localhost:3000/centres/create'. Below the address bar is a red navigation bar with the text 'home'. The main content area is titled 'create Centre page' and contains a form with the following fields and controls:

- name**: A text input field.
- phone**: A text input field.
- From**: A text input field.
- To**: A text input field.
- city**: A dropdown menu with 'Nabius' selected.
- Centre Owner**: A dropdown menu with 'hello' selected.
- Choose File**: A file selection button showing 'No file chosen'.
- create**: A blue button to submit the form.

Figure 35: Add Center

Activate Windows

Update Center

When you click on update from the page where the products are displayed, a page appears through which the admin can update on certain information from the center's information, which are: name, phone number, and working hours.

When you update and press the button, the page of the center is updated.

A screenshot of a web form titled "Update Center". The form contains three input fields: "name" with the value "Sineen Salon", "phone" with the value "787878", and "timesOfWork" with the value "10am-11am". Below the input fields is a blue "update" button. A vertical green bar is visible on the left side of the form area.

| | | | |
|---------------------------------------|--------------|-------|--------|
| name | Sineen Salon | phone | 787878 |
| timesOfWork | 10am-11am | | |
| <input type="button" value="update"/> | | | |

Figure 36: Update Center

Products:

When you click on products from the main page, a page appears that contains all the products that have been added to the site and their information: their name, description and price. There are also two buttons next to it, one for deletion and the other for updating the product information.

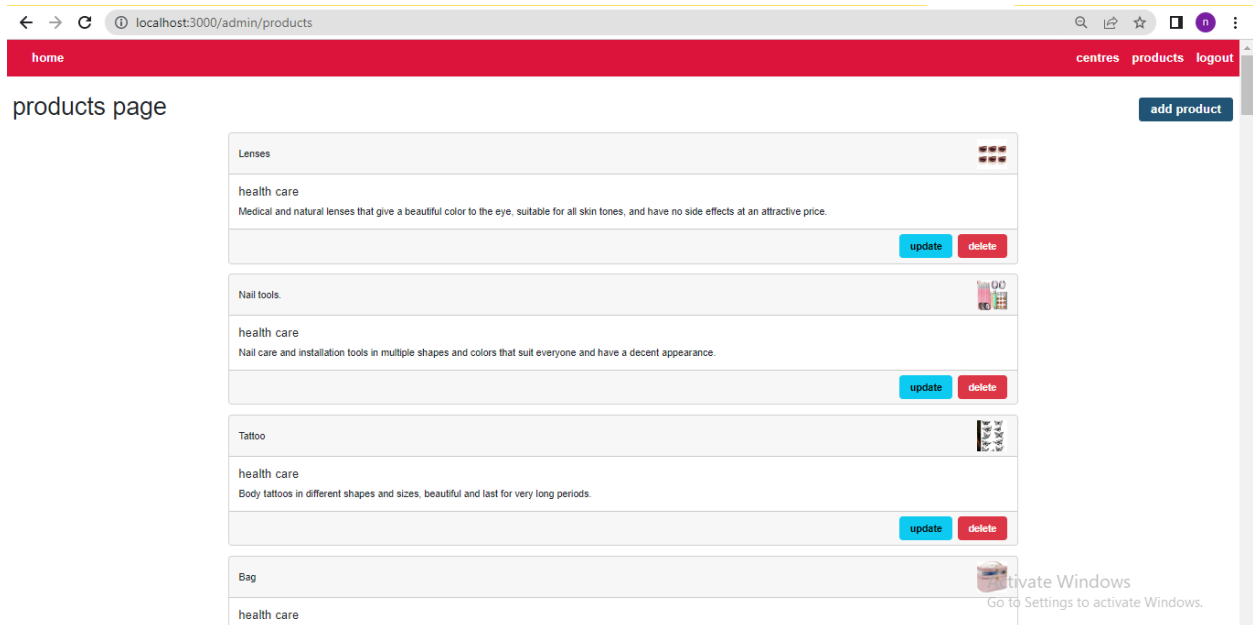


Figure 37: Admin product page

Update Product:

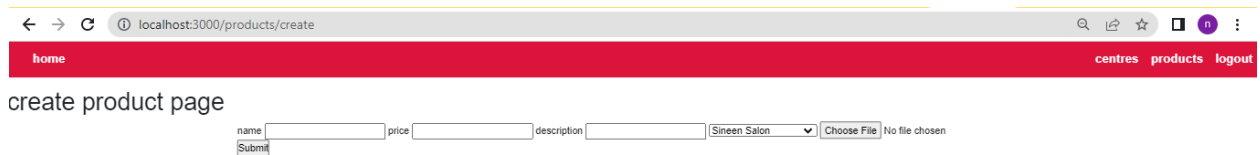
When you click "Update" from the page where the products are displayed, a page appears where the administrator can update certain product information, namely: its name, price and description. When you refresh and press the button, the product page is updates.

name price description

Figure 38: Update Product

Add Products

On the products page there is a button called Add Products. When you click on it, a page appears that contains information that must be filled in through the admin to add any product, which is the name of the product, its price, its description, and which beauty center of the centers that have been added to the site belongs. When clicking on the add button, it is added this product appears on the Products page.



The screenshot shows a web browser window with the address bar displaying 'localhost:3000/products/create'. The browser's navigation bar includes a red header with 'home' on the left and 'centres products logout' on the right. Below the header, the page title is 'create product page'. The form contains several input fields: 'name', 'price', and 'description'. To the right of the 'description' field is a dropdown menu currently showing 'Sineen Salon'. Further right is a file upload button labeled 'Choose File' with the text 'No file chosen' next to it. At the bottom left of the form is a 'Submit' button.

Figure 39: Add Product

Log out

The admin account is logged out by clicking on log out on the home page

5 Results and Discussions

We succeeded in developing a phone application and a website that meet all the needs of the target users of the application, whether people who want to book appointments and buy products or people who want to display their beauty centers in the application.

Customers can book appointments that suit them in beauty centers and see all available appointments without the need to suffer in crowding inside beauty centers, as he can know all available appointments. If the appointment he wants is not available, then when booking this appointment through the application, the application will show him that he cannot book because This appointment is reserved by another customer, and they can also see all the products and order them from inside their home and without the need to shop by adding the product they want to their shopping cart, and they can search for the center they want and if they are in another city and they want to go to a beauty center and they do not know What are there beauty centers, they only have to enter the application and choose the city in which they are located, and there are all the beauty centers with their own site map to make it easier for them to access them, and the customer can also if he has forgotten the name of the salon he wants, he can search for it by putting his name or even One letter from his name may suffice for him to reach the beauty center he wants. Also, the customer can communicate with the owners of beauty centers to inquire about anything he wants through chat.

The owners of the beauty centers can see the reservations in full details, which are: the name of the person who wants to book, and here it is not required that the person who made the reservation be the same as the owner of the account, the number of people who have a reservation if it is more than one person, the type of service they want to receive, the date and time of the reservation, and they can Talking to customers through chat, and it is not required that the time of

sending through chat be the working time in which the center is open. The customer can send to the chat and the owner of the center can respond to it at any time they want. The store can display its services and prices. The centers are available to all customers at any time they want with their services. And their reservations, and the owner of the beauty center can see all the requests that were requested from the center from the beginning of its establishment, and it contains all the details that are necessary for the owner of the center and the delivery company until the owner of the center sends the request to the customer successfully.

The admin can control the application in general after he logs in. If the customer owns a beauty center and wants to join the application so that people know his location and see his products and communicate with him, then he contacts the owner of the application to request that, so the owner of the application checks the conditions and if they are suitable for the nature of The application adds the beauty center to the application itself, with all its products, and if the owner of the beauty center located on the application previously wants to amend specific information related to his center, such as working hours and others, or to amend a specific product such as its price or description and other information, then he communicates with the owner of the application To modify it himself, and if the owner of a particular beauty center wants to withdraw from the application for some reason or to delete a product from his center, he communicates with the owner of the application to delete the center or delete the product.

The existence of applications that make it easier for people to access a specific thing has become a very important matter because the reality we live in imposes on all people of all ages to deal with mobile phones, so people prefer online shopping in order to save time and effort, and owners of centers, especially in unknown places, prefer these applications to advertise their places.

6 Conclusion and Future Work

We applied our application to solve a problem that was not sufficiently highlighted, although it is an important problem, which is that it made us shop for beauty products from the center that the customer prefers without effort and effort, and made him able to know if he is able to book the appointment he wants in the center he wants or not without effort while he is sitting in His home through the application and we made it easy for him to communicate with the owner of the center through chat.

The application can be developed by adding a delivery company that will be special for the owners of the application to facilitate the transfer of requests. It can also add home service for those who cannot come to beauty centers, and finally employ artificial intelligence by giving the customer beauty centers near his place, not only those who are inside the city in which he is located.

7 References

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