Kingdom of Saudi Arabia Ministry of Education Umm Al-Qura University



المملكة العربية السعودية وزارة التعليم جامعة أم القرى

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Health Portal Project Report



Abstract

The "HealthPortal" hospital app is a user-centric and innovative solution aimed at enhancing the healthcare experience for patients, healthcare providers, and hospital administrators. This application offers a seamless platform for appointment scheduling, medical record access, and real-time communication, ultimately improving the efficiency and quality of healthcare services. The main purpose of "HealthPortal" is to design application interfaces that facilitate hospital management, making it a valuable tool for efficiently providing services to patients. The application provides an approach to healthcare enhancement, blending patient-centered features with hospital management capabilities.

Introduction

Health comes first,

People today are used to doing a lot of things online and communication with a medical institution is no exception. Of course, a doctor cannot always diagnose a patient remotely, but it is possible to facilitate some procedures using digital technologies, With these innovations, we prioritize your health, making it effortless for you to connect with your medical team, schedule appointments, access vital information, and manage your healthcare journey conveniently and safely. we recognized the need to provide patients with easy and convenient access to healthcare services. That's why we designed application interfaces for hospitals.

Scenario

Hind is a 30-year-old. patient, suffering from symptoms of fever, phlegm, and abnormal vital signs, in addition to being a patient with heart disease. Hind created an account in the hospital application and created her health record by entering her weight, and height. in the application. Adding her medications to the (My Medications) page with the type and quantity of the dose and frequency, and she now receives a notification of the time to take her heart medications. From the (My Appointment) page, she booked an appointment with the family doctor. Hind felt pain in her chest and asked the emergency services for an ambulance to take her to the hospital. Hind benefited from the home healthcare service and requested an injection three days ago. Hind, from time to time, has immediate remote consultations with her cardiologist.

Related Work

Teladoc provides access to board-certified doctors, therapists, and other medical professionals through video or phone calls.[1]





Medisafe helps users manage their medication by sending reminders and tracking adherence. It also offers medication interaction alerts.[2]



HealthPortal is a modern hospital app with 31 interfaces that makes healthcare easier for patients and healthcare providers. It helps people book appointments, talk to doctors online, and understand their health better. It also helps doctors and nurses work more efficiently and provide better care to patients.

services that our app provides are:

1. Health Record Management:

- Patients can access and manage their health records conveniently, including essential details like blood type, blood pressure, height, weight, and BMI.

2. Appointment Booking:

- Patients can easily schedule appointments with any doctor, regardless of their specialization.
- This streamlines the appointment process and helps patients receive timely care.

3. Medication Schedule Management:

- Patients can maintain a medication schedule by entering details like medication name, time, dose, and frequency.
- This feature promotes medication adherence and better health management.

4. Home Health Care Requests:

- Patients can request home health care services, providing convenience for those who may have difficulty visiting a healthcare facility.
 - It enhances patient comfort and accessibility to care.



services that our app provides are:

5. Remote Consultation with Doctors:

- Patients can consult with healthcare professionals remotely, which is especially valuable for non-urgent medical inquiries or follow-ups.
- It saves time and resources for both patients and providers.

6. Emergency Services Request:

- In urgent situations, patients can request emergency services and provide their location, including ambulance services.
- This feature can be a life-saving aspect of the application.

7. Medical Records Storage:

- The app helps patients maintain a comprehensive medical history, including prescriptions and test results, making it easier to share with healthcare providers.

8. Video Calls with Doctors:

- The option for online video calls with doctors offers a convenient way to seek medical advice without physically visiting a clinic.

9. Emergency Help:

- The app offers a quick way for patients to request urgent medical assistance, ensuring a prompt response in critical situations.



Figure 1

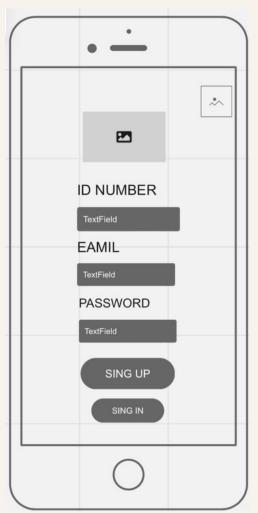


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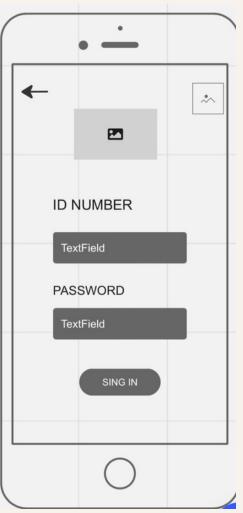


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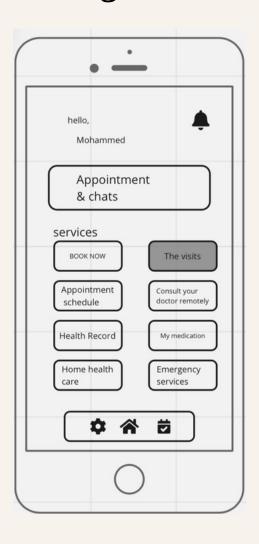


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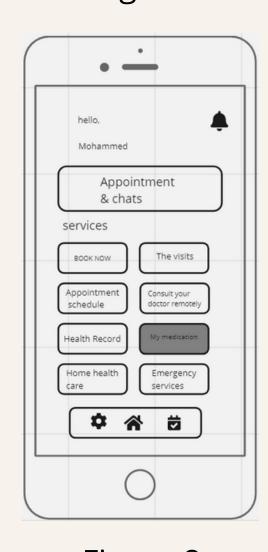


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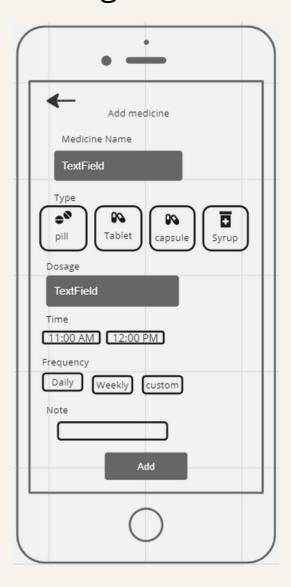


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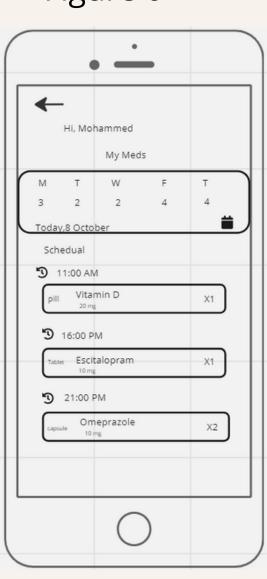


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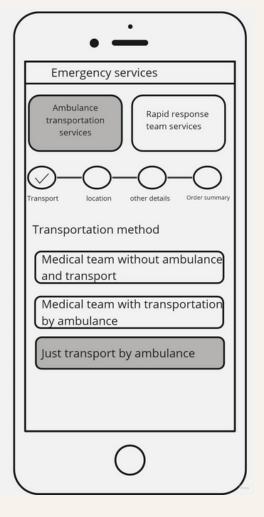


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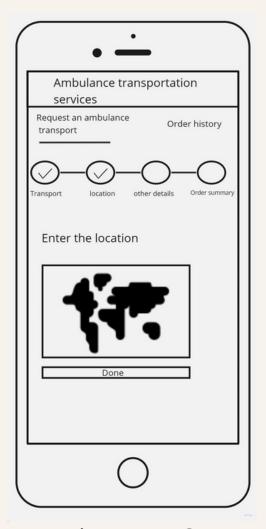


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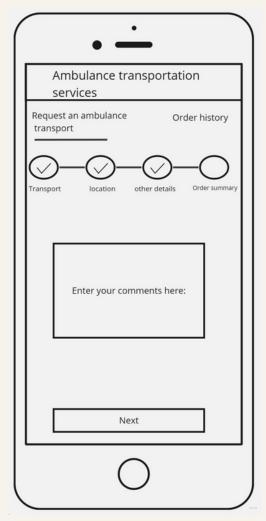


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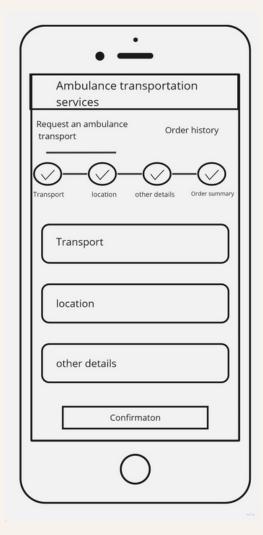


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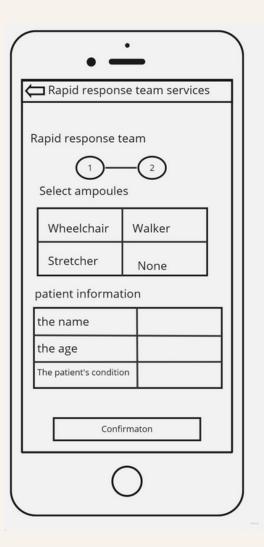


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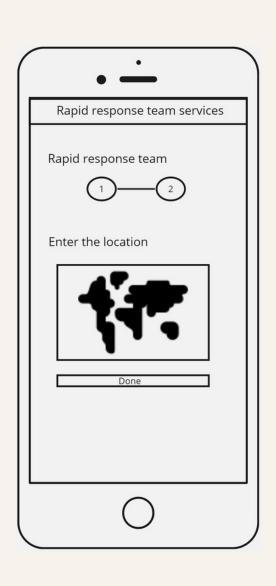


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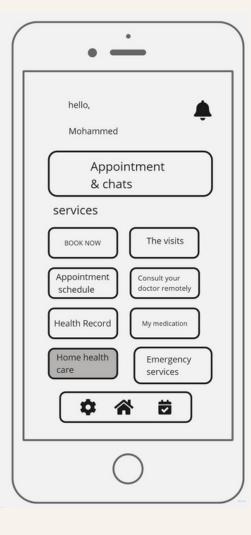


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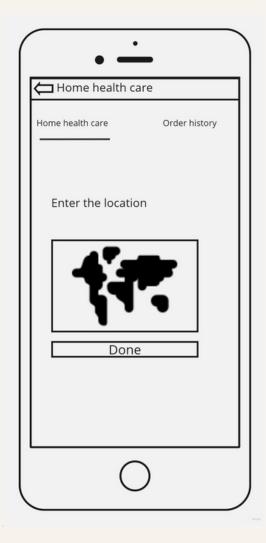


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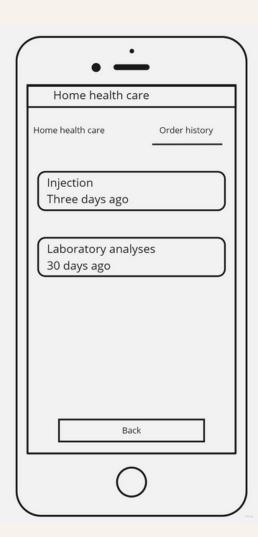


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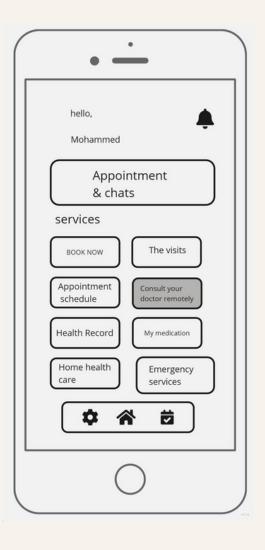
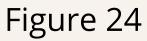


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Figure 23





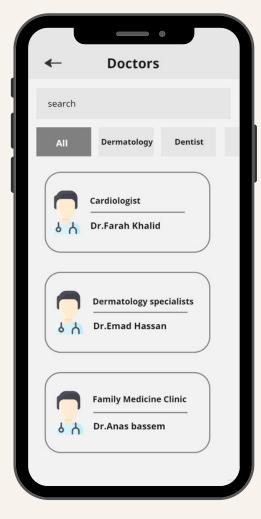


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Figure 26

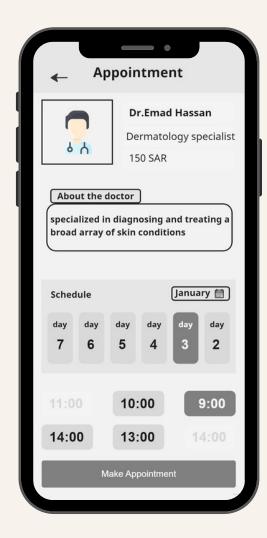


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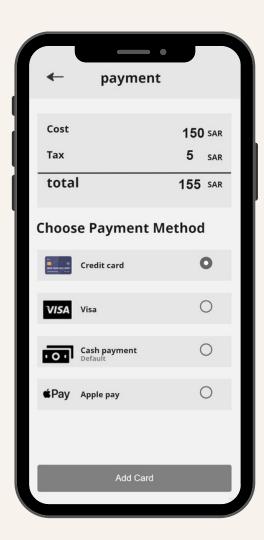
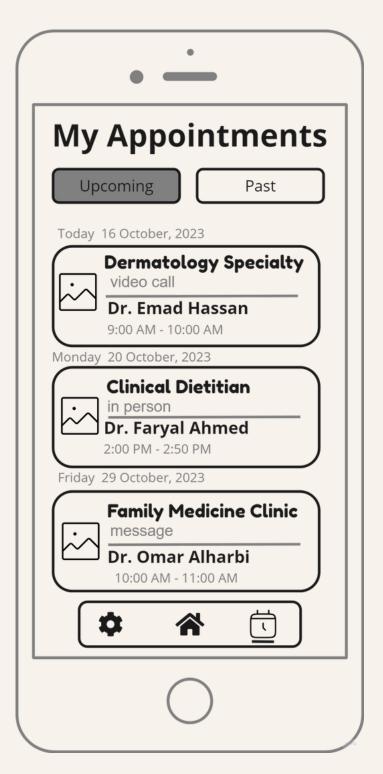
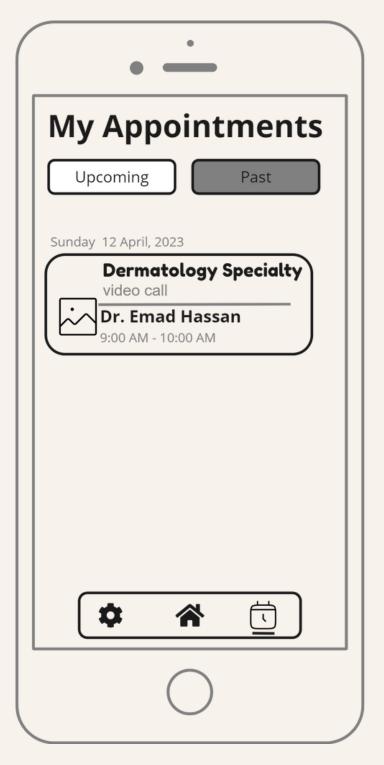


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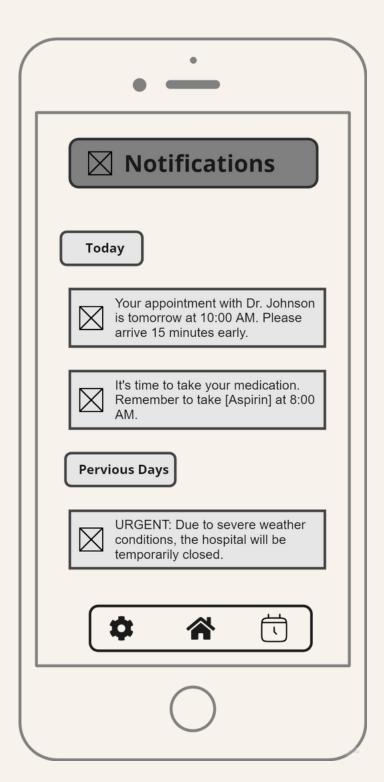
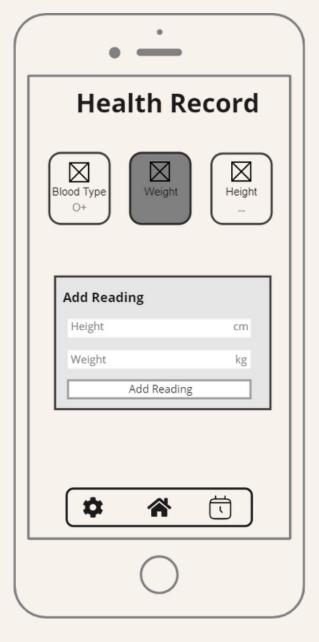


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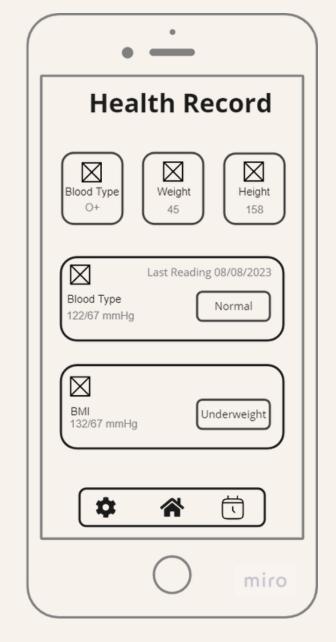
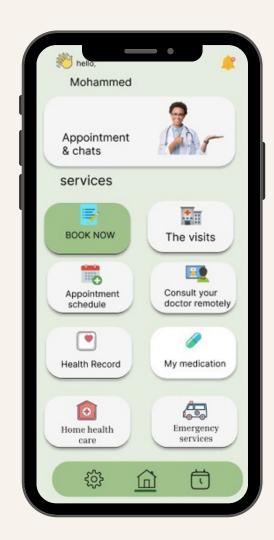


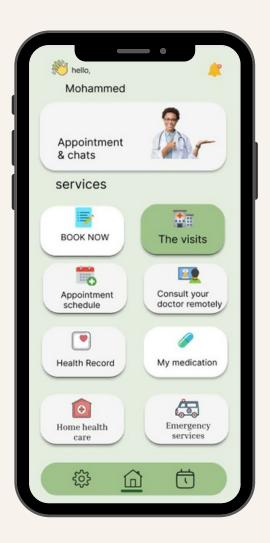
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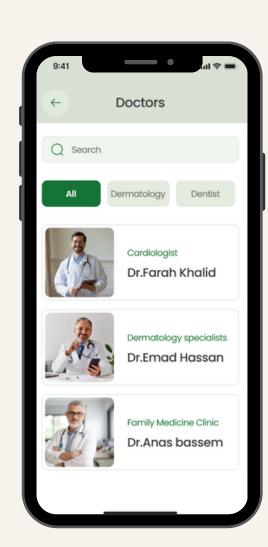


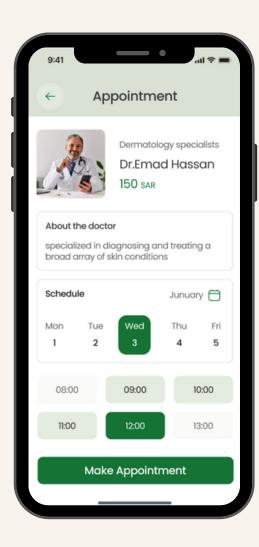


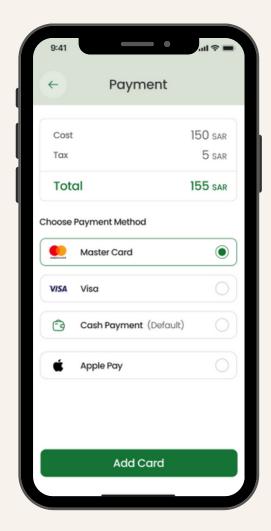


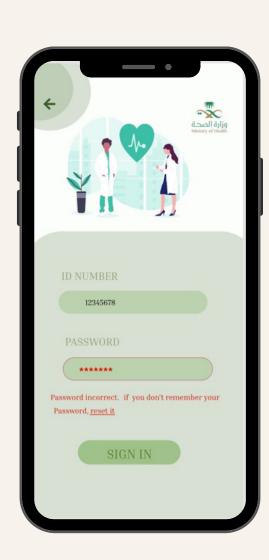


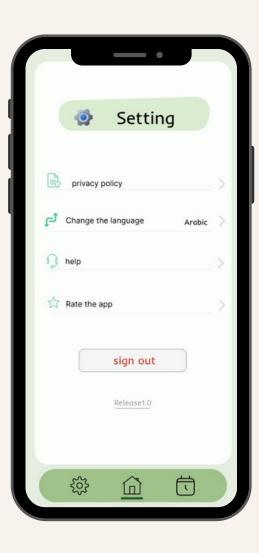


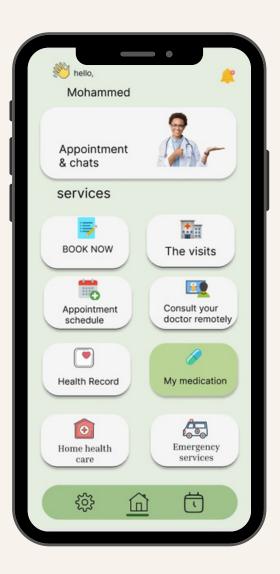


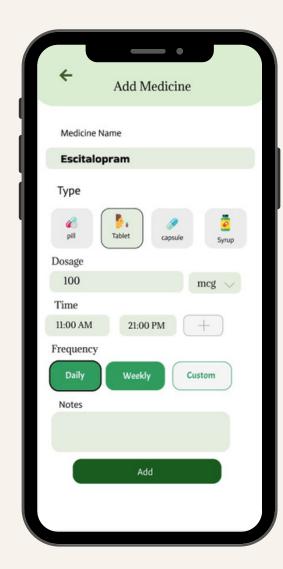


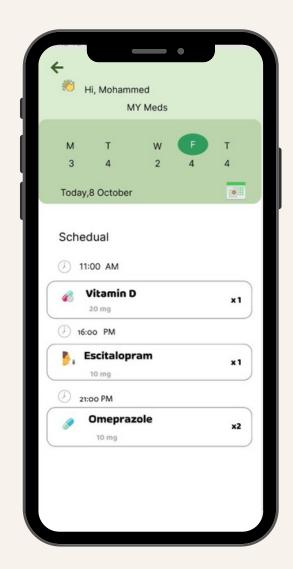


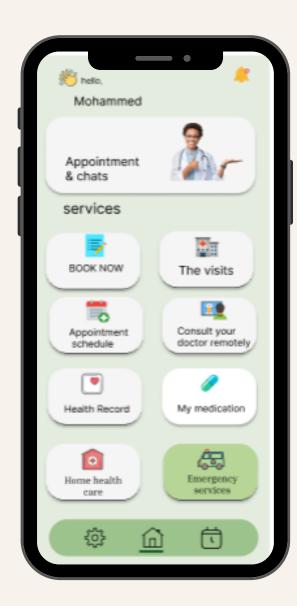


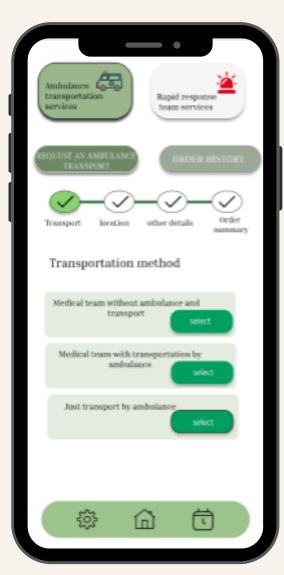


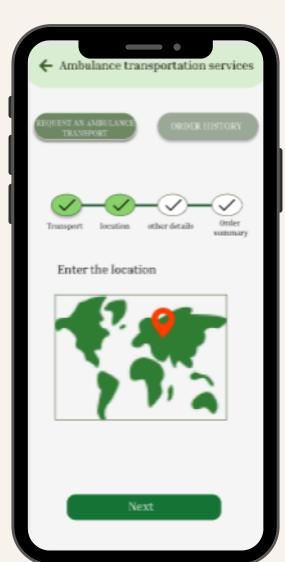


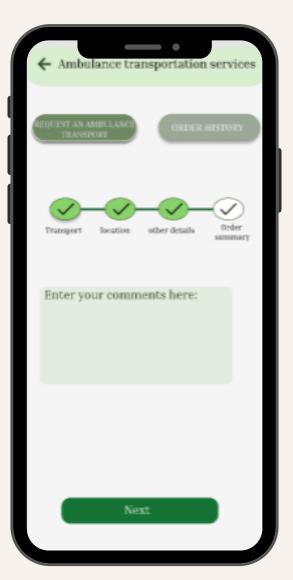


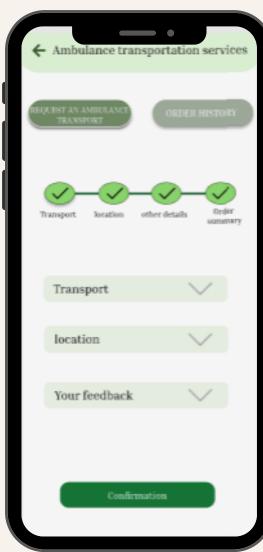


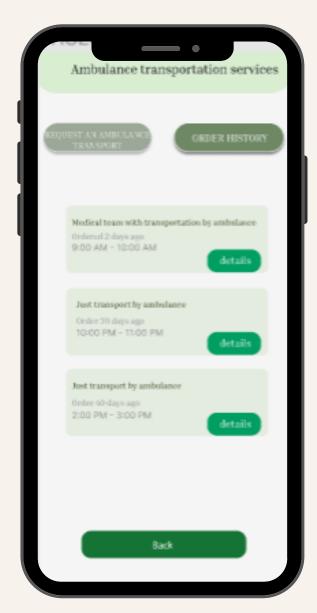






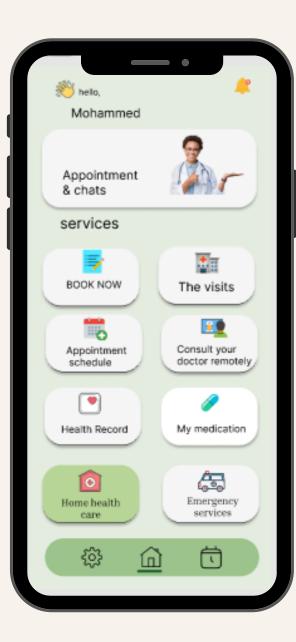




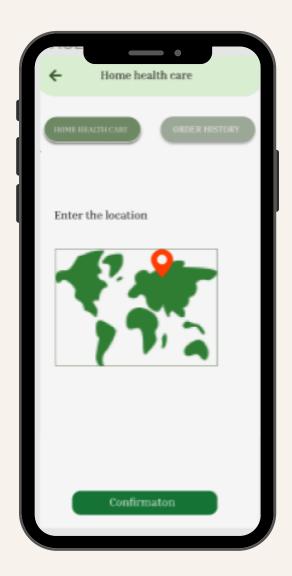


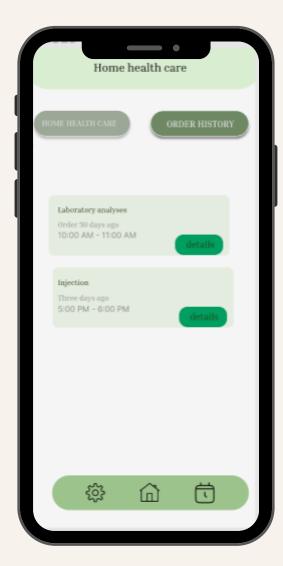


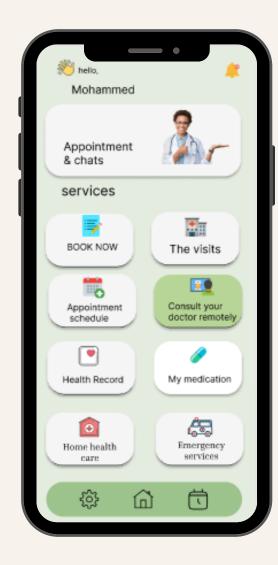


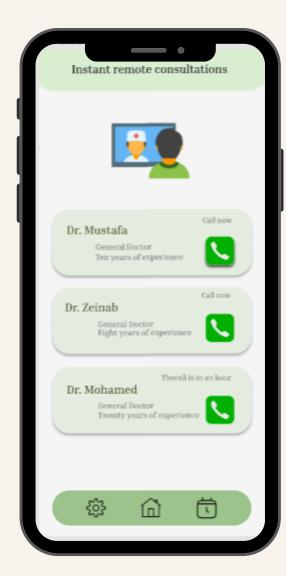




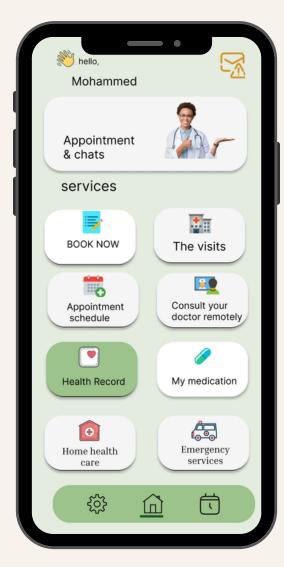


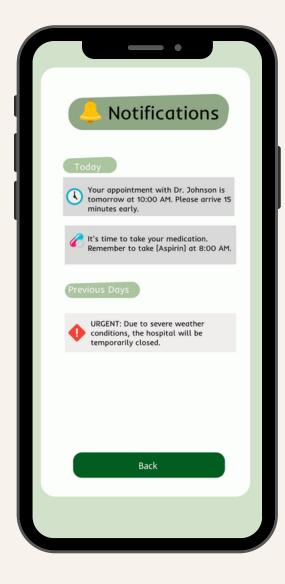


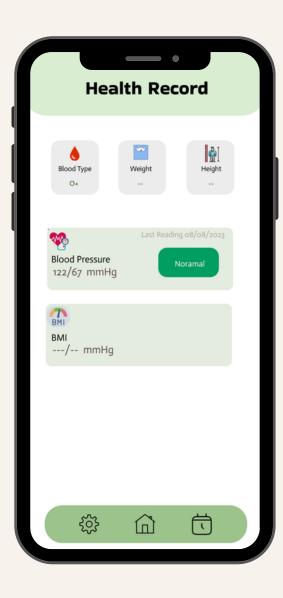


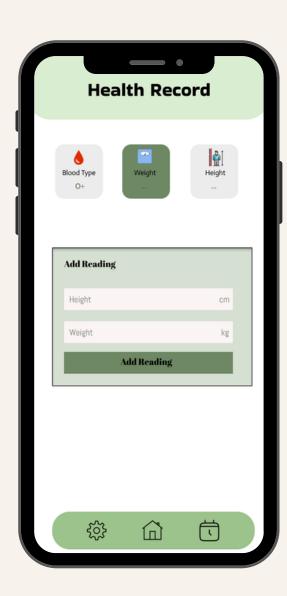


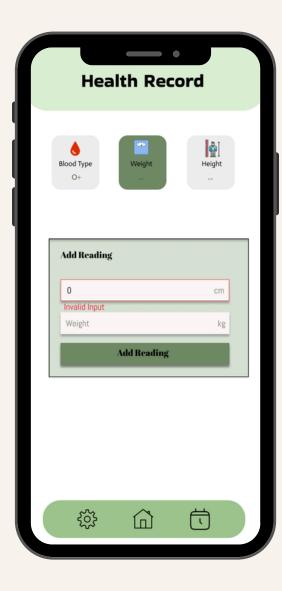


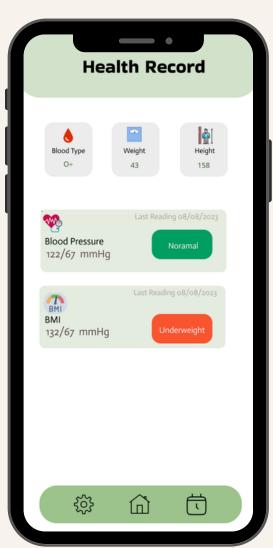




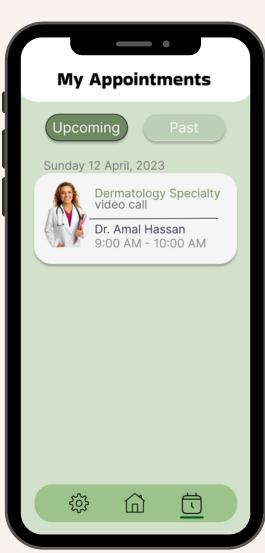












• Notification Icon:

- Allows the user to access their personal alerts and notifications.
- Notifications may include upcoming appointments, health-related alerts, or other information relevant to the user.

• Health Record:

- Displays important health information for the user, such as blood type.
- Can record health measurements like blood pressure and body mass, whether input by healthcare staff or entered by the user themselves via the application.

• My Appointments Page:

- Provides access to the user's upcoming and previous appointments.
- Offers detailed information for each appointment, including the clinic name, doctor's name, appointment time, and the type of appointment.
- Presents appointment information in a chronological and organized manner, making it easy for the user to manage their appointments.



O: No Usability Issue - No usability issues were identified during the evaluation.

1: Cosmetic Issue - Minor visual or cosmetic issues that have no impact on usability.

2: Minor Usabilty Issue - Minor issues that hava a slight impact on the user experience.

3: Minor Usabilty Issue - Noticeable issues that hinder the user experience to some extent.

4: Minor Usabilty Issue - Severe issues that significantly impede the user experience.

Appendix

Heuristic violated	seve rity	Figure	Description	improvments
Help and Documentat ion	2	Figure 27	The app does not offer a live chat support option for real time assistance during the payment process.	adding a live chat support option to provide real-time assistance during the payment process, enhancing user experience and addressing any concerns promptly.
Visibility of System Status	4	Figure 28	it does not inform users about the successful completion of a payment step.	Users should get immediate responses to their payment-related inquiries.
Match between the system and real world.	က	Figure 27	In the reservation of the appointment, there is no year and this does not match the reality.	Users should easily differentiate appointments occurring in different years, ensuring accurate scheduling and avoiding confusion.
Aesthetic and Minimalist	3	Figure 8	Page colors are distracting	use a more harmonious color scheme on the pages to reduce distractions and enhance visual clarity.

Conclusion

In reviewing our hospital app using the usability guidelines, we have gained crucial insights into its strengths and areas needing enhancement. Our app, "HealthPortal", has proven its effectiveness in guiding users clearly through various features and maintaining a consistent design. It excels in ensuring users recognize, rather than recall, their information, leading to a smooth experience.

References

[1]

https://www.teladoc.com/ways-we-help/primary-care/

[2]

https://medisafeapp.com/features/

[3]

https://icons8.com/icon/

[4]

https://miro.com/ar/