



Al-Najah National University Computer Engineering

Department of Computer Engineering

GRADUATION PROJECT I

BEAUTY CENTERS



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Abstract

Day by day, the development of life is increasing in various fields of life, and one of these areas is the field of programming and technology. Smart devices have become an integral part of our daily lives. Developing applications that facilitate our daily lives is crucial, especially considering how fast our lives have become. The project aims to facilitate the purchase of hair care and skin care products from more than one store, as the application brings together several stores and puts their products at the user's fingertips. The application provides a variety of distinct services to users and store owners, and on the user's side, the application shortens a lot of time for the user to visit more than one store and puts all the stores in front of him. It also shows him additional complementary options on the product he ordered. Also, after the user purchases the goods, the application issues a purchase invoice containing the products he purchased and the price of each product, which enables him later, in case of problems, to return and search for a specific invoice according to the date of its issue and match the incoming product with the product that was monitored in the invoice. The application provides the ability to chat between the store owner and the user. As for store owners, the application makes it easier for them to display their products and the possibility of competition among other stores. Also, the app sends a notification to the store owner if the quantity offered has expired or is about to expire. As well as conducting various statistics related to sales and others. There are not many applications similar to ours. However, there are apps similar to ours in some stores, but there is no app that brings more than one store together and provides chat and notification features. We developed and built this app using php and flutter.

Table of Contents

1	Introduction	1
1.1	Problem	1
1.2	Objectives	1
1.3	Scope	2
1.4	Importance	2
1.5	Report Organization	3
2	Constraints and Earlier work	4
2.1	Limitations	4
2.2	Previous work	4
3	Literature review	5
4	Methodology	6
4.1	Technical choices	6
4.2	Methods and techniques	7
4.2.1	Mobile pages	7
4.2.2	Center Side	24
4.2.3	Web pages	26
4.2.4	Admin pages :	28
4.2.5	Center pages:	34
5	Conclusion and Results	43
6	Future work	44
7	Acknowledgements	45

Chapter 1

Introduction

1.1 Problem

Difficulty accessing markets, especially in periods of epidemics, and the difficulty of ordering more than one order from more than one store, and some stores monopolizing the goods they have due to the lack of a competitor.

1.2 Objectives

The project aims to facilitate the purchase of hair care and skin care products from more than one store, as the application brings together several stores and puts their products at the user's fingertips. The application provides a variety of distinct services to users and store owners, and on the user's side, the application shortens a lot of time for the user to visit more than one store and puts all the stores in front of him. It also shows him additional complementary options on the product he ordered. Also, after the user purchases the goods, the application issues a purchase invoice containing the products he purchased and the price of each product.

1.3 Scope

This project deals with shop owners that are interested in hair and skin care products, etc., and also with people who are interested in purchasing such products. The application displays to the user more than one center and displays the products under its sections distributed to it, such as human products displayed under the skin section, the user can buy from more than one center with the same order, and when he clicks on the product, the application shows him similar products that he can benefit from, as well as chatting with the store owner and other things . The admin can add a center, and then the center can display his products on our application, he can add a product and modify it if he wants, and the application also gives him a notification if the number of pieces of a product he has is less or equal to 10, to renew the quantity before it runs out, and to show him graphs about his sales.

1.4 Importance

To shop owners and those interested in beauty products, any of them can display their products, And it is easier for the user, as we put in his hands the products of more than one center in one application, and we also show him products similar to what he wants to buy, and we make it easier for him to communicate with the store owner, and he can compare between stores and choose the most appropriate product for him in terms of price and so on. And competition increases between shop owners, and a store cannot monopolize a specific commodity for it at a certain price.

1.5 Report Organization

The next chapter will discuss the constraints that are faced through developing this app. In addition, it will highlight the courses needed to create this system. Chapter Literature review will talk about apps in the same field as ours, and the difference between them and ours. Chapter Methodology will describe the method that followed to complete this work also, the tools and technologies that is used to develop this app. Chapter nnnn will talk about the results that are achieved from this project and it will give sufficient details to justify the conclusion. The final chapter will discuss the conclusion and the recommendation.

Chapter 2

Constraints and Earlier work

2.1 Limitations

With only four months left in the semester, other coursework that requires more work in addition to this assignment must be prioritized. Furthermore, we didn't enroll in any flutter courses, which caused us to squander time at the start of the course.

learning about them. Limited resources: flutter's documentation only covers the foundation, necessitating additional study to accomplish our goals. Additionally, understanding JSX, Android Studio, and other libraries is crucial. Additionally, adopting MySQL and Firebase necessitates investigation and effort on our part.

2.2 Previous work

We learned many key concepts and principles from the computer engineering department's courses, including web programming, algorithms, complexity, and object-oriented programming, which have assisted us in creating this application. Additionally, we have completed online courses on Firebase and Flutter. Assist in the creation and implementation of our project.

Chapter 3

Literature review

There is no similar to our application found before it, there are a lot of ideas for the idea, but for one center, and there is no application that combines more than one center together in an application

Of the running applications:

1. Lana Line The application displays all the products made by Lana, such as hair, body, makeup, etc., and provides sending a message to the center and why chat.
2. Nagham Pro idea is very similar to the Lana Line application, but for a different brand and a different center.

Chapter 4

Methodology

4.1 Technical choices

- **Flutter**

Google developed the open-source UI software development kit known as Flutter. From a single codebase, it is used to create cross-platform applications for Android, iOS, Linux, macOS, Windows, Google Fuchsia,[4] and the web. enables the creation and usage of a single database across several platforms, including web, desktop, and mobile. As a result, applications launch more quickly and affordably.

We chose Flutter because it has less needs, a nicer design, and more functionalities.

- **Php**

PHP is an open to all, server-side programming language that may be used to develop a variety of things, including websites, programs, CRM systems, and more. It is a generally accepted language that can be included in HTML.

- **MySQL database** The most widely used open source database management system ever created is this one. Oracle distributes and supports it. The MySQL database is quick, dependable, scal-

able, and simple to use. it was first Compared to current methods, it was created to handle massive databases significantly more quickly. For many years, they have been utilized successfully in demanding industrial conditions. Despite being constantly improved, MySQL Server currently provides a wide range of useful functions. That's all there is to it MySQL Server is a great choice for accessing databases online due to its connectivity, speed, and security. It was thus our primary database.

- **Firestore** It is a platform for creating mobile and web apps that is powered by Google (Backend-a-Service), and it aids developers in creating more engaging app experiences. Using an excellent collection of tools, Firestore manages its own infrastructure while streamlining the workflow of developers by giving them access to web dashboards and development kits. The interconnectedness, scalability, and integration with 3rd party software of these toolkits enable them to address complex problems using common building components. Because it is a real-time database, the developer can create the application much more quickly without a back-end server or a SQL database. As a result, we use it to store notifications and chat messages. Internet. It was thus our primary database.

4.2 Methods and techniques

4.2.1 Mobile pages

1. **OnBoarding :** Like many other apps, ours begins with onboarding pages that guide users through the process of using it in an automatic way and give them a general notion of what it is all about as shown below :

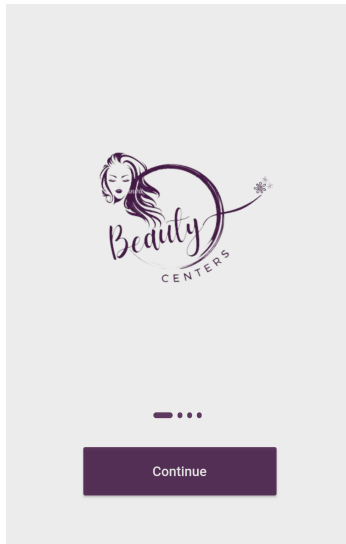


Figure 4.1: OnBoarding one

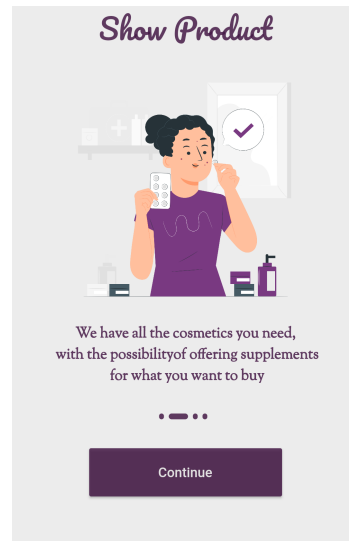


Figure 4.2: OnBoarding Two

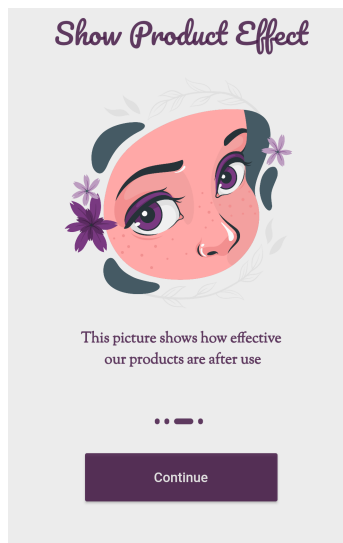


Figure 4.3: OnBoarding Three

- 2. Sign In:** An account must be created for the user in order to log in. If he doesn't, he can visit the registration page and open an account. By providing his email and password, a user can log in. The program will not permit the user to log in and will display a warning message as shown below if the information is incorrect or any of the required fields is left empty.

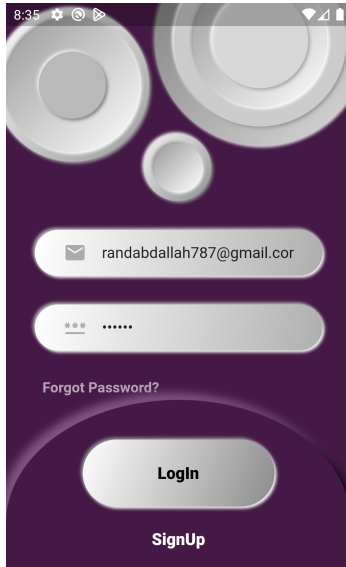


Figure 4.4: SignIn

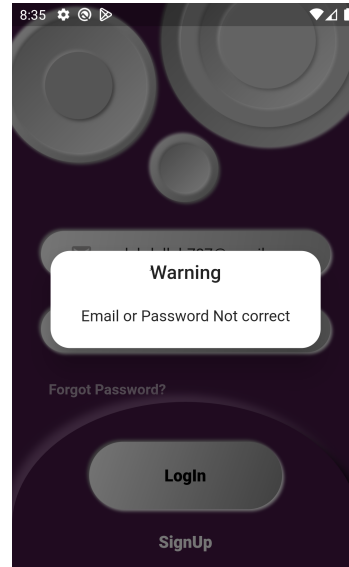


Figure 4.5: In-valid SignIn

- 3. Sign up:** If the user does not have an account, he can create a new one, but he is required to enter a valid email so that the application can send him a message and verify his existence, after that all his data will be entered in the MySQL Database as shown below:

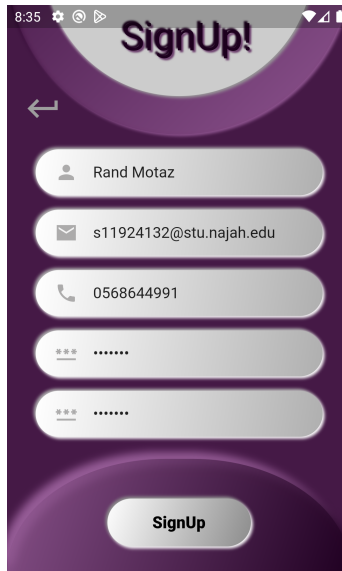


Figure 4.6: Signup

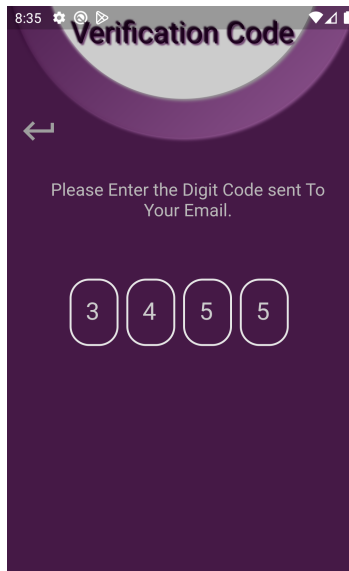


Figure 4.7: Page To write verify code

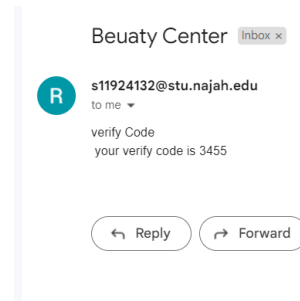


Figure 4.8: Verify Code which sen o email

4. **Forget Password:** People who have forgotten their password can reset it by inputting a code that was sent to their registered email address to prove their identity. By limiting the ability to

reset the password to the authentic account owner, this technique adds an added layer of security. This type of email verification for identity validation is routinely used when resetting passwords as shown below:

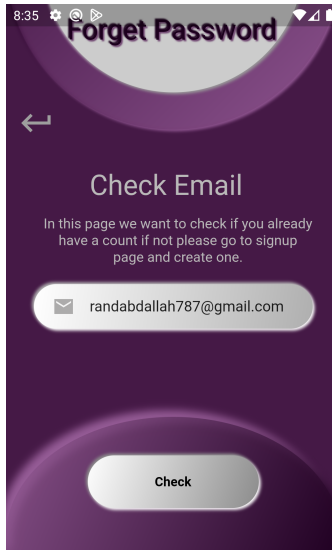


Figure 4.9: Email to send verify Code

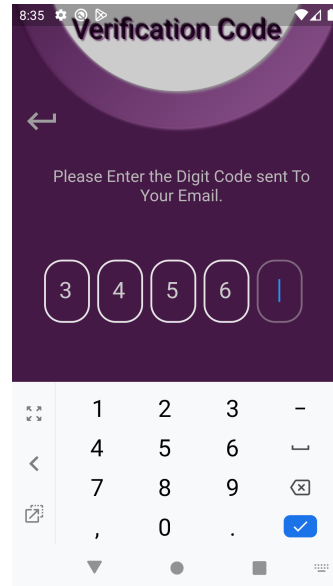


Figure 4.10: write verify code

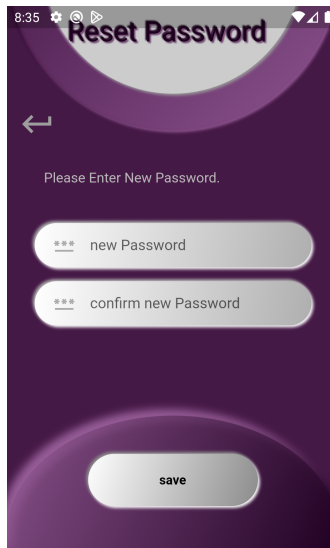


Figure 4.11: Reset new Password

5. **Center View:** After logging in, the user will see a validity containing all the centers attached to the application along with their locations,so user can enter any center he wants as shown below:

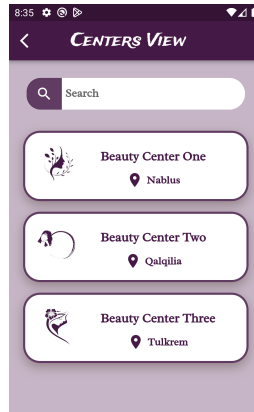


Figure 4.12: Center View

Also inside this page, the user can do a search for a specific product, which will show him a list in the center that contains this product, arranged in ascending order according to the price of this product. Also, inside the list there is the name of the product with its category as shown below:

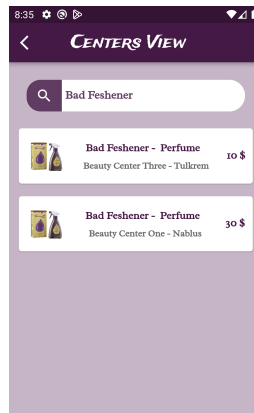


Figure 4.13: Search inside all centers

6. **Home Page:** After the user selects the center, it will show him a health page that contains all the sections inside this center. It will also show him the products on which there are offers, in addition to the best-selling products inside it as shown below:

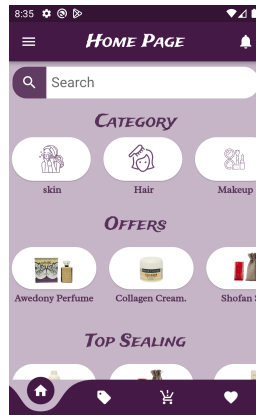


Figure 4.14: HomePage

Also inside this page, the user can do a search By entering part of the product name, which will show him a list of product with product name and its category as shown below:

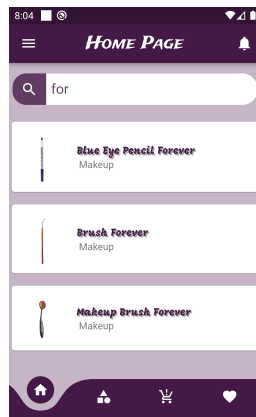


Figure 4.15: Search inside center

7. **Item Page:** On this page, all sections will be displayed, the user can click on any of them, and the products belonging to this section will be displayed with the picture, name and price of this product and its price after the discount if there is a discount on it, in addition to the possibility of adding this product to the favorites after that this will appear The product is in the list of products added to the favourites as shown below:

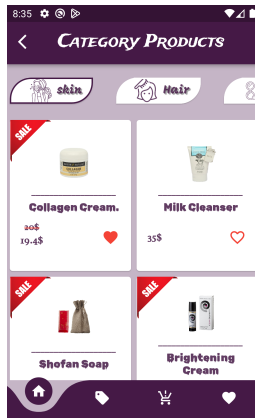


Figure 4.16: Item Page



Figure 4.17: Favourites Item

8. **Item Description:** When the user clicks on a specific product, that product will be shown to him with its name, image, and price after the discount, if there is a discount, and its description, in addition to that he will suggest products for purchase based on previous purchases, whether they belong to that user or to other

users inside that center from Then the user can add that product to the basket or return to check the products as shown below:

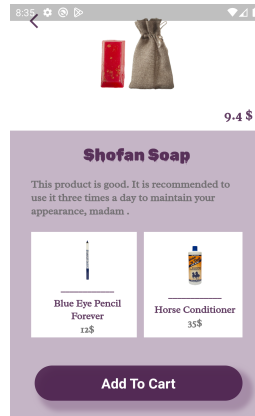


Figure 4.18: item Description

9. **Cart Page:** After adding the product user to the basket and entering its health, it will show him the total number of products added to the basket, in addition to the list of products added to it..... The user can increase or decrease the required quantity of a specific product. He can also add a discount coupon if the coupon is valid (Its validity date has not expired or the number specified for using that coupon has not expired) as shown below:

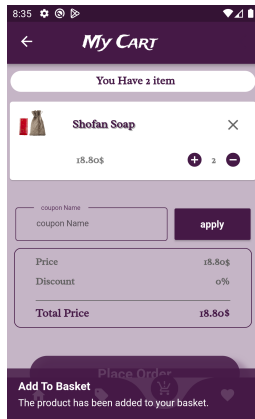


Figure 4.19: Add Item

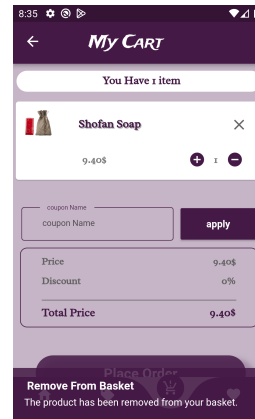


Figure 4.20: Remove Item

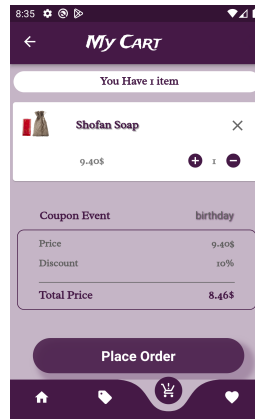


Figure 4.21: Apply Coupon

1

10. **Place Order:** Here, the user will complete the purchase process by specifying the payment method (cash or card) and the method of delivery (receipt by hand or delivery to the lesson that he previously added) as shown below:

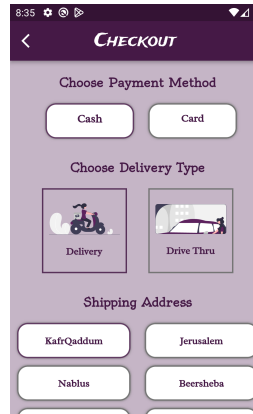


Figure 4.22: Place Order

11. **Add Address:** Within this application, the user can locate its private places by specifying its location on the map, and then the system will automatically determine the specified city and street,

and when you press the add button, it will be added to the list of delivery addresses for this user.as shown below:



Figure 4.23: Marker to mark the location on the map

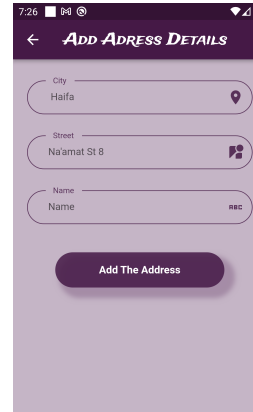


Figure 4.24: Address Information

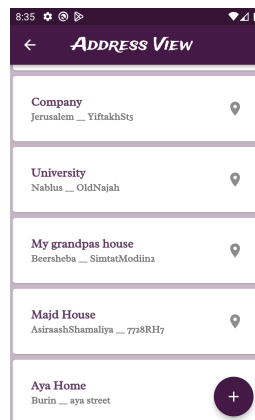


Figure 4.25: Address View

12. **Pendding Order:** All orders that the user has not yet received will appear here, as the order number will appear inside his card. There is the price of the products, the delivery price, the status of the order, and the method of delivery. The user can also delete the order unless he receives the first notification that the order is being prepared as shown below:

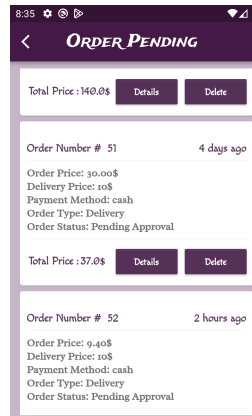


Figure 4.26: pendding Order

13. **Order Deails:** After clicking on the details button on the previous page, the invoice for that order will appear, including the products that were ordered, their number and price, the total price with delivery, and the discount coupon used if the user used it.

Also, the place of delivery that the user chose to deliver his order will appear as shown below:.

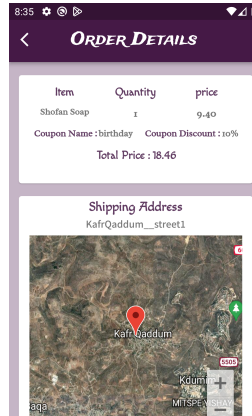


Figure 4.27: Order Details

14. **Archive Order:** Same to pending orders But the difference is that the user has received the request and is now able to rating it as shown below:

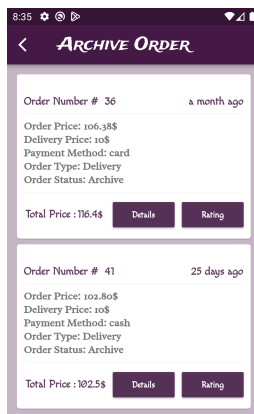


Figure 4.28: Archive Order

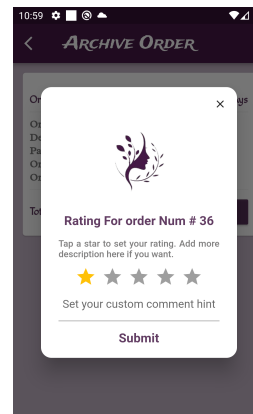


Figure 4.29: Rating Order

15. **Offers Page:** Here, the products that have a discount will appear, as the product will appear with its price before the discount, its

price after the discount, and the amount of the discount as shown below:

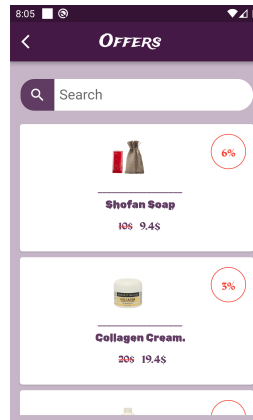


Figure 4.30: offer

16. **Profile Page:** The user's data will appear from his name, personal photo, mobile number, and the date he joined the application as shown below:

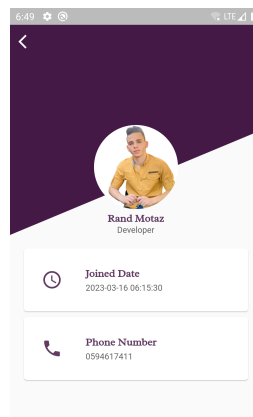


Figure 4.31: User Profile

17. **Contact us:** If the user wants the user to communicate quickly

with the center, he can do so by going to the menu and choosing the option to contact us, after that the system will add the number of the center so that the user has the option to make a call or send a sms message as shown below:

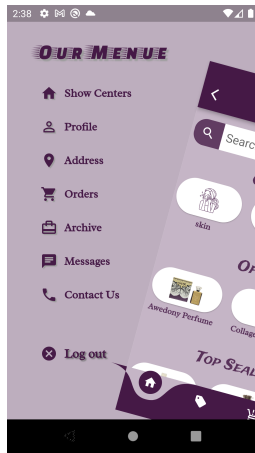


Figure 4.32: The Menu

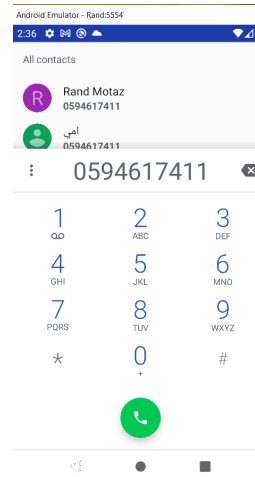


Figure 4.33: Number To Call

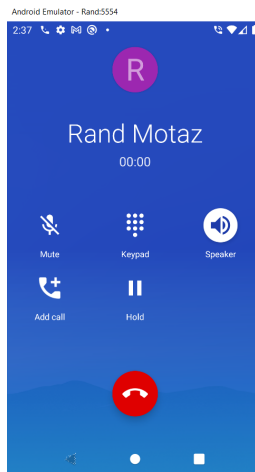


Figure 4.34: Calling

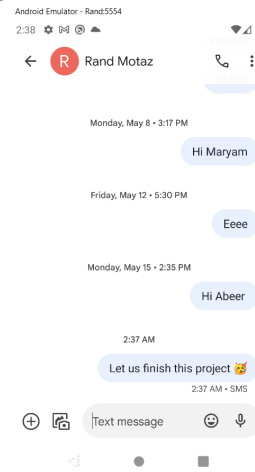


Figure 4.35: Send SMS Message

18. **Notification:** The application will send a notification according to the status of the request (The Order is being Prepared, Ready To Picked up by Delivery man, On The Way, Archive), so that if the user is on the pending requests page, the status of the request will change automatically. It is also possible to receive notifications if the application is closed as shown below:

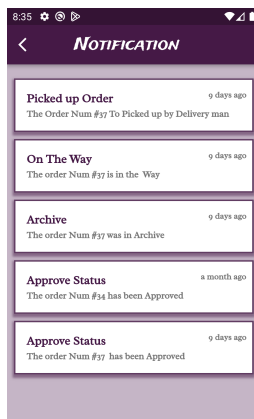


Figure 4.36: Notification View

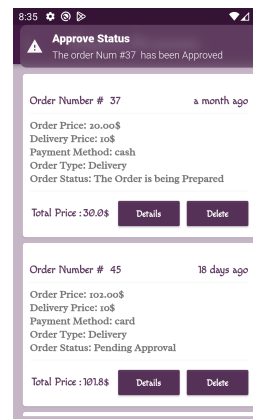


Figure 4.37: Notification when app open

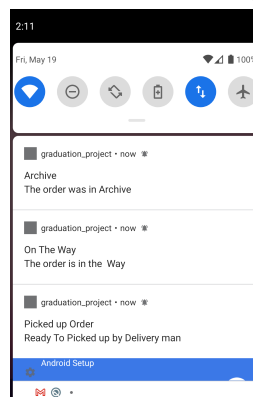


Figure 4.38: Notification when app close

19. **Chat:** The user can send free messages by going to the menu and choosing the chat button, after which he will be transferred to his

chat page and the center located inside it as shown below:

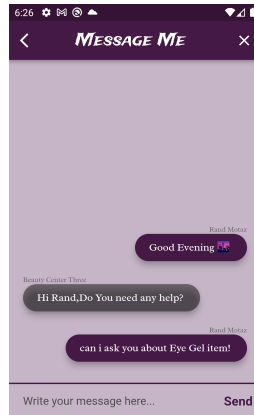


Figure 4.39: Chat from Client Side

4.2.2 Center Side

1. **signIn** : The center added to the application can access the application through its email and password as shown below:

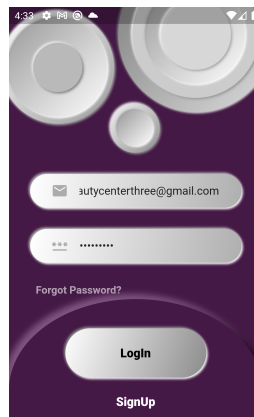


Figure 4.40: SignIn

2. **center Home** : After the success of logging in, he will enter his

page that contains his logo, where he can go to the health of the product, products, or chat as shown below:

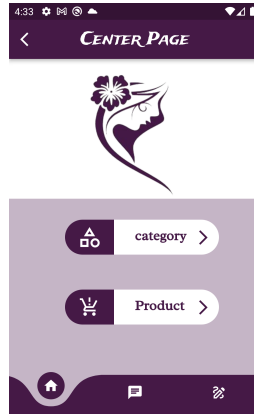


Figure 4.41: Center Home

3. **Chat :** After clicking on the conversation button, the center will move to a page that contains a list of users with whom it had previous conversations. It can also perform a search on a specific user, as shown below:

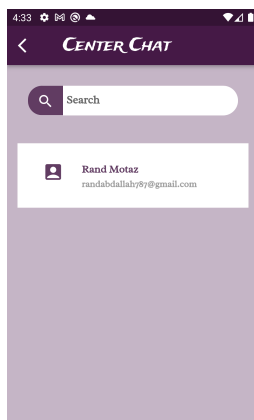


Figure 4.42: Chat Home

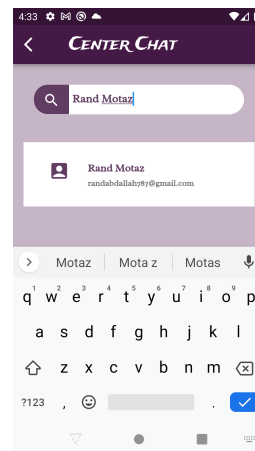


Figure 4.43: Chat Search

After clicking on the name of the user, the center will move to its own chat, and with that user, it will be able to respond to its inquiry,as shown bellow:

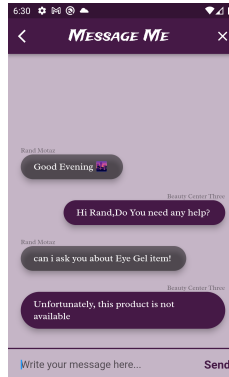


Figure 4.44: Center Chat

4.2.3 Web pages

1. **Log In** : An account must be created for the center and the administrator must approve it to log in. If he does not do so, he can visit the sign-up page, put in his full information, and send a registration request to the supervisor. If the supervisor does not approve the request, the center will not be able to create an account for him. If you are already an account holder, you can log in with your correct email and password. Also, the admin logs into his account through this page. The program will not allow the user to log in and will display a warning message as shown below if the information is incorrect or first leave any of the required fields blank.

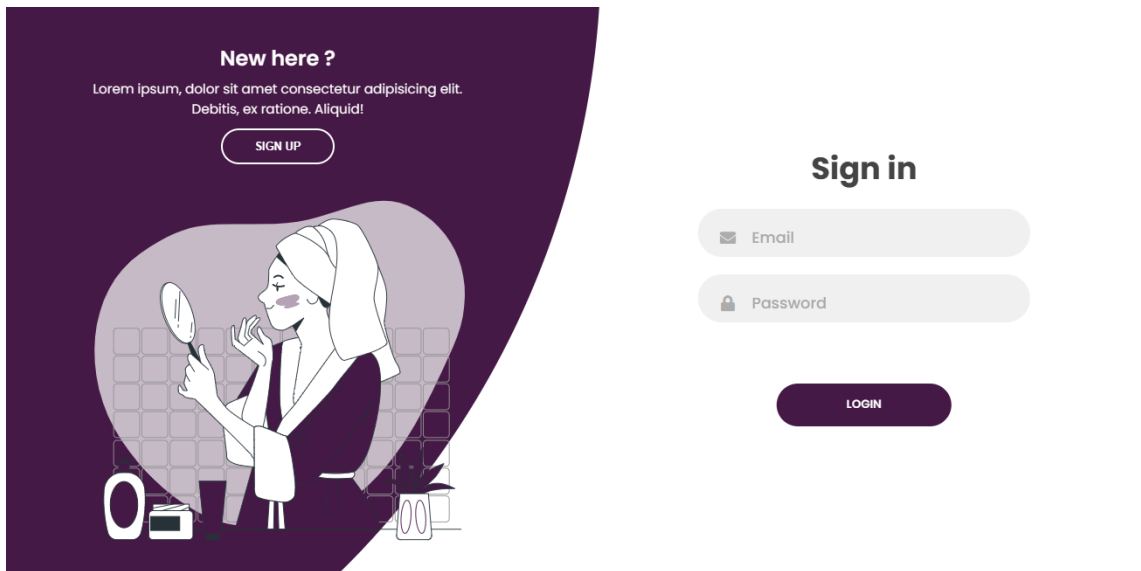


Figure 4.45: Log In

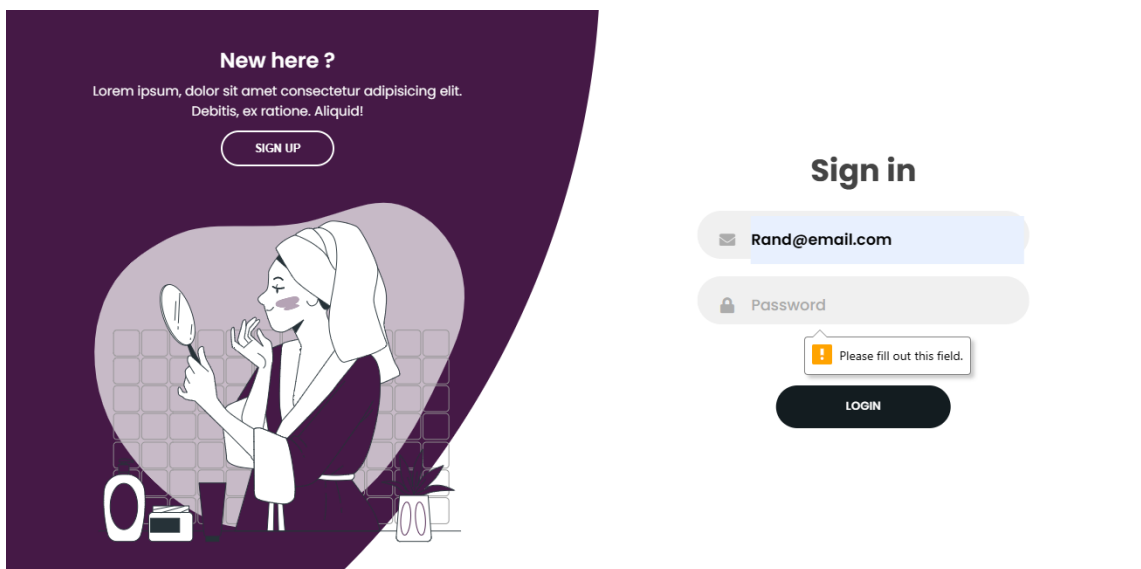


Figure 4.46: Log In

2. **Sign up** : If the user does not have an account, he can apply to create an account New, but a valid email is required in order to do so The administrator can send him a message when his request

is accepted. When he clicks the register button, the information goes to the administrator so he can decline or approve the request.

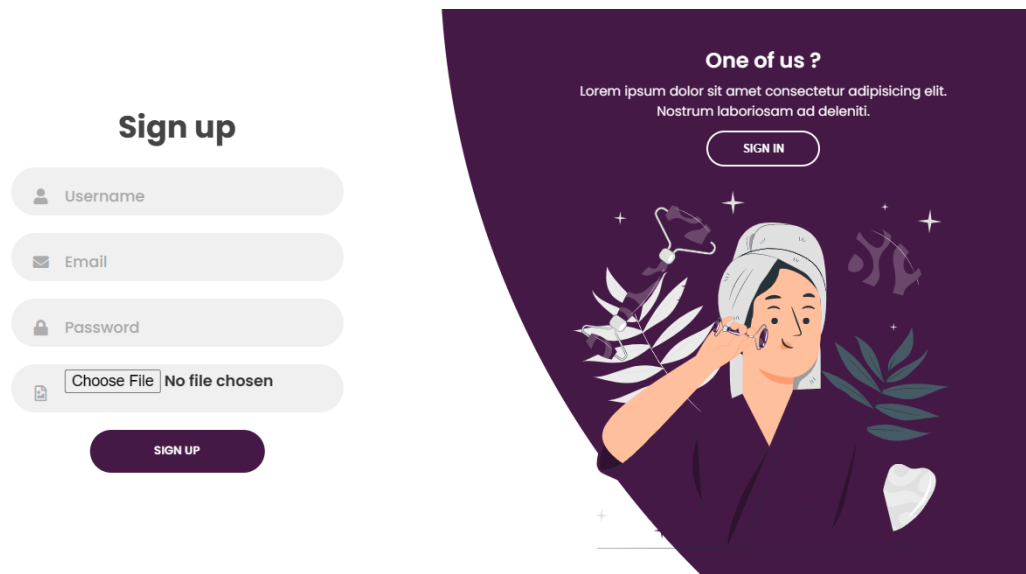


Figure 4.47: Sign In

4.2.4 Admin pages :

1. **Home page:** Through this page, the admin can see all the centers participating in his application and he has the authority to delete one of the centers if he wants.

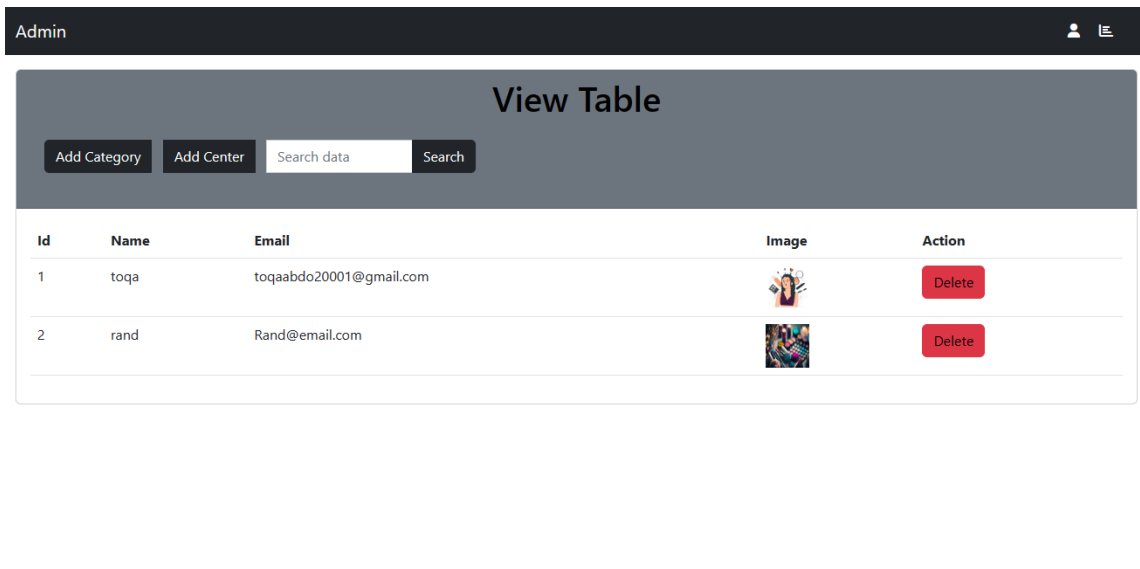


Figure 4.48: Home page

2. **Add category button:** When you click on it, this page will appear through which the admin can add a new category

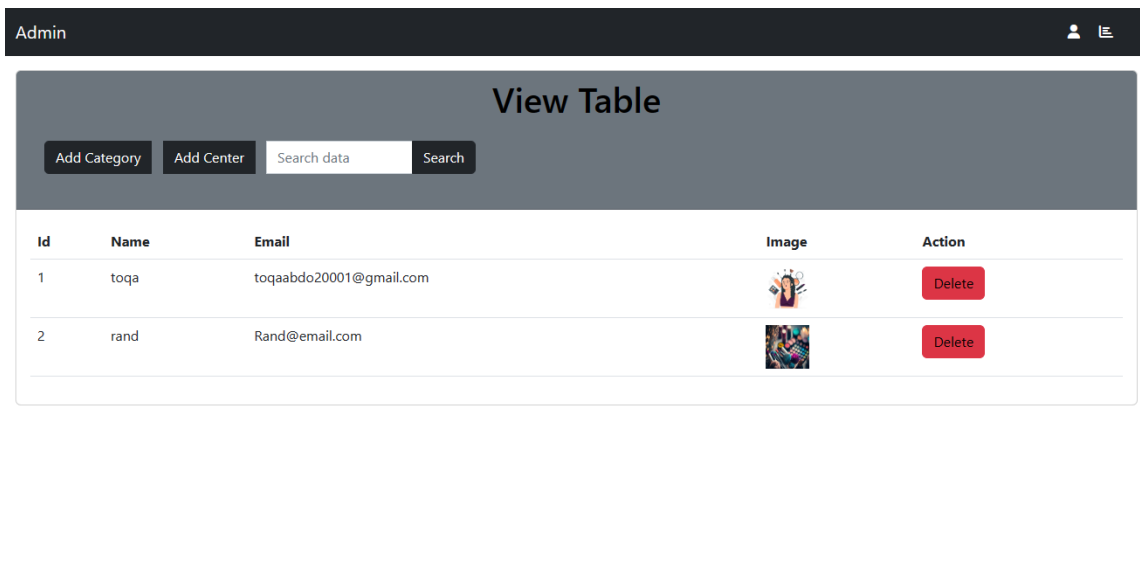
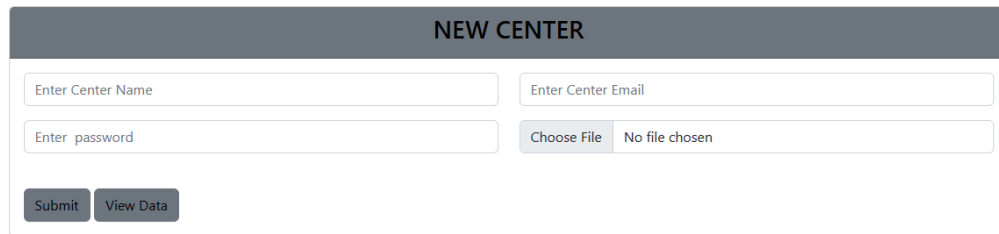


Figure 4.49: Add category button

3. **Add center button:** The admin can add a new center if he wants by pressing this button and registering the information through the page that appears.



The image shows a web form titled "NEW CENTER". It contains four input fields: "Enter Center Name", "Enter Center Email", "Enter password", and a file upload field with a "Choose File" button and "No file chosen" text. At the bottom, there are two buttons: "Submit" and "View Data".

Figure 4.50: Add center button

4. Search button:

To make it easier for the admin to search for a specific center by putting the name of the center or a section of its name.

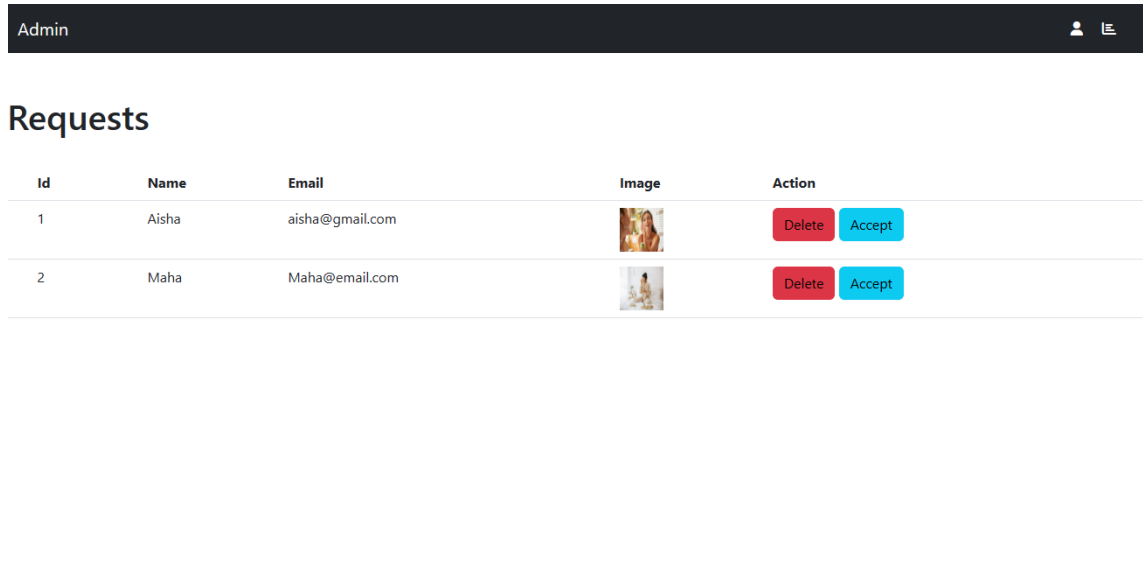
View Table

Add Center Search

Id	Name	Email	Image	Action
1	toqa	toqaabdo20001@gmail.com		Delete

Figure 4.51: Search button

5. **Requests page:** On this page, all requests that you want to have a center account on our application are shown. Admin has two options: Either delete the request, or accept it, and upon acceptance, it sends an email to the person that your joining request has been approved.





Id	Name	Email	Image	Action
1	Aisha	aisha@gmail.com		Delete Accept
2	Maha	Maha@email.com		Delete Accept

Figure 4.52: Requests page

6. **Charts page:** On this page, it displays the number of new requests (in the last month), the number of centerers we have, the number of registered users in the application, as well as the number of categories for each user. Then, in the bar chart, it displays the number of total sales for each center, and from it we can compare between the centers in terms of which center sells more products.

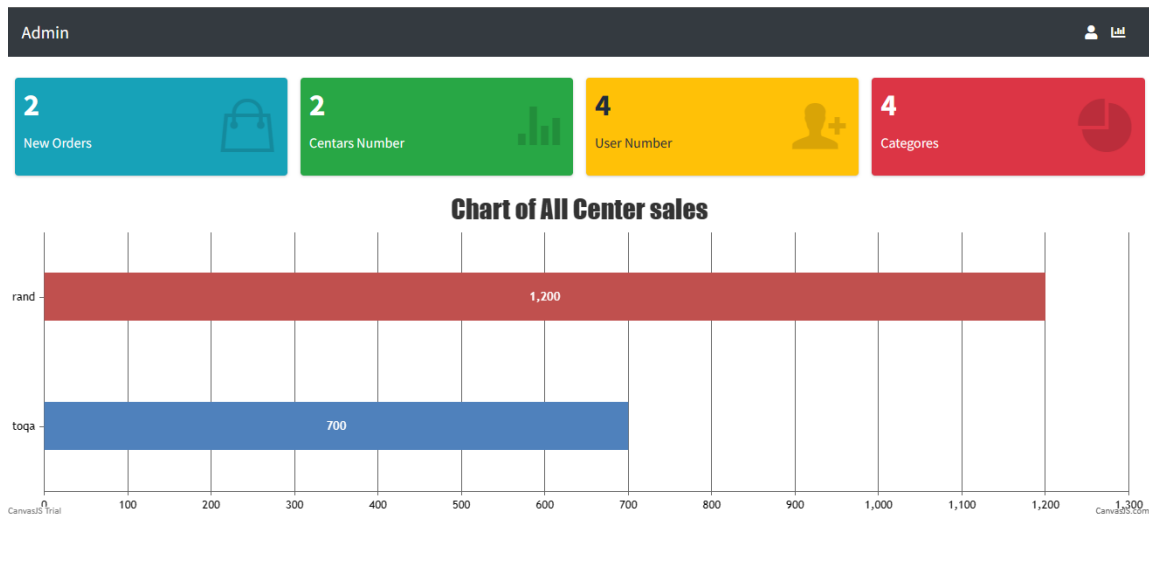
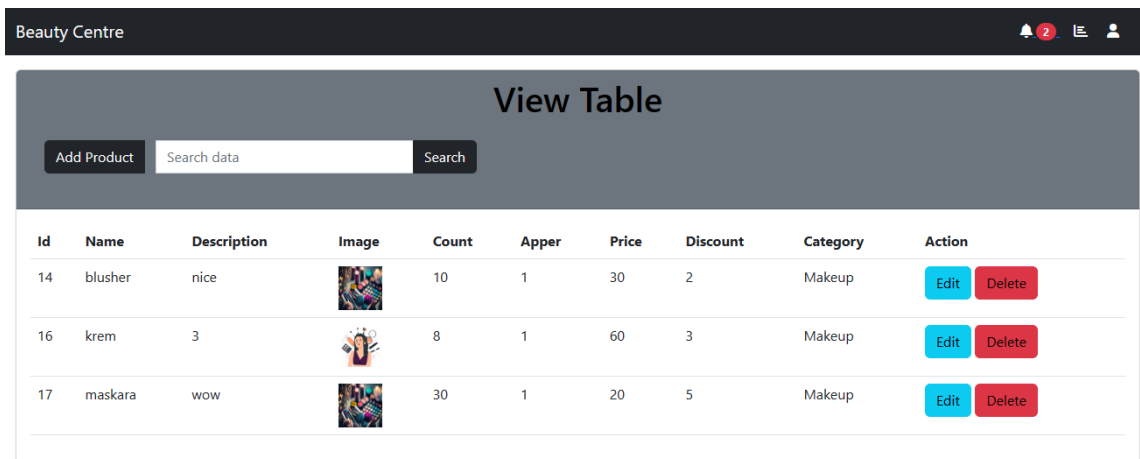


Figure 4.53: Charts page

4.2.5 Center pages:

1. **Center Home page:** After the admin approves the request to join, and upon logging in to your account, this interface appears to you through which you can add new products, delete them, modify them, and search for any of them through the buttons on the page, and also the page shows you all the products offered in your store with their information






Id	Name	Description	Image	Count	Apper	Price	Discount	Category	Action
14	blusher	nice		10	1	30	2	Makeup	Edit Delete
16	krem	3		8	1	60	3	Makeup	Edit Delete
17	maskara	wow		30	1	20	5	Makeup	Edit Delete

Figure 4.54: Center Home page

2. Add product button:

NEW Products

<input type="text" value="Enter Product Name"/>	<input type="text" value="Enter Product description"/>
<input type="text" value="Enter count"/>	<input type="text" value="Enter price"/>
<input type="text" value="Enter discount"/>	<input type="text" value="Select the category"/>
<input type="button" value="Choose File"/> <input type="text" value="No file chosen"/>	
<input type="button" value="Submit"/>	<input type="button" value="View Data"/>

Figure 4.55: Add product button

3. Edit button:

The form contains the following elements:

- Input field with value: 14
- Input field with value: blusher
- Input field with value: nice
- Input field with value: 10
- Input field with value: 30
- Input field with value: 2
- Dropdown menu with value: Select the category
- File upload area with text: Choose File No file chosen
- Image placeholder showing a colorful abstract pattern.
- Buttons: Update, View Data

Figure 4.56: Edit button

4. Search button:

View Table

Add ProductSearch


Id	Name	Description	Image	Count	Apper	Price	Discount	Category	Action
14	blusher	nice		10	1	30	2	1	Edit Delete

Figure 4.57: Search button

5. Notification:

When the bell button shows the number of new notifications, the application sends a notification to the center if one of the offered products is about to run out and gives it information about the product and the remaining quantity, and this notification will not go away unless the product is deleted or the quantity is renewed in addition to it.

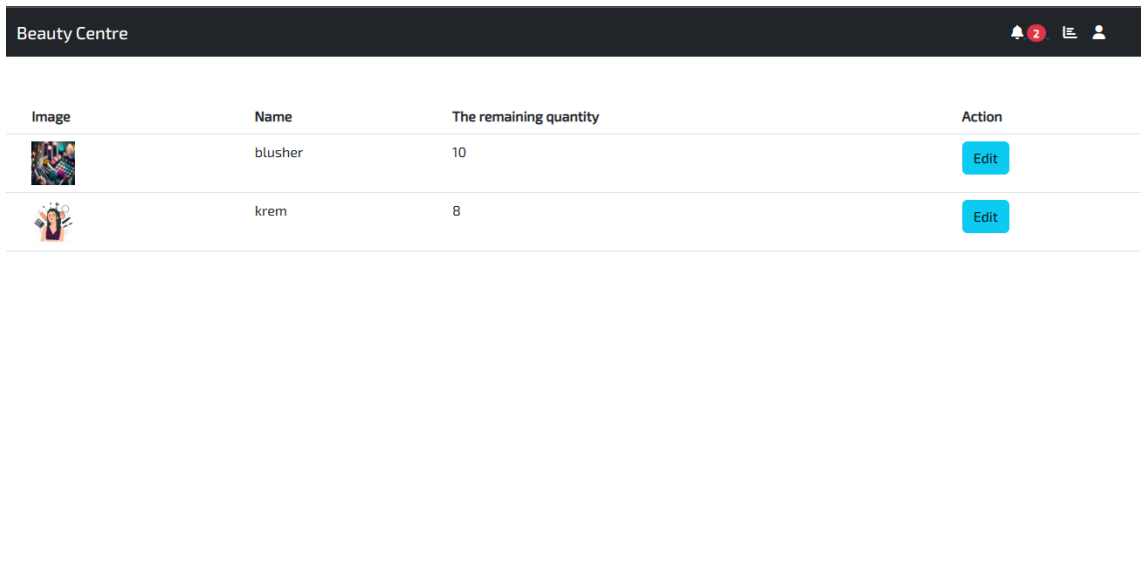




Image	Name	The remaining quantity	Action
	blusher	10	Edit
	krem	8	Edit

Figure 4.58: Notification

6. **Charts page:** On this page, you will see the total number of pieces sold for each product. The total number, and the number in the last month and last year.

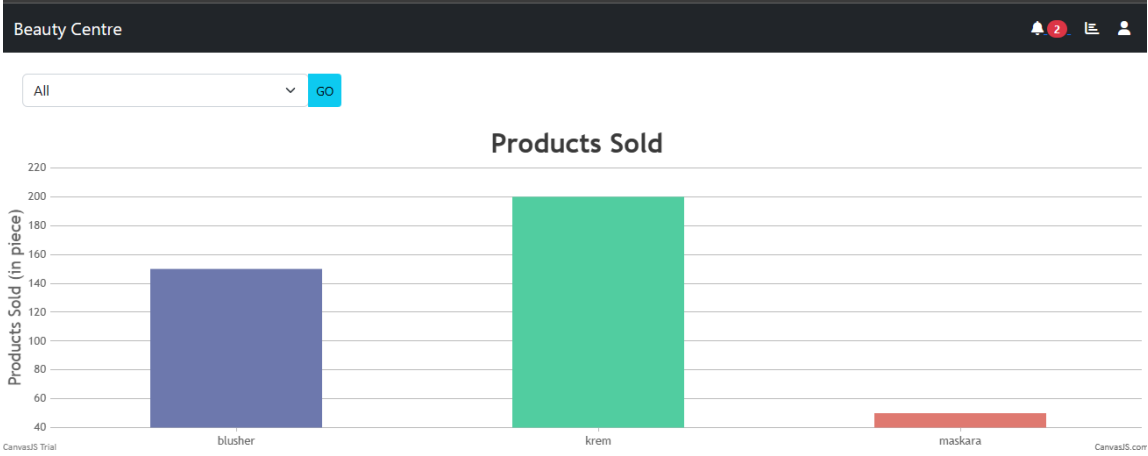


Figure 4.59: Charts page

Last Month GO

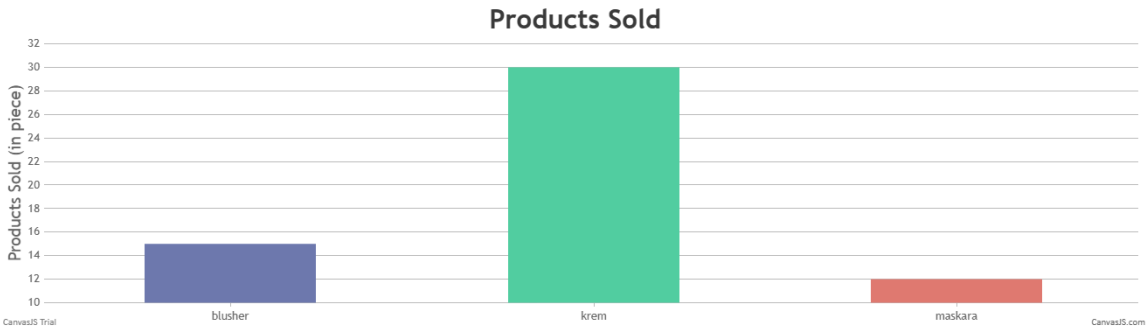


Figure 4.60: Charts page

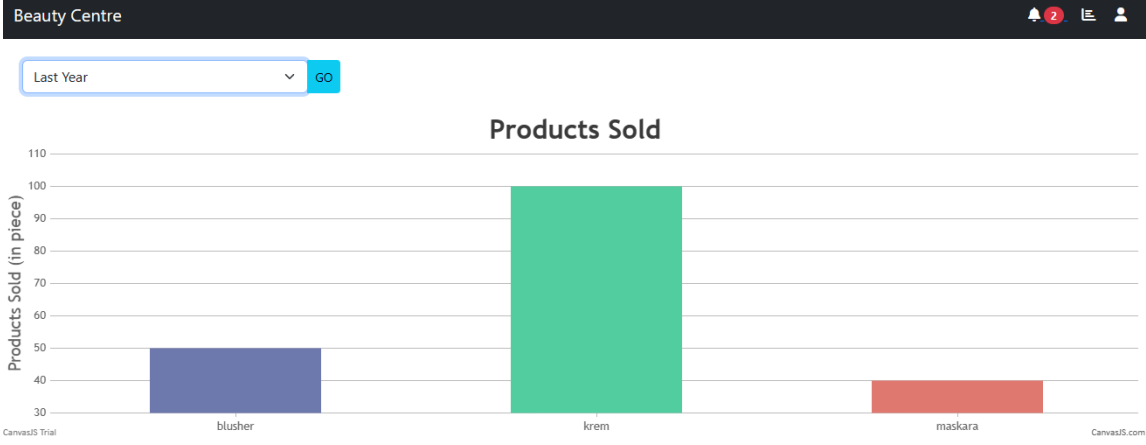
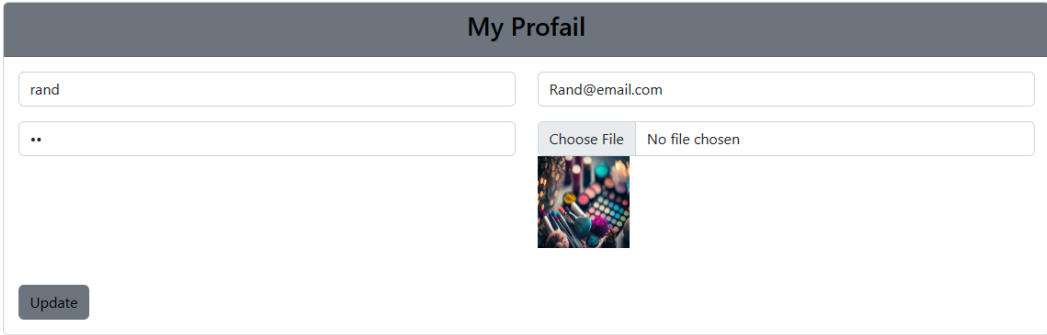


Figure 4.61: Charts page

7. **Profile page:** Through this page, the center can amend its personal information and save the modifications.



The image shows a web form titled "My Profile" with a dark grey header. Below the header, there are four input fields arranged in two rows. The first row contains a text field with "rand" and an email field with "Rand@email.com". The second row contains a text field with two dots "••" and a file upload field with a "Choose File" button and the text "No file chosen". Below the file upload field is a small square image of a colorful abstract pattern. At the bottom left of the form is a dark grey "Update" button.

Figure 4.62: Profile page

Chapter 5

Conclusion and Results

Beauty Centers is an application that aims to serve users by displaying more than one center inside each center of its own data, in addition to the possibility of conducting a search for any product and the ability to display the centers that contain that product in order from the lowest price to the highest, which saves the user time in the process of searching for a price. It is also suitable that the center itself serves when it is added to the application, so any user can access it and make the purchase process, not just people who have prior knowledge about this center.

Outcome of the Project

1. **Learning:** In our application, we have been keen to learn new languages by reading the comment or following YouTube as well. We have been keen to use the latest version of the same language to get the new features.
2. **Challenges:** We had many problems, one of the main ones was that it was all on short notice: such as, The named libraries in the code must match the version, so we must change it to match release because updating the version causes issues with the named libraries. Also, the emulator takes a long time to start working.

Chapter 6

Future work

We intend to continue improving and adding features to our software, such as a chat system, so we won't just stop there. In addition to the ability to create groups, we want to improve it to support voice messages and video clips. Additionally, the tracking system from the customer's location to the center he wishes to access should be developed as part of the features of the map utilized within the application.

Chapter 7

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First and foremost, praises and thanks to the God, the Almighty, for His showers of blessings throughout our graduation project work to complete it successfully. We would like to thank our great doctor **Dr.Haya Samaana** for her huge support, guidance and help for successfully achieving this project. A special thank for our parents and family for their support. we also want to thank our friends for the encouragement.

References