



AN-NAJAH NATIONAL UNIVERSITY

FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY

Computer Engineering Department

Software Graduation Project- January 2023

Dream Wedding

Masa AbuOdeh

Lana Atabeh

supervised by

Dr.

Asmaa Afifi

A report submitted in partial fulfillment of the requirements for the degree of Bachelor in Computer Engineering - Software Project.

Dedication

I dedicate the success of this project to my dear family, especially my father, who has always helped and encouraged me to achieve this success. I have a special feeling of gratitude to my mother for her patience and sacrifice that made me who I am today. I also want to thank my friends and wish to mention my colleague Masa for her efforts and cooperation in achieving this great achievement. And last but not least, I would like to thank myself for achieving this feat.

Lana

I will start dedicating this project to God Almighty, the source of my inspiration, my strength, my knowledge, and my understanding during this project. I also dedicate this project to my family, especially to my mother, who has always encouraged me to give everything I have until I finish what I started. I want to especially thank my father, who has always given me strong motivation to persevere in what I want and encouraged me to be able to strive better in my life. My mom and dad always pushed me to be at my best. I also dedicate my friends, especially my partner in the project, Lana, to this continuous effort and her cooperation to achieve this achievement together.

Masa

Acknowledgements

Special gratitude to our project supervisor, Dr. Asmaa Afifi, for her continuous support during our work and her continuous ideas that helped us greatly at all times. In addition to practical advice and unlimited information, she was more than generous with her experience and valuable time. And most of all her patience throughout the entire process.

Disclaimer

This report was written by Lana Atabeh and Masa Abo Odeh at the computer Engineering Department, Faculty of Engineering, 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

Organizing a wedding for the bride and groom is a big challenge. The bride and groom often find it difficult to organize their wedding, as it is a long and difficult process. They need to search for all the details of the wedding in an unorganized manner, follow up with all parties and coordinate between them, but thanks to technology, this has become easier in an unprecedented way, the application of a dream wedding, is an application that aims to gather wedding halls, wedding organizers, photographers, show teams, and everything that the wedding needs, as the application can be used to identify various items in terms of price and place, and the possibility of reservation, which saves time and effort for the couple.

Contents

1	Introductions	5
2	Constraints, Standards/ Codes and Earlier course work	6
2.1	Constraints	6
2.2	Standards/Codes	6
2.3	Earlier Coursework	6
3	Literature Review	7
4	Methodology	7
4.1	Tools, Programming Languages, and Technologies	8
4.2	Features Of The Application:	9
4.3	Business:	13
4.4	User	22
4.5	Admin	29
4.6	website	32
5	Results and Discussion	35
6	Conclusions and Recommendation	36
7	References	36

1 Introductions

Due to the great industrial and technological development, this era has been called the era of information technology, as a result of which many televisions, computers, mobile phones, etc... have entered every home. With the development in all fields, mainly meeting different needs through the Internet, especially social networking sites.

Today, billions of people use social networking sites and mobile applications to buy various products and get a unique shopping experience, and buying things online has become a common practice among millions of people around the world. Or in order to get many daily services such as Uber or delivery service.

People are becoming aware of the importance of online services like shopping, mainly due to the Covid-19 emergency that we are facing, and there are many reasons why online services are better according to many people. Firstly, due to the large selection and variety of products. Next, the convenience of not having to go to stores (saving time and effort), easy checkout process and quick delivery options, quick and easy product exchanges and refunds, and easy finding of rare products online. Finally, better prices with coupons/discounts.

Today, we aspire to take advantage of the technological development to provide such services through electronic platforms (applications / websites). This is mainly done by connecting service seekers with professionals service providers.

In the beginning, before we started this project, we noticed people's tendency towards wedding planners greatly, as they organize all the details of the wedding ceremony, but we noticed some comments from people that they are expensive, so we decided to create an application that helps people organize their wedding in an inexpensive way Easy and reliable, our project supports evaluation system and reservation system

As we have noted, there are many business owners who struggle with marketing themselves, especially since most of them are freelancers.

Through our application, we aspire to solve most of the problems that we mentioned previously, and we have added all the required features.

Through our application, the business owner enters the application and presents his business when the application manager (admin) allows him to do so, as he markets himself and receives reservations from users, and displays his location via a map, and he also communicates with users through the messaging system. And he realizes how much customers like his services through the evaluation system

In conclusion, we aim to help our bride organize the wedding in an easy, fun and inexpensive way. We

also aim to help business owners, especially new ones, market themselves.

2 Constraints, Standards/ Codes and Earlier course work

2.1 Constraints

Poor internet connection was a problem because our website and app require internet connection all the time due to online database, we increased internet speed to face this constrain. Another problem we faced about the reduced storage space for laptops and their slow performance.

One of the greatest fears that we faced at the beginning was the lack of knowledge about flutter language (used for frontend) and node JS (used for backend), both languages are not mentioned at university courses! Even the database management program that we used which is Mongo DB was not easy to understand at first, so most of the time is spend on the application and no enough time to build full website with all basic functionalities.

Please appreciate that we have made mobile application for the first time and through self-learning only, using open free learning resources on the internet.

2.2 Standards/Codes

Develop the application by using Flutter which is an open source framework by Google [3]. And the website by using Flutter [5]. for the back-end we use Node js and Mongo db atlas as database.

2.3 Earlier Coursework

we have made mobile application for the first time and through self-learning only, using open free learning resources on the internet.

3 Literature Review

The job of a wedding planner is nothing new. It is noticeable that people these days turn to party planners to organize all wedding details which is the traditional known way But it is expensive for some people . Also, apps that help plan weddings are not a new innovation. There are many apps, including the mywed app. mywed app for America [4], But Dream Wedding Planner is the number one app here in Palestine, in addition to the main highlight of the Dream Wedding application is that It is an application that can be used by business owners (owners of halls, photographers ...) and people who want to plan their wedding (users) and each business owner can create an account and use the application , display his work and market for himself.

4 Methodology

Dream Wedding is an application installed in mobile devices with android operating system. this application for wedding parties and users and each of them can enter own specific side. and the server handle all request and responds to all requests from wedding parties and use.this the main structure of the project:

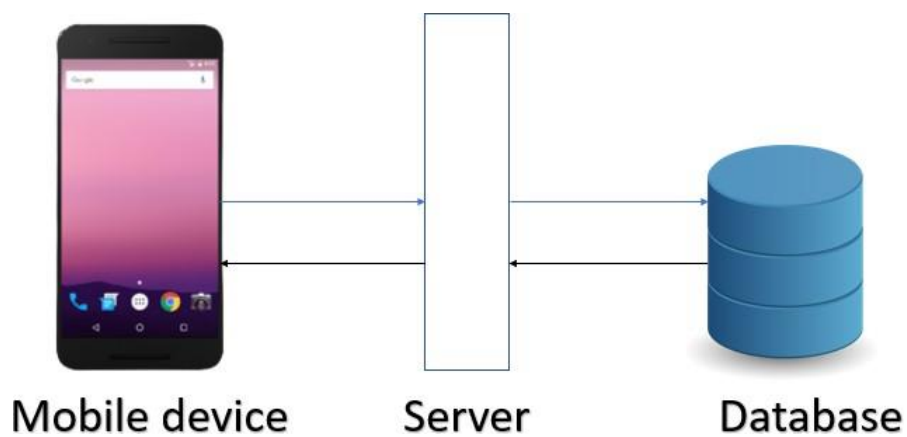


Figure 1: The project's main structure

4.1. Tools, Programming Languages, and Technologies

4.1.1. Mobile application

We had a lot of options to develop the app after searching and reading studies we decided to develop the application on the following frame work.

1. Design

We should have had a simple user-friendly application that is not complicated, we saw many applications and designs before we had a clear picture of our application and then we built this design and started programming interfaces.

2. Frameworks:

We choose flutter framework to build our application.

Why we choose flutter[1]?

Flutter is Google's free and open-source UI framework for creating native mobile applications. Released in 2017, Flutter allows developers to build mobile applications for both iOS and Android with a single codebase and programming language. This capability makes building iOS and Android apps simpler and faster. Although Flutter is a newer cross-platform framework, more and more companies have chosen Flutter over frameworks such as Xamarin, Cordova, and React Native.

3. Programming languages

The programming language we use is Node JS it's an open-source, cross-platform, back-end JavaScript runtime environment that runs on a JavaScript Engine . Node JS is easy to understand and has extreme documentation so we can easily fix and debug any errors that appear.

4.1.2 Website Dashboard

We have created a website, just for admin.

1. Frameworks:

we used flutter for fronted.

2. Programming language

we used Node JS.

4.1.3 Database

Database is very important in most applications especially for the purpose of Reading and editing information and deleting it, it makes the application meaningful and we can backup data, our application depends directly on database it displays information from which we used NoSQL database where the relationships between different collections were few and are also easy when using API.

MongoDB is a source-available cross-platform document-oriented database program. Classified as a NoSQL database program, MongoDB uses JSON - like documents with optional schemes[2].

4.1.4 IDEs

"Dream Wedding" was built by using two IDEs.

For the front-end we use Android Studio IDE.

For Back-end we utilized VS code since it's a fantastic choice to deal with JavaScript and Node.JS.

Version Control

We were working on a team, so we needed a way to share the work and for code integration, so we used GitHub.

API Endpoints Testing

Because our application has a RESTful API in the back-end server, we have to test each endpoint before we can integrate it to the client for this we use Postman.

Postman is an API (application programming interface) development tool which helps to build, test and modify APIs. Almost any functionality that could be needed by any developer is encapsulated in this tool.

4.2 Features Of The Application:

a- Rating:

Each user can rate any business and can see the average rating of the business from all users.

b- Comments: Each user can write a comment about any business and can see all user comments on the business

c- Filter:

1- filter by location: The user can find the business he wants by the name of the city (Nablus, Ramallah, Tulkarm), so the owner of the business must enter the location of the business.

2-filter by price: The user can search for business based on the price, as he can search from the most expensive to the cheapest, and from the cheapest to the most expensive

3-filter by rating: The user can search for business based on the rating, where he can search from the highest rating to the lowest rating, and vice versa

d- Maps: The user can see the location of the business through the map, where an marker of its location is placed

e- Search: The search system is by entering a letter or part of a word, where a list of businesses that contain these letters is displayed to facilitate the search process in the application.

f- Booking: A reservation system where the user looks at the reservation calendar with the company and then requests a reservation with the name, date and time of the reservation, and then the business owner approves or declines the reservation, if the reservation is accepted, the business owner will add the reservation to the calendar, and the reservation will appear on the users' side, and a notification will be sent, and the reservation status will appear in the user's list.

g- Chat: A chat system is available for clients and business , this helps clients to keep in touch with the selected business.

h- Notification: The system notifies users when his reservation request is accepted

The business owner can notify all users when there are special events such as winter discounts or special discounts.

When you clicked on the app icon, horizontal scroll page will appear as a first screen as shown below:

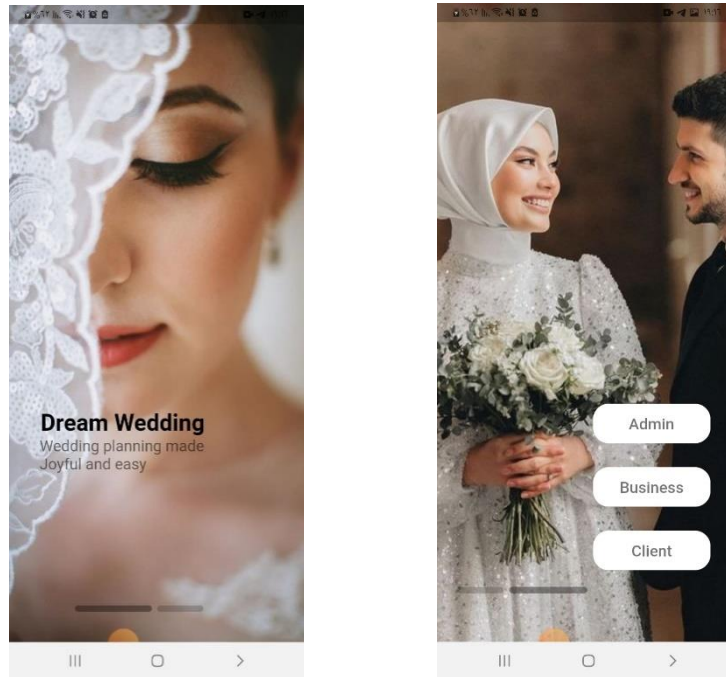


Figure 2: horizontal scroll Screen

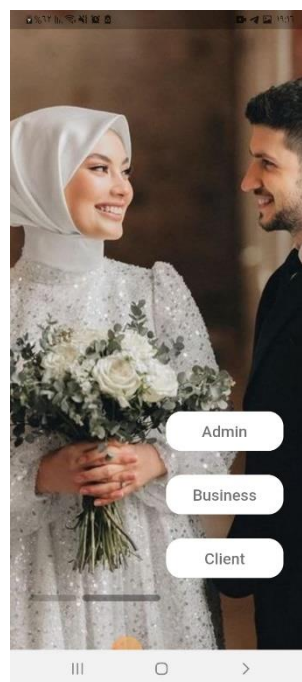


Figure 3: Type of account screen

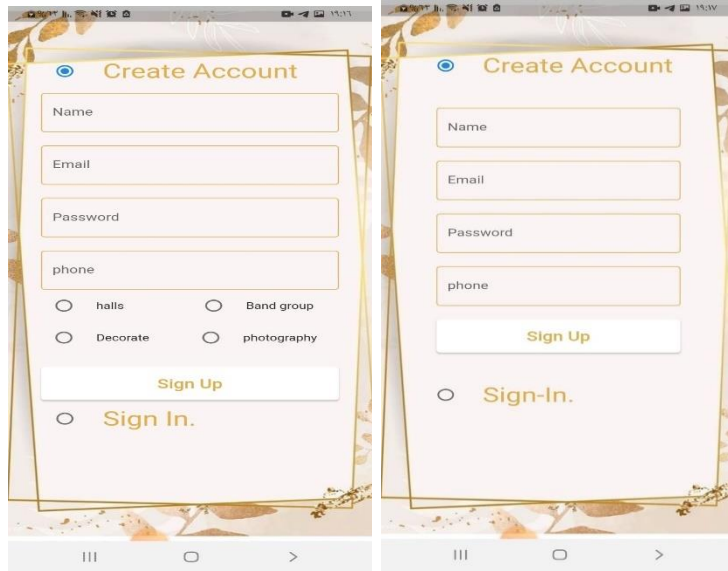
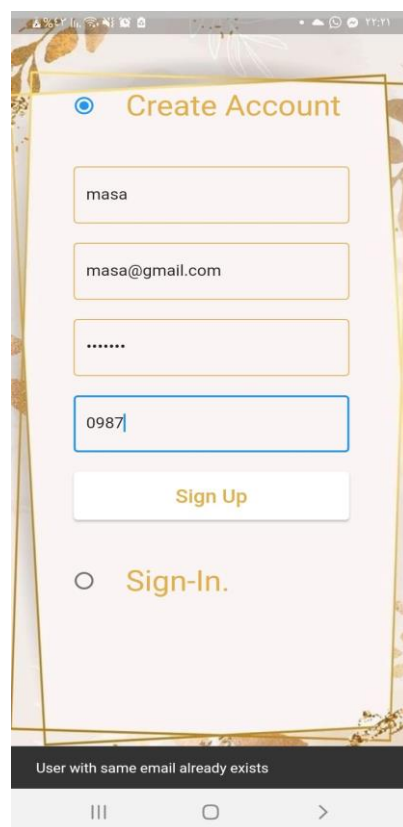
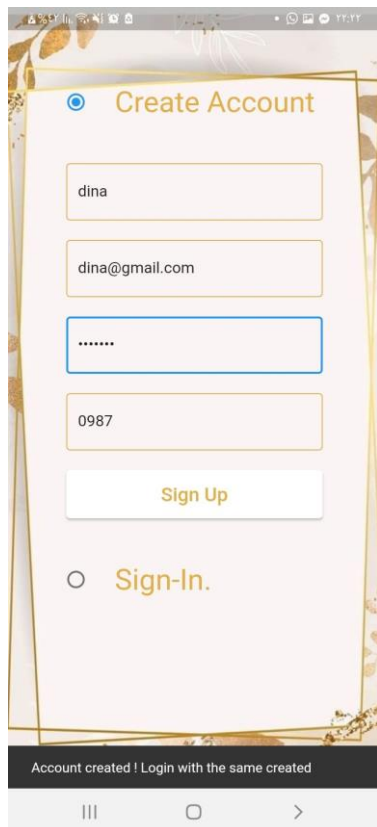


Figure 4: Sign-Up Screen for both User and Business



(a) Success create account

(b) failed create account

Figure 5: Create a new account- Sign Up Screen

4.3 Business:

Sign in screen: the members can sign in directly (Wedding Halls Owners, Photographers, Wedding Planners, and Bands) only if the email and password are valid.

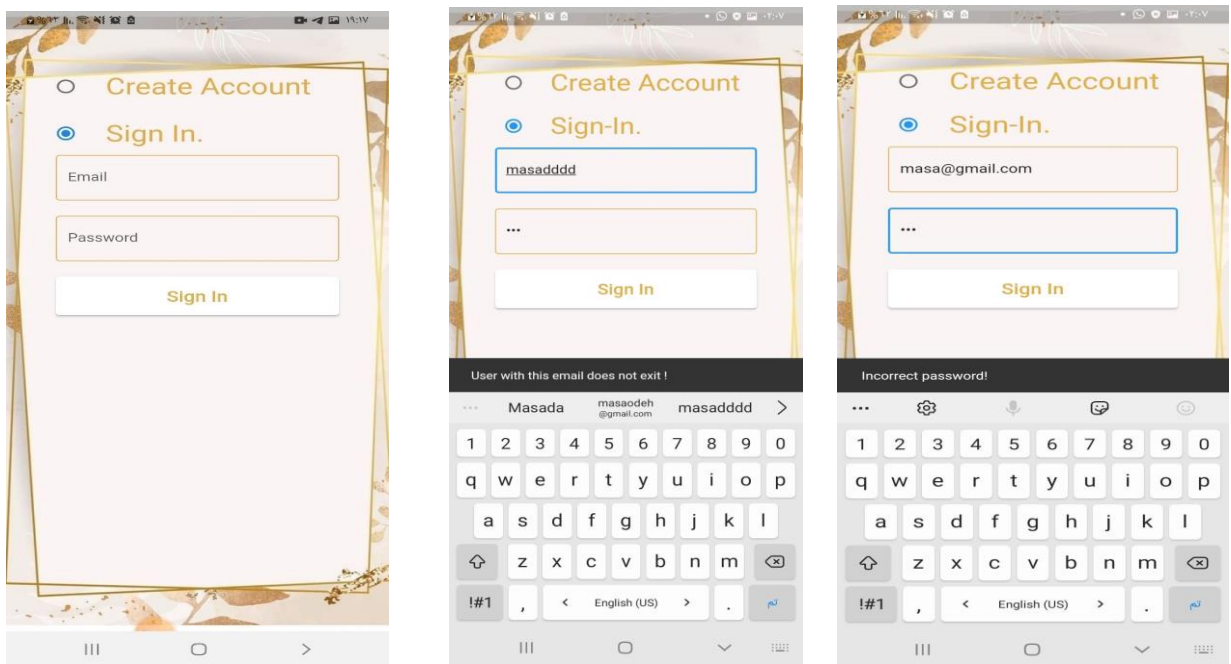


Figure 6: Login Screen

if the businesses ownerships have not created an account before, they can go to sign-Up. But first, they must enter their business name, email, password and phone number, then choose the type of account. the first choice for Wedding Halls Owners, the second choice for Photographers, the third choice for Decorator, the fourth for Bands.

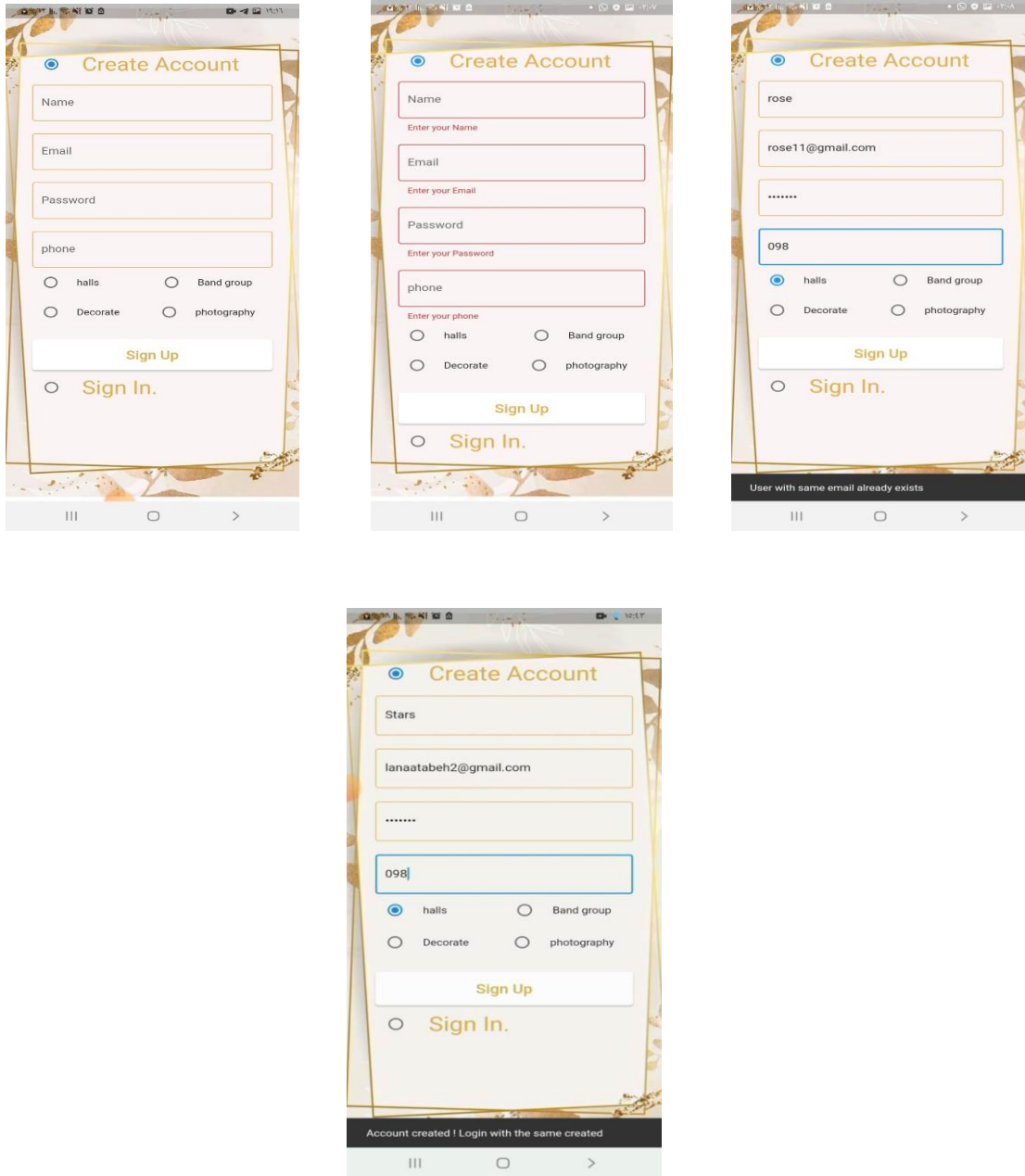


Figure 7: Sign up Screen

The figure below, will open after sign-in, if the admin approved to this account, then it can be get started, and exit button to exit application if the admin did not approve to this account .

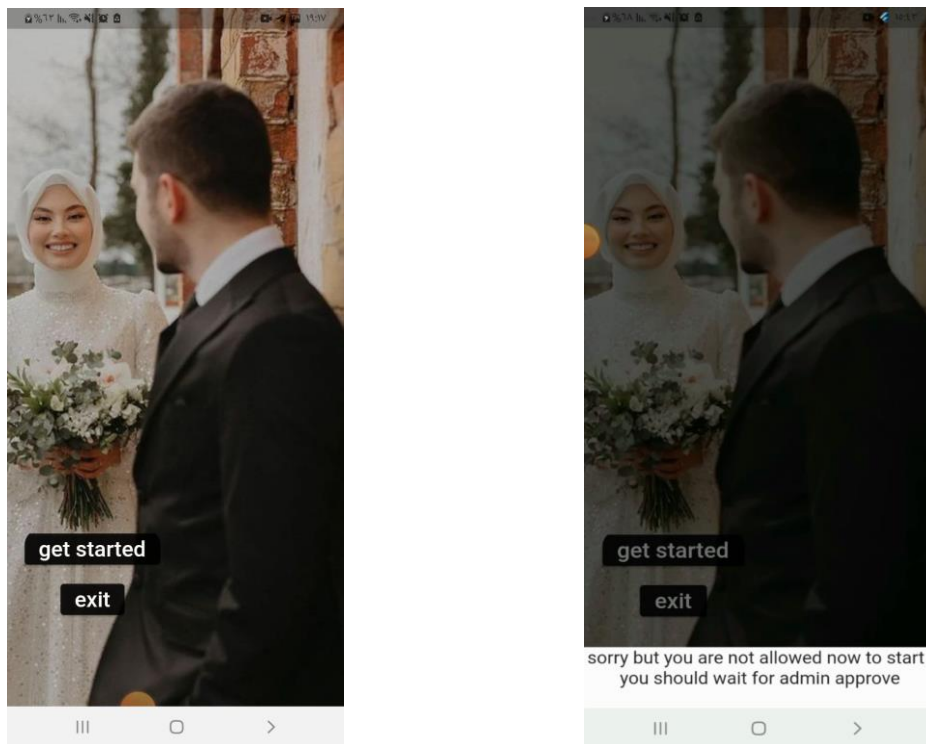
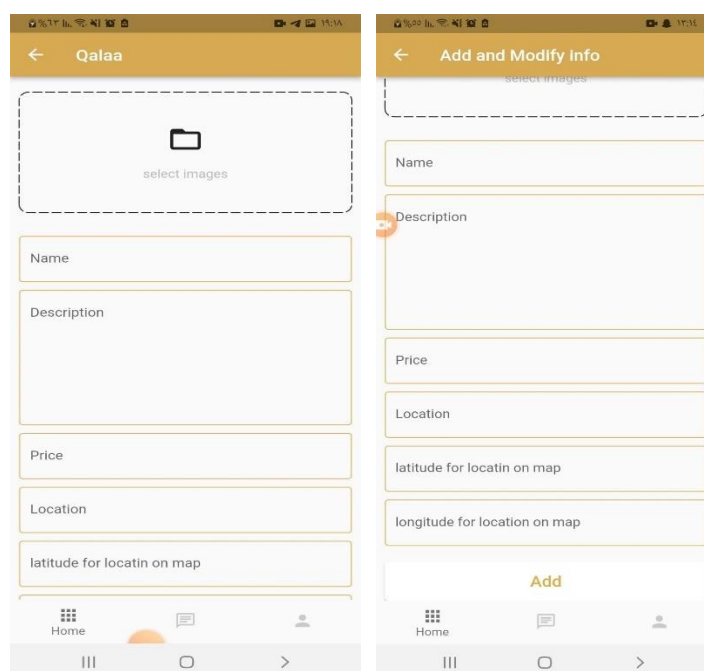


Figure 8: after sign-in if admin approve business or not

After get started, the figure below will be opened, this page allows businesses owner to add or modify the information for them, that include their photos, name, description, price, location, latitude for location on map, and longitude for location on map, If the information already exists, then this information can be modified.



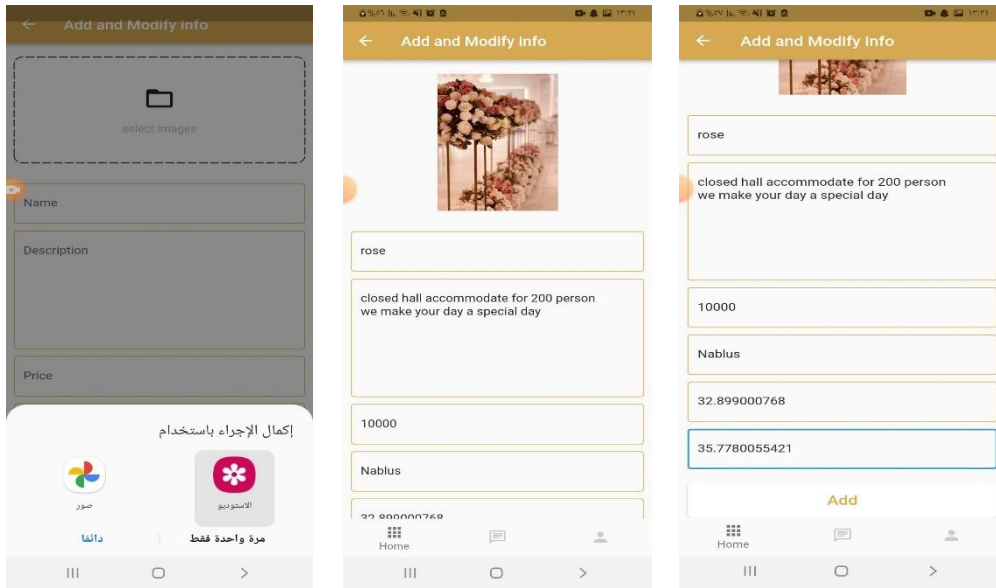


Figure 9: Business details

Chat page: this page shows a list of all users that the business owner can chat with them, and the green icon shows the beside user that sends a message.

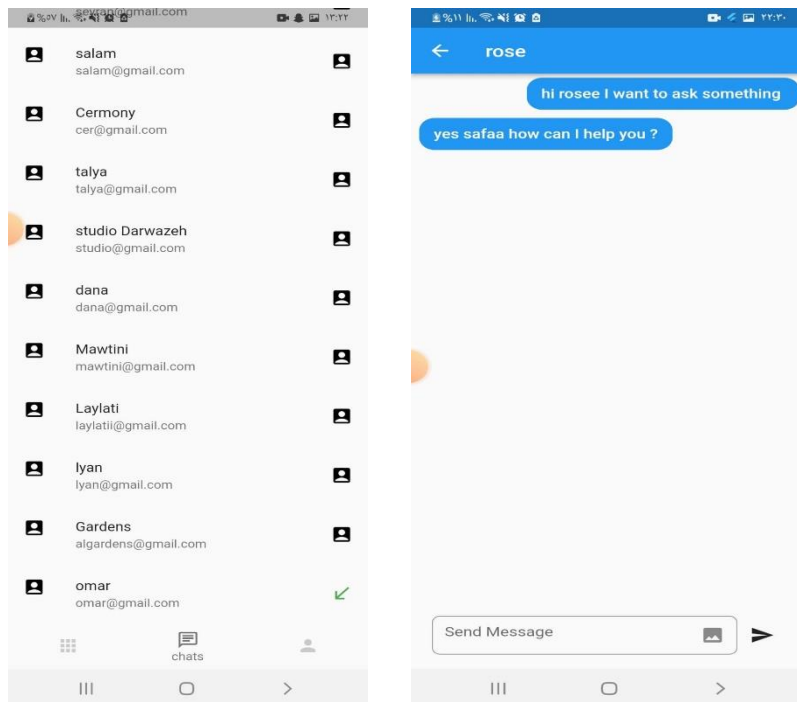


Figure 10: chat

The business owner has a profile page, that include account information, push notification, booking, bookings requests, comments, and log out.

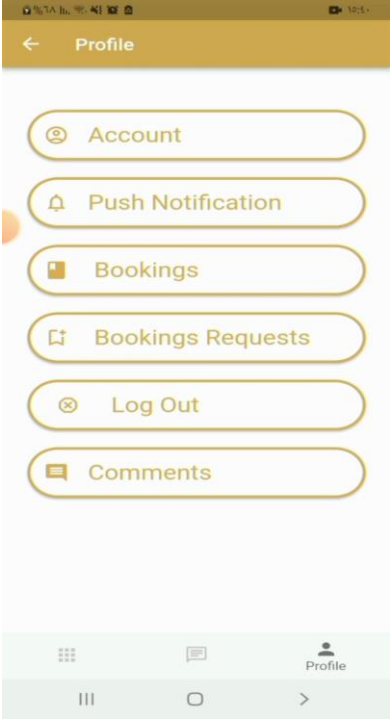


Figure 11: Business profile page

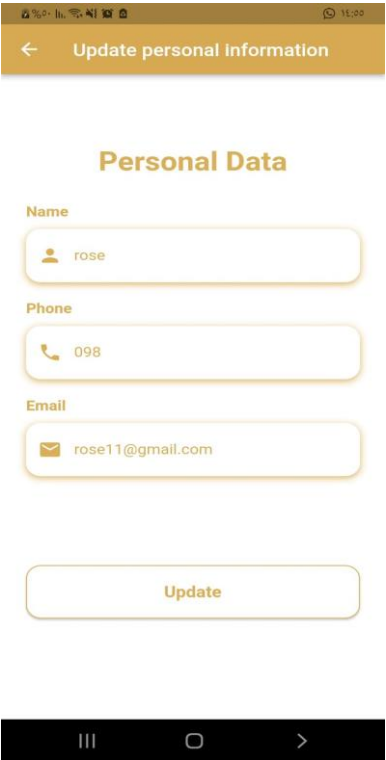


Figure 12: Business update personal data

Push notification page: the business owner can enter the body of the notification and the title for it, when click on push notification button, then the notification will appear to the all users.

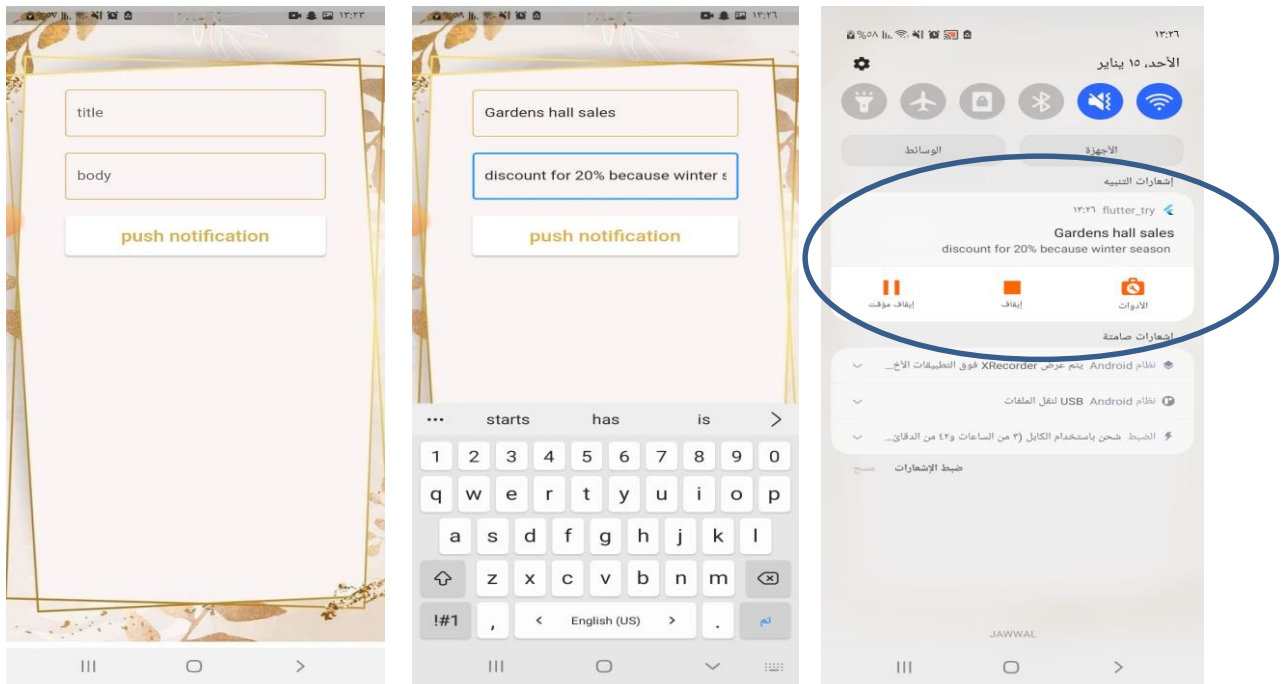


Figure 13: notification

Booking page: calendar, when business selects any date then it shows for him the wedding in this date, and the time for it, when click on add reservation button, then he can add a new reservation.

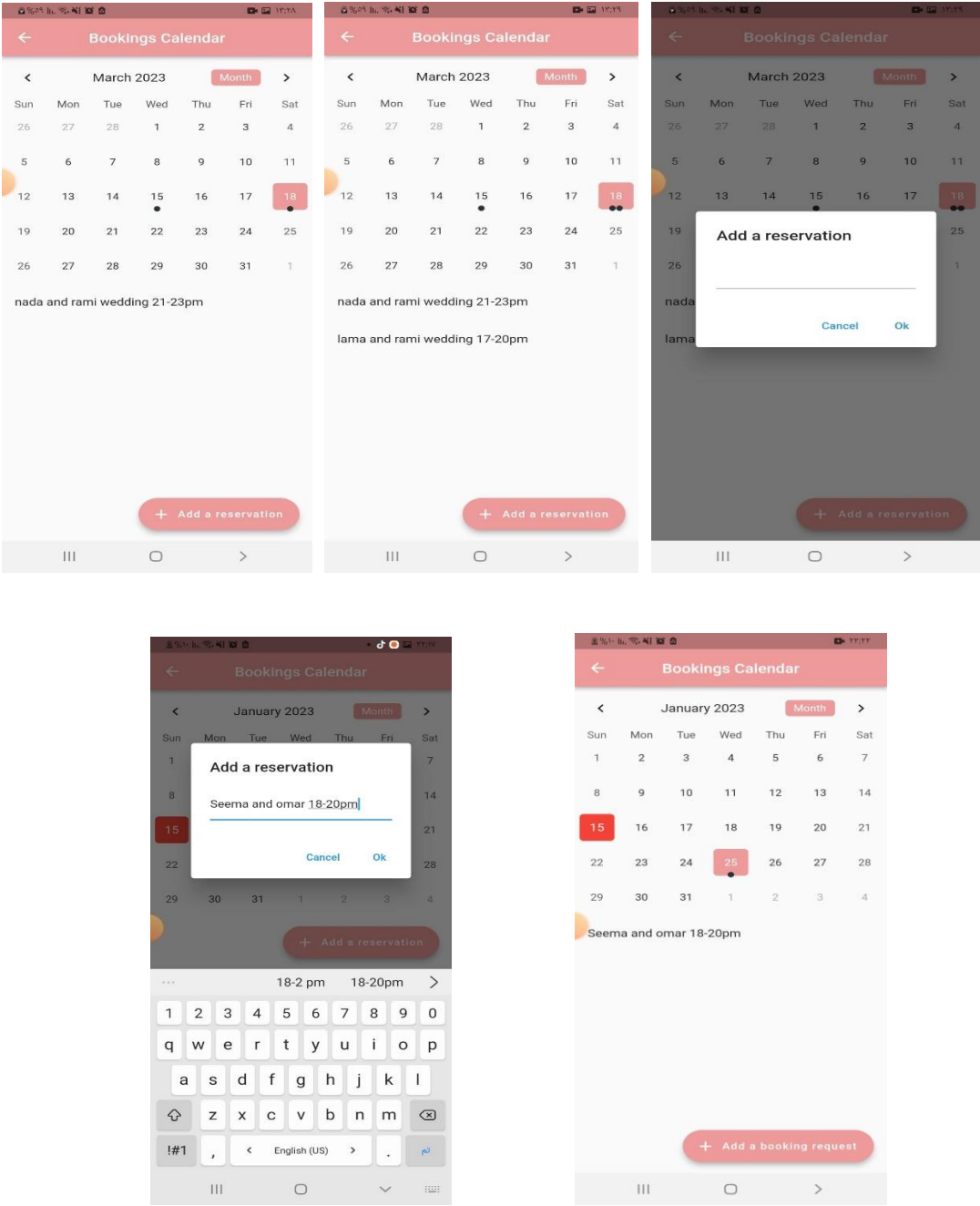


Figure 14: reservation

Bookings requests page: when click on bookings requests button, then the list of all requests will appear with details of the booking (name, booking date, the time for booking, phone number, and the status of the booking), if the business owner select accept, then the booking will be stored and appear for the one who make the booking with a notify system that notify the request owner and the business owner should add this booking request on booking calendar, if select reject, then the booking will be rejected and show this to the user, if select InProcess, this show that the booking is hold.

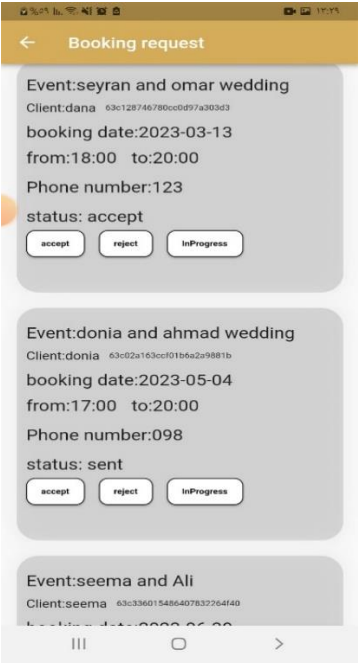


Figure 15: Bookings requests page

Comments page: the business owner can also see all the comments/feedback that user added to his business. To take the feedback and improve his works.

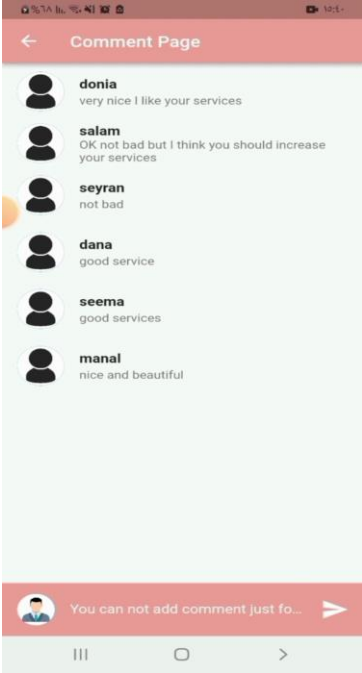


Figure 16: Comments page

4.4 User:

Sign-in screen: the user for this application can be entered by Valid email and password.

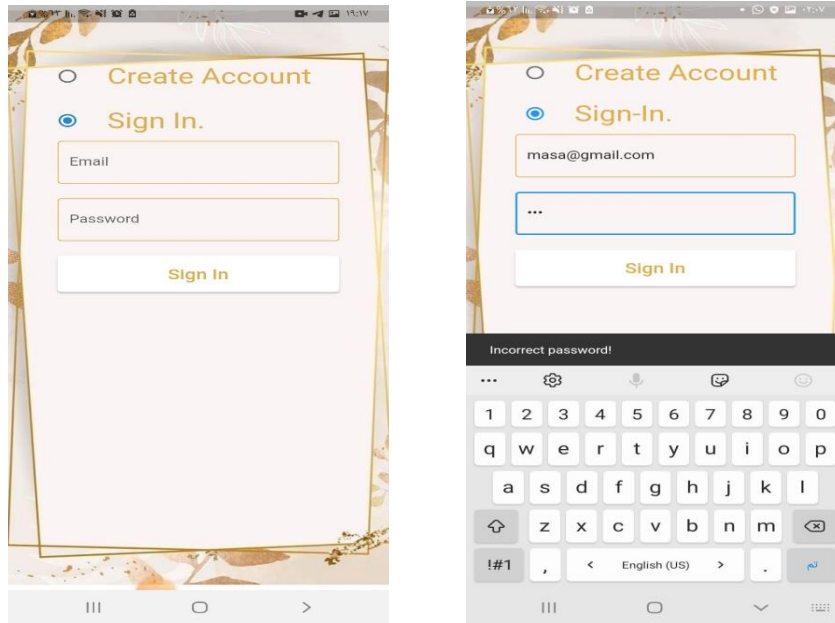


Figure 17: sign-in

If the users do not have an account, they can go to sign-up page, they must enter name, email, password, and phone number.

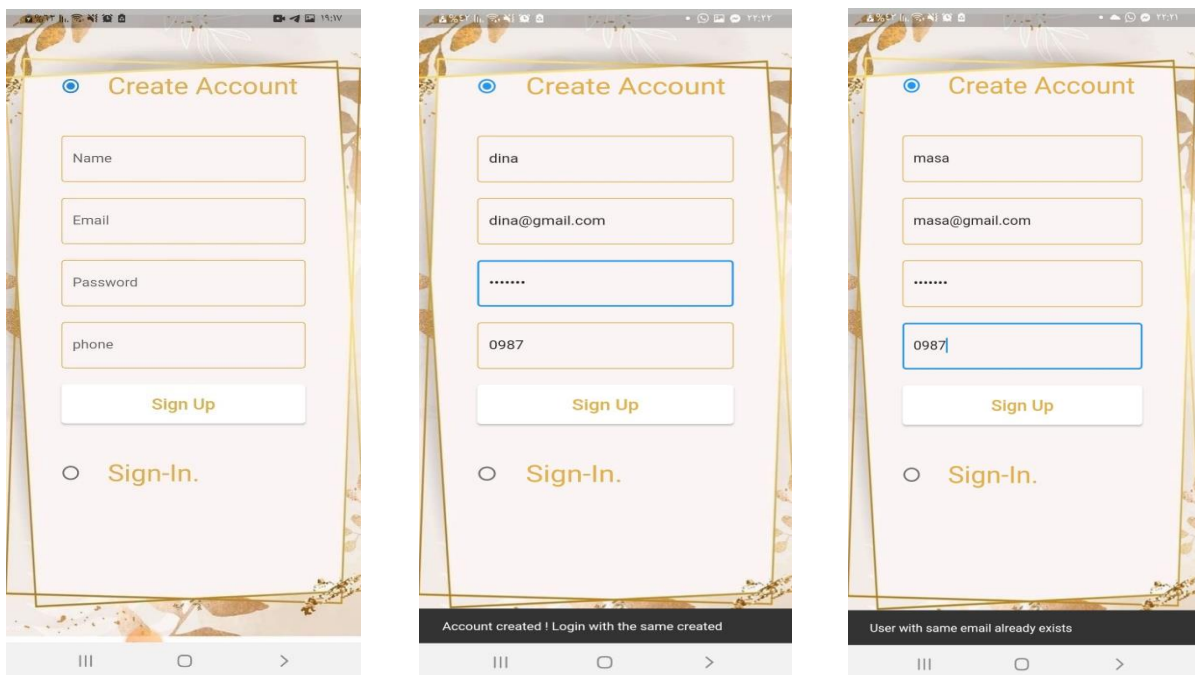


Figure 18: sign-up

The home page will appear like figure below, it includes list of works that have been added, (wedding halls, wedding planners, photographers, and bands), user can use search bar to find any think he wants.

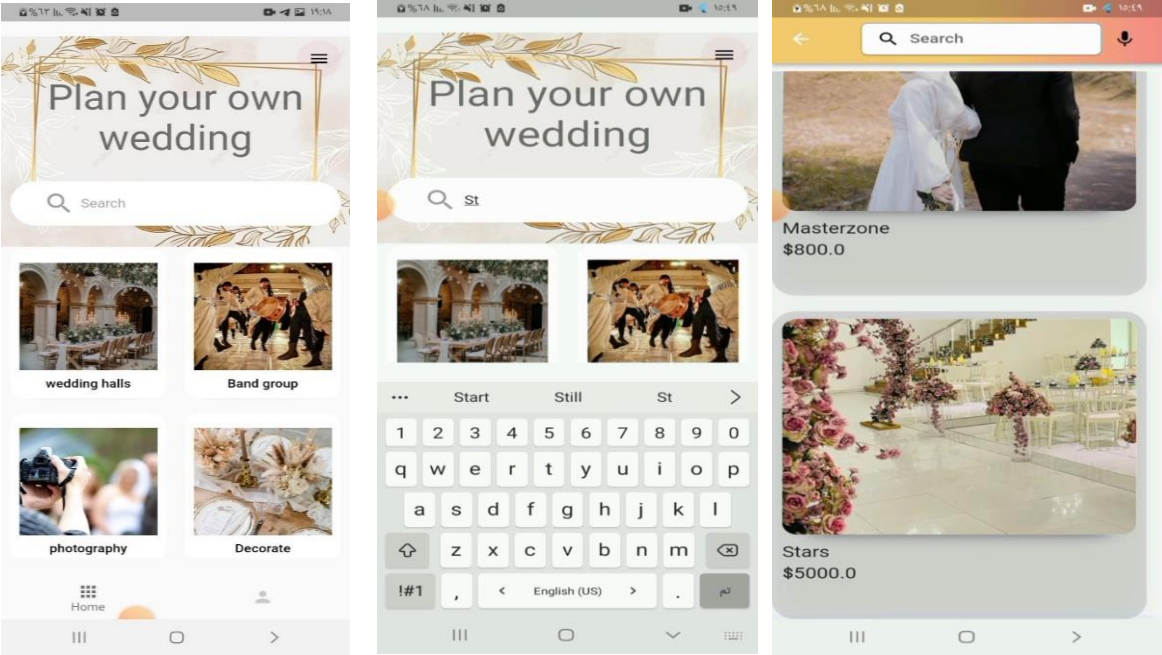
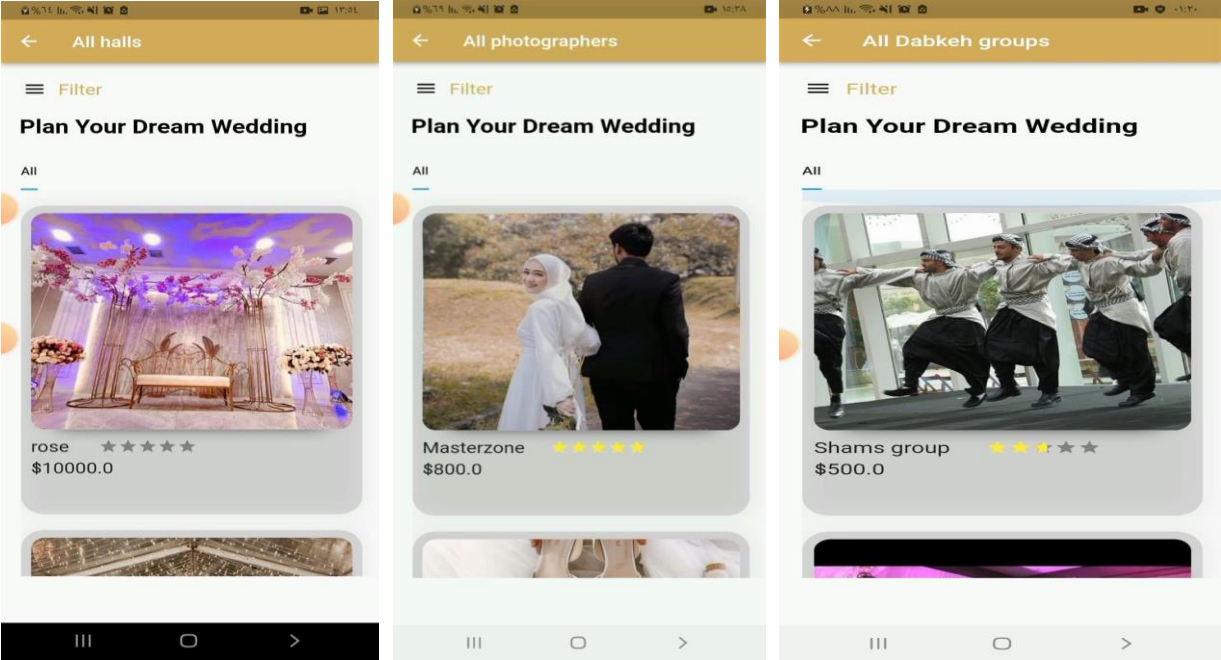


Figure 19: home page

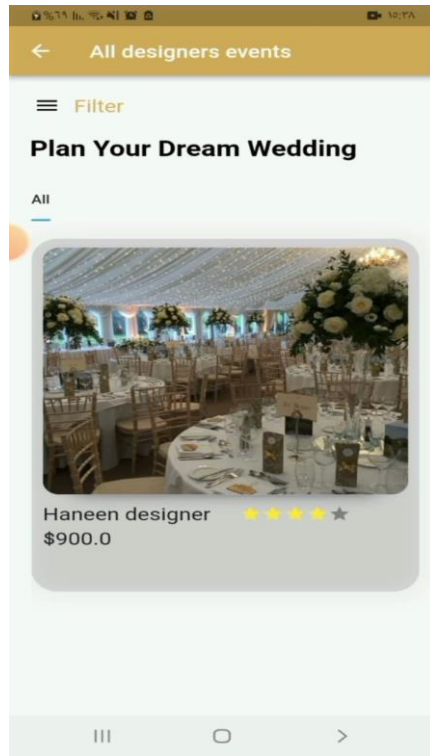
lists: when user choose halls list, or Bands list, or Photographers list, or decorate list, then list of these will appear. The list will show all the halls for example that added to the application, each selection from list includes the name of hall, the average rating, price and image for it, this will help user to know a little bit about it.



a-Halls list

b-Photographers list

c-Band group list



d- Decorator list

Figure 20: lists

Filter: the user can use filter menu to arrange the list as he want. He can choose to arrange the list based on price, or rating, or location.

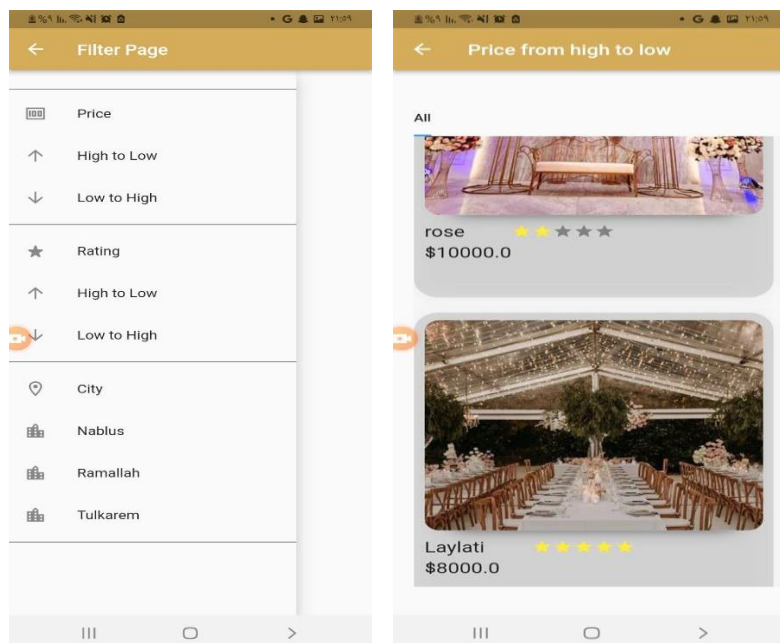


Figure 21: filter menu

Details page: when user choose from the list, then the details about it will appear, like, more images to know more about it, price, average rating, and user can rating, and the location for it when click on location icon, so the map will appear, also the user can know more by the description box, also user can chatting with the business owner by click on chat button, and he can know more by when click on comment button so the comments from people will appear(feedbacks) or add his comment.

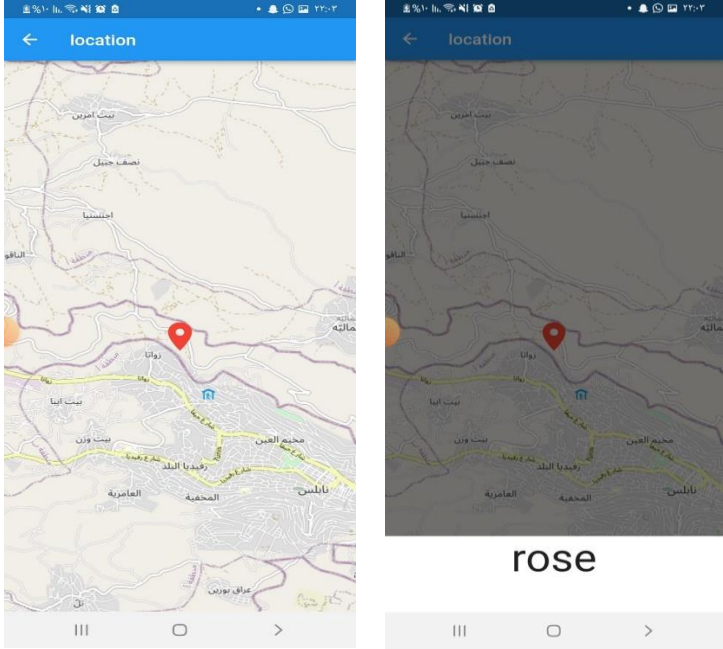
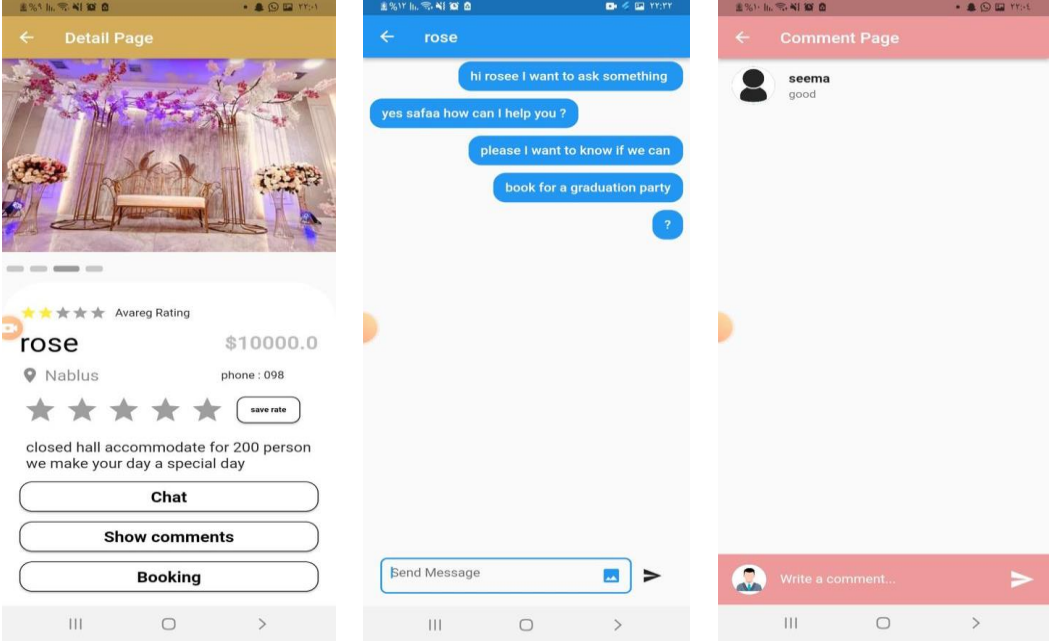


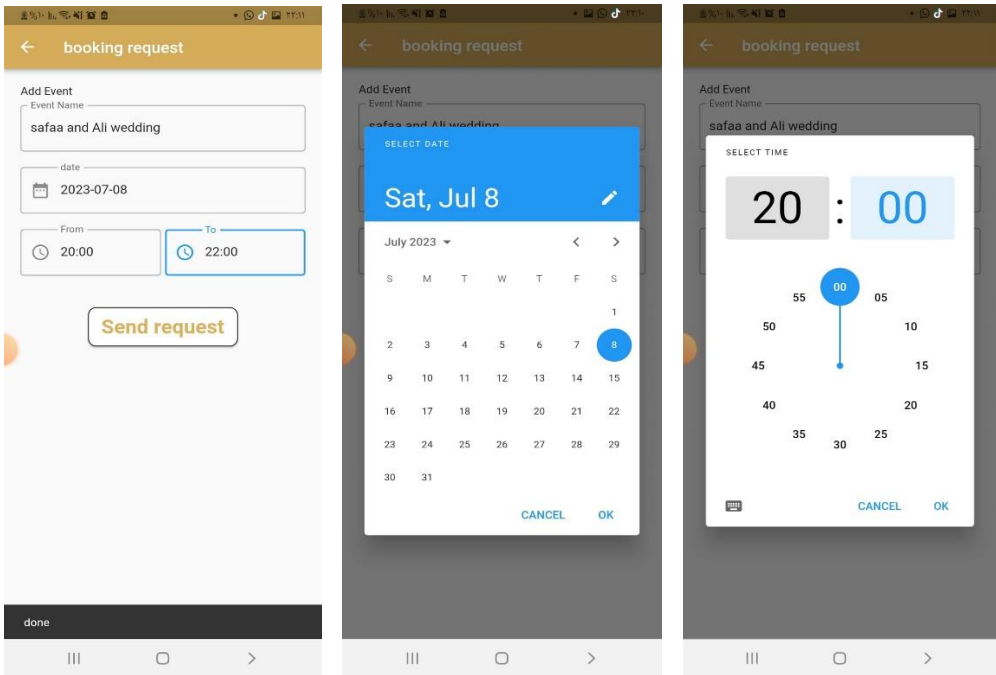
Figure 22: Details page

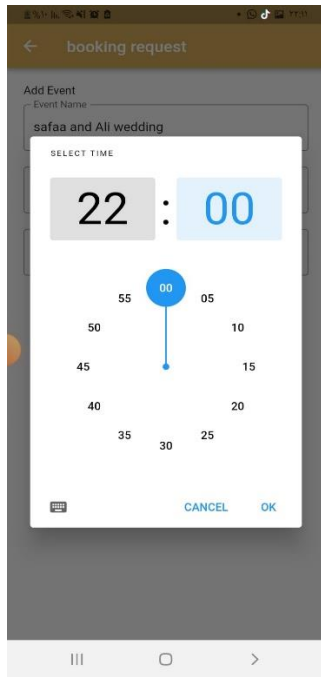
Booking: if user chose booking button, the calendar will appear so the user knows all the dates that are booked.



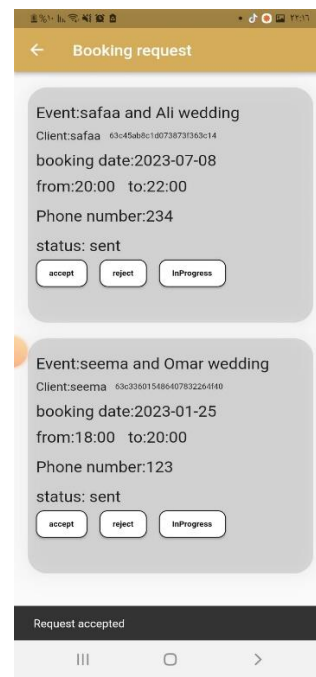
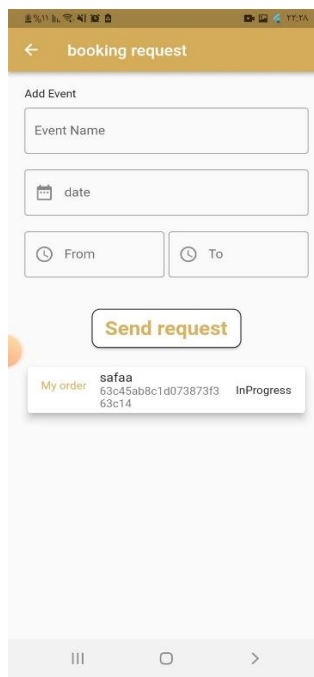
Figure 23: Booking Calendar

Booking request page: if the user wants to request for a reservation, then click on add booking request button, so the booking request page will appear .it include event name, the date and the time for the event, when user filled this information then he click send request button, so this request will passed to the business owner(request status in beginning is sent), and the user must wait until the business owner accept or reject his request.





a-booking request/user side



b-booking request/business side

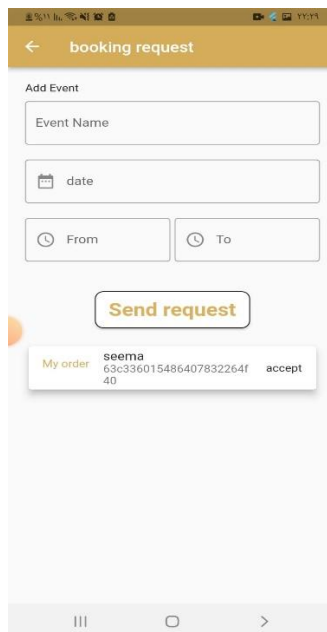


Figure 24: Booking request page

The users have a profile page, that include their account information, their wedding date, notification to control it, my favorite list, and log out. User can update his information.

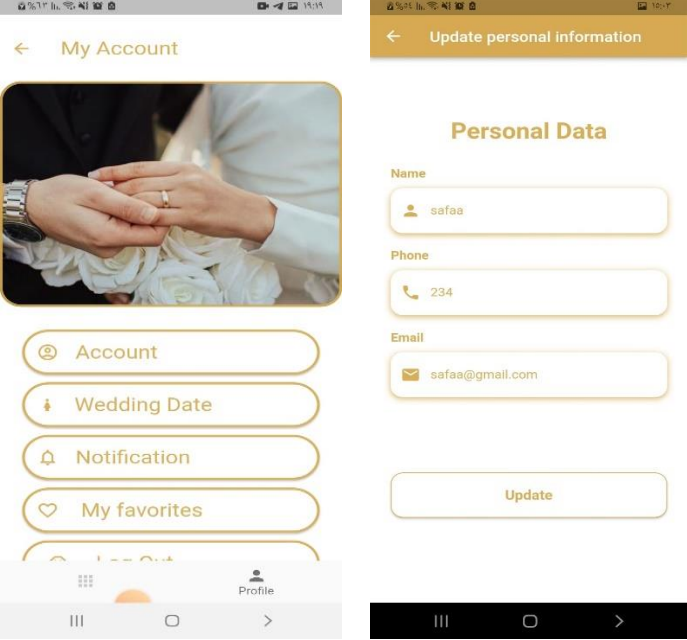


Figure 25: user profile

4.5 Admin:

Sign-in page: admin can sign-in by enter his email and password.

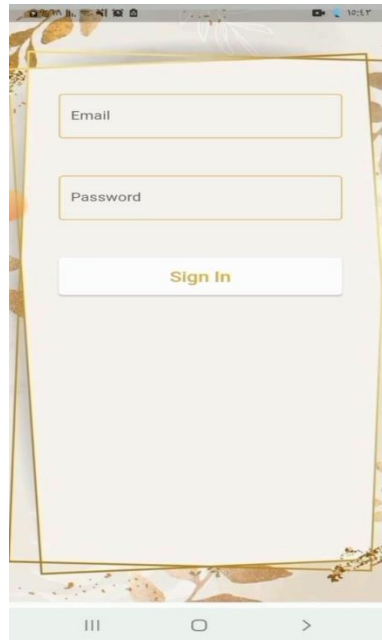


Figure 26: Sign-in

Home page for admin: it includes lists of works that have been added, (wedding halls, wedding planners, photographers, and bands).

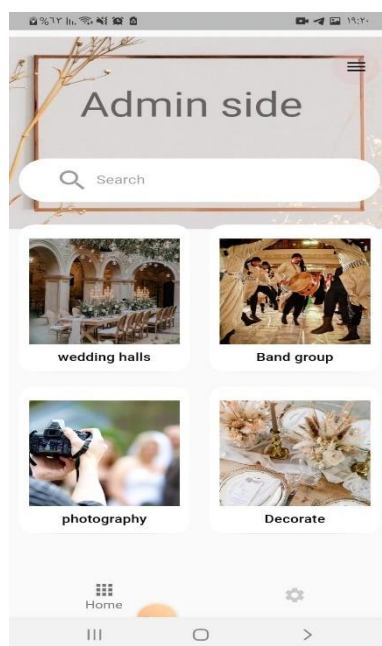


Figure 27: home page

List page: when admin chose hall list for example, then the list of all hall that added to the application will appear, and the admin can delete any hall he wants and the and the hall that he deleted will no longer appear in the user's side.

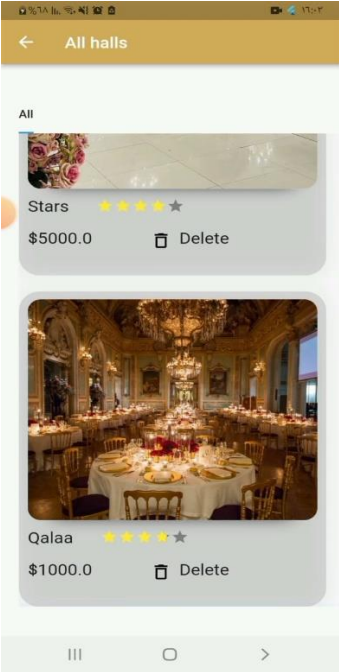


Figure 28: List page

Setting page: this page include clients and businesses list.



Figure 29: Setting page

Client list: this list displays all user in the application and the admin can delete any one he wants.

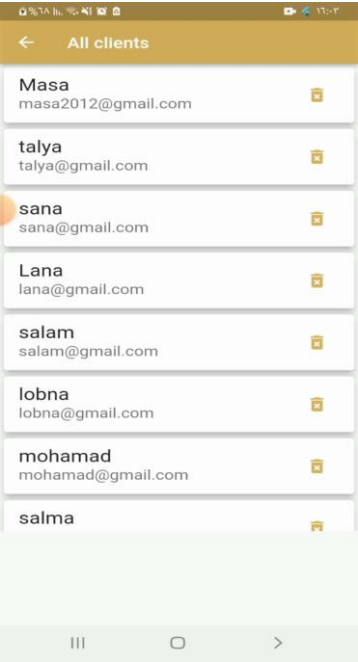


Figure 30: Client list

Business list: This list allows displaying all the businesses that want to join the application and are awaiting the approval from admin.

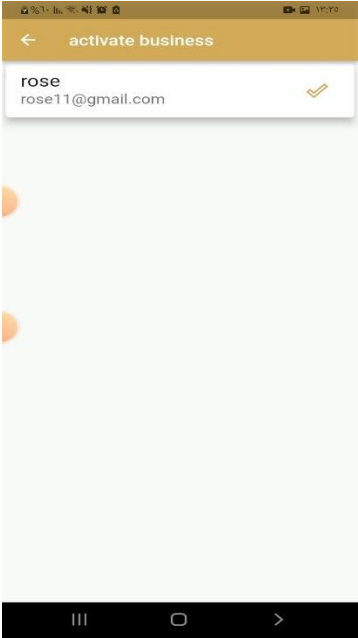


Figure 31: Business list

4.6 website

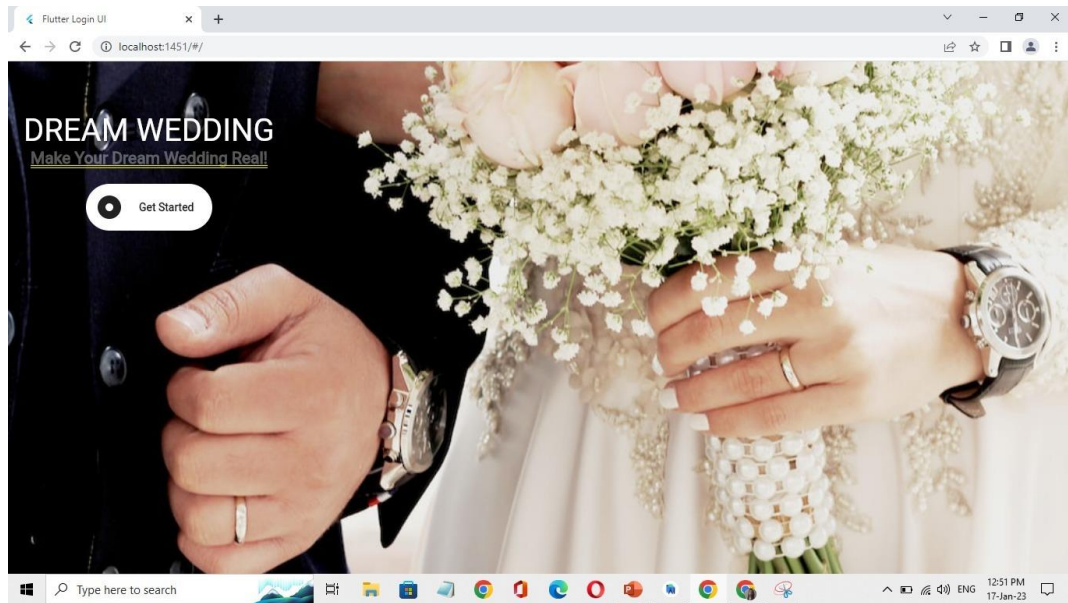


Figure 32: Splash Screen

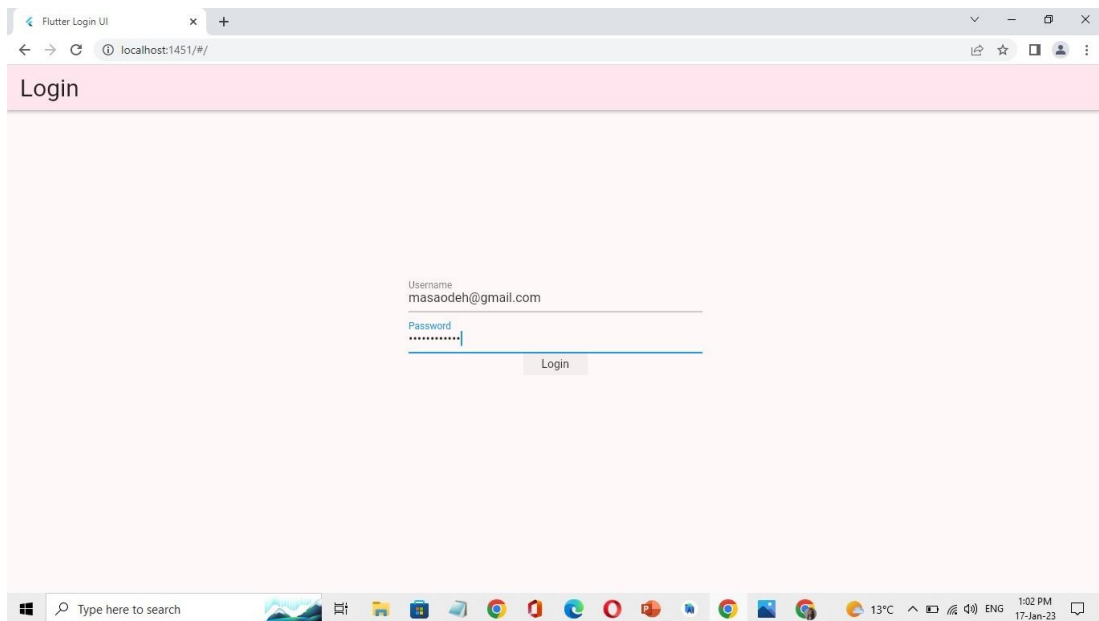


Figure 33: Admin login Screen

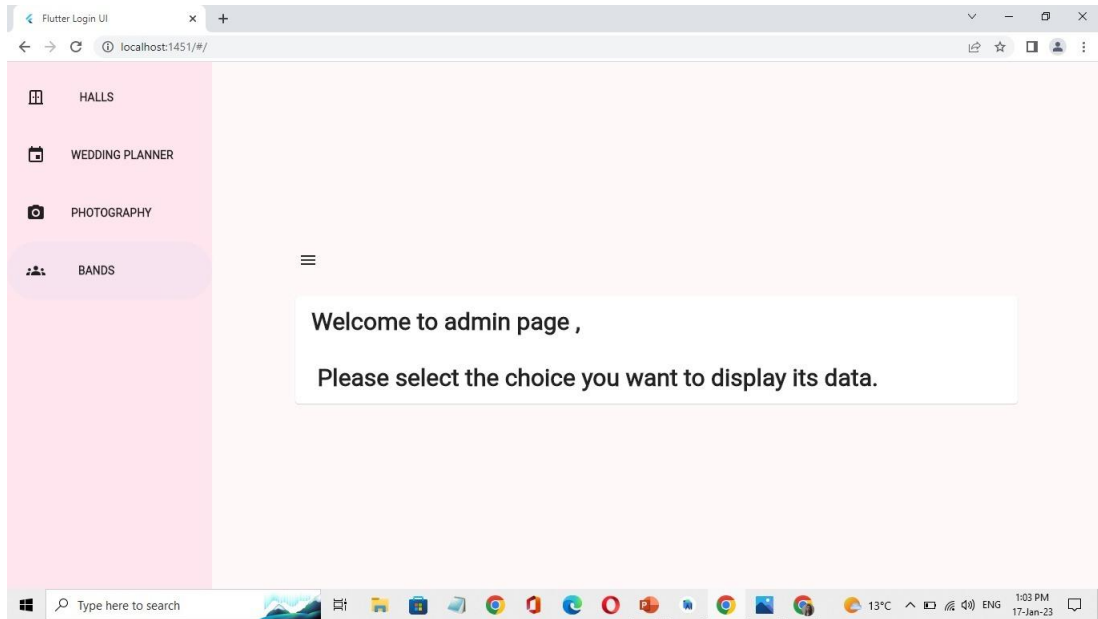


Figure 34: Admin main Screen

The dashboard contains the 4 business (wedding halls, photographers, band groups and decorator) businesses. Each business has a table containing its name, email, location, and the admin can delete any business from the table or activate any business that needs activation.

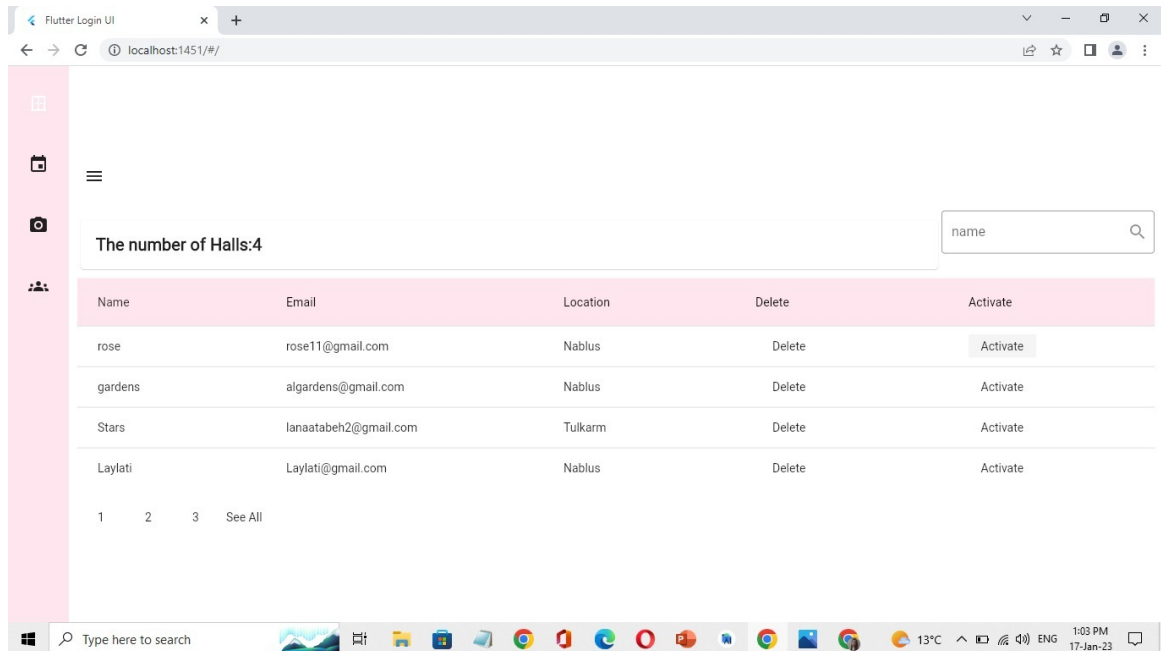


Figure 35: hall list

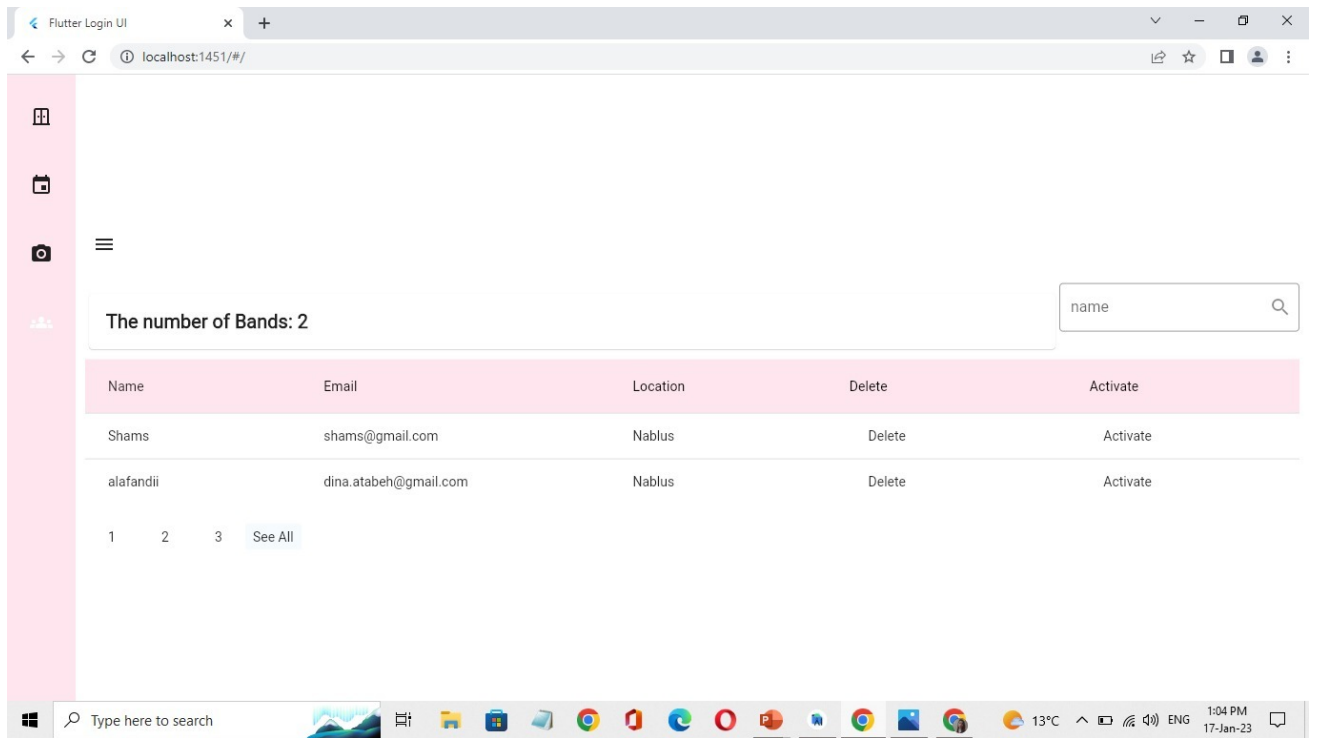


Figure 36: Band group list

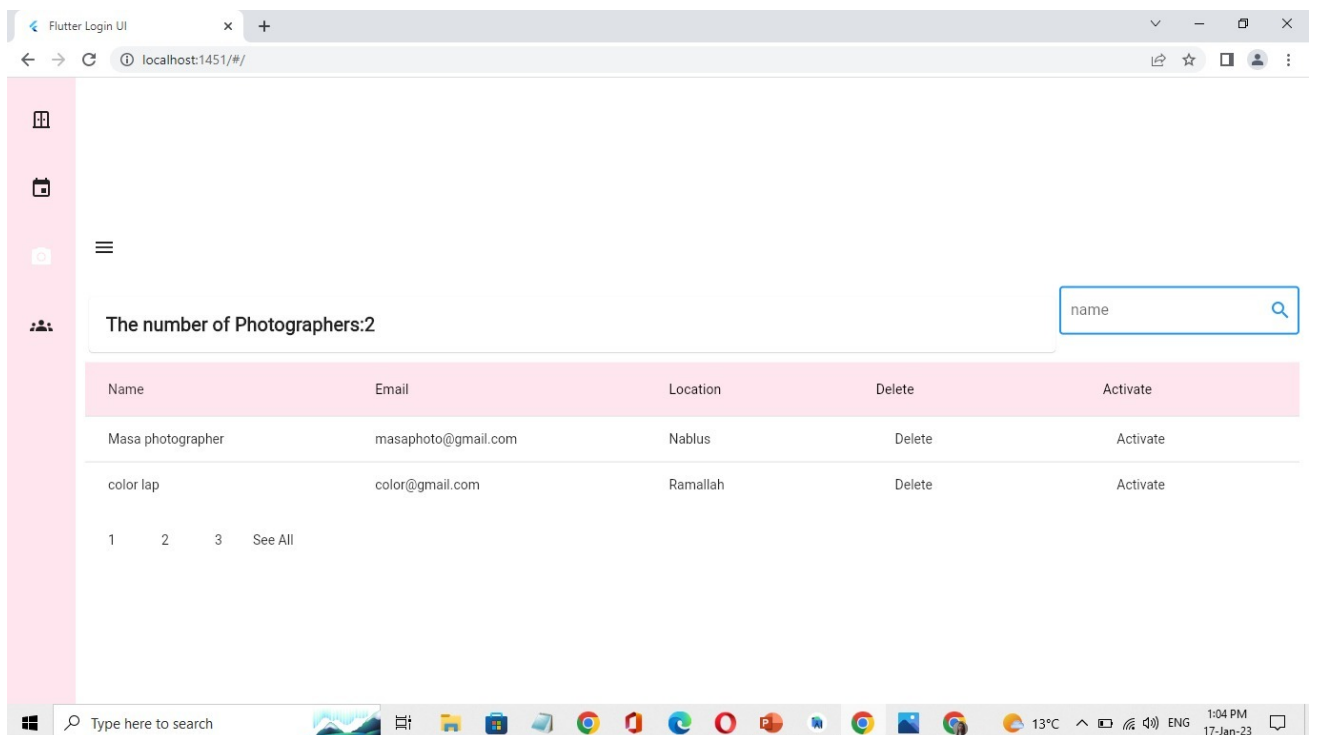


Figure 37: Photographers list

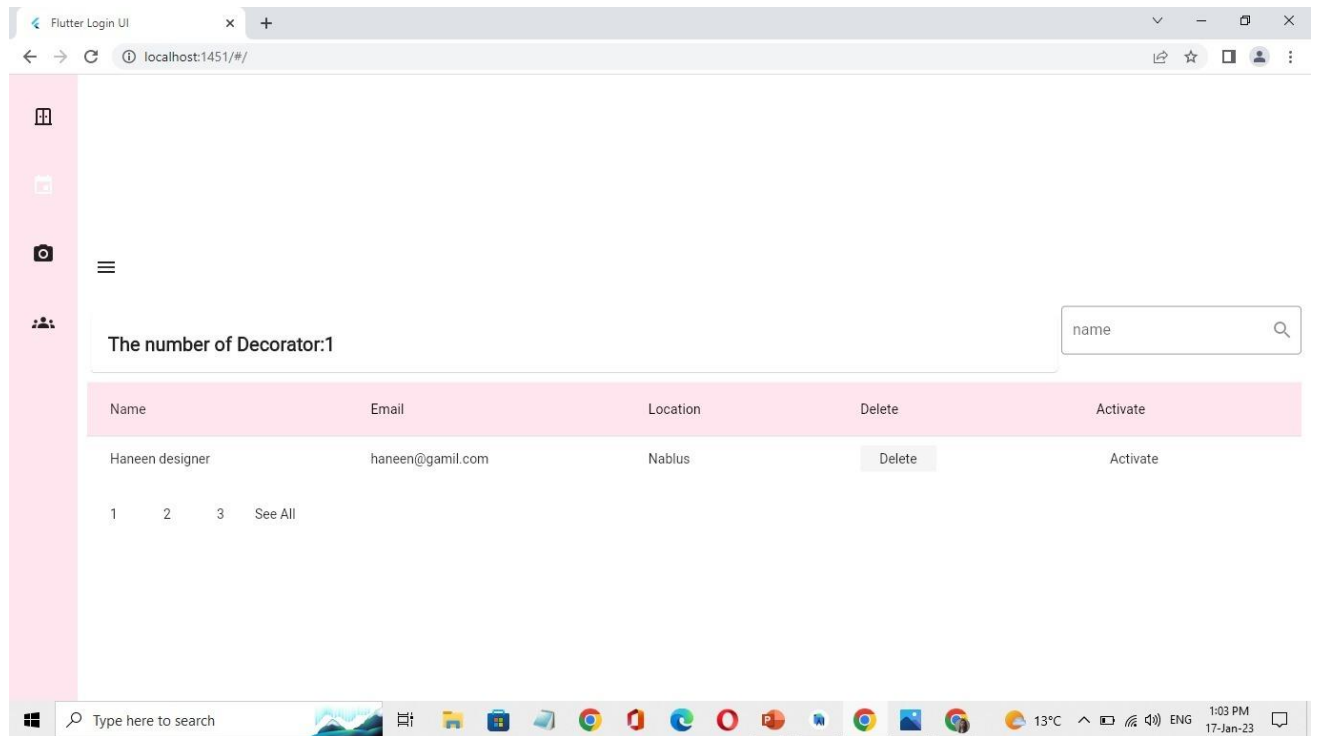


Figure 38: Decorators list

5 Results and Discussion

We have created an application that aims to provide new services that business owners can provide by connecting the business owner to the customer via the Internet. Many reliable services can be obtained through the application. The application is also of great help to many business owners by giving them the opportunity to show their skills and reach customers.

5.1 Learning

Learning something new takes patience, effort, and a lot of research. We learned a lot from this project and used a lot of new technologies that we didn't know before. We chose to learn and use flutter for the front end, Node JS for the back end and use Mongo DB for the database. Websites helped us a lot in our journey of learning these new languages, we knew nothing about how to make a mobile app before this project so programming lessons were very helpful.

5.2 Challenges

Searching for a reliable source to learn a new programming language takes a lot of time and effort. We don't always find the solutions for errors we faced. We also had an issue in dependencies versions of the flutter packages we wanted to use.

6 Conclusions and Recommendation

6.1 Conclusion

We were able to create the Dream Wedding app as a solution to many problems faced by couples and business owners.

6.2 Recommendations

In order to improve the application, we can add online payment for services, and a website that includes all the features and services in the application, and we can add new businesses to the application such as women's salons and wedding dress boutiques.

7 References

- [1] <https://flutter.dev/>
- [2] <https://www.mongodb.com/docs/manual/>
- [3] <https://flutter.dev/multi-platform/web>
- [4] <https://play.google.com/store/apps/details?id=app.mywed.android&hl=en&gl=US>