My Health

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Figure 1: We worked together and she helped us with most of the work

1 Chapter1

1.1 Background

My health is an electronic platform for providing health services to individuals in the kingdom of Saudi Arabia. The platform allows the user to access health information and obtain a number of health services provided by various entities in the health sector in the kingdom, including services for updating and following up vital examinations, tracking consumed medicines, reviewing and sharing sick leaves, developing a healthy lifestyle, and other services related to individual and Family Health and increasing health awareness. It is offered under the supervision of the Ministry of Health in the kingdom of Saudi Arabia as an extension of its mission to develop the levels of healthcare provided and its services .

"My Health" is an electronic platform that provides a range of health services to individuals in the Kingdom of Saudi Arabia. The platform allows users to access their personal health information and benefit from various health services provided by different entities in the health sector across the kingdom. It is developed and operated under the supervision of the Ministry of Health as part of its mission to enhance healthcare levels and services offered to citizens and residents.

1.1.1 introduction

Who Uses the Platform?:
All individuals in the Kingdom of Saudi Arabia, whether citizens or residents. People of all age groups, including children, the elderly, and individuals with special needs.
-Languages Supported:The platform is available in both Arabic and English, ensuring accessibility for a wide range of users.
-Objectives of the My Health App:Simplify and organize access to essential health information in one secure and easy-to-use platform,Provide effective and efficient health services to individuals across the kingdom ,Increase health awareness among individuals and families.
-Problems the App Solves:Simplified Access: My Health offers centralized access to important health information, reducing the burden on individuals to manage their healthcare.
-Security: The platform ensures the protection of sensitive health data by using advanced encryption and security measures.
-Needs Addressed:Appointment Booking: Users can book appointments either in-person or remotely with doctors and healthcare centers
-Medication Management: Helps store and remind users of their prescribed medications ,Instant
-Consultations: Provides quick access to remote consultations with healthcare professionals.
-Children's Vaccinations: Enables the registration and tracking of children's vaccinations.
-Review Medical Reports: Offers an easy way to review sick leaves and other medical reports. In summary, My Health is a comprehensive platform designed to improve the health and well-being of individuals in the Kingdom by providing modern and integrated digital healthcare solutions. Who uses the platform?
my health platform serves all individuals, citizens and residents of the kingdom, with their children, the elderly or with special needs. What languages are available on the service The ministry provides its electronic services in both Arabic and English
Why Does My Health app exist ?
It allows the user to access health information and get a number of health services provided by various entities in the health sector in the kingdom of Saudi Arabia.
What problems do you solve?
Organize and facilitate access to important health information in one secure place .
What needs do you address?
She has many needs that she has addressed , including: Appointments (remote, existential) Save the list of medicines. Instant consultations. Register of children's vaccinations. Review sick leave and medical reports. Services Offered by the My Health Platform: Vital Examinations Monitoring: Users can update and follow up on health metrics like blood pressure and sugar levels, Medi-

cation Management: Track consumed medications, including dosage schedules and medication reminders,Sick Leave: Users can review and share their sick leaves and access medical reports,Healthy Lifestyle: The platform provides services aimed at promoting a healthy lifestyle, including tracking physical activity and nutrition. Family Health Services: It allows users to monitor the health of family members, including registering and following up on children's vaccinations and offering healthcare support for the elderly and individuals with special needs. Instant Consultations: Provides immediate health consultations through the app, enabling communication with doctors and specialists remotely.

Figure 2: The goal of this question is to solve the problems that users may face and we have worked to solve the problems that they may face and explain how to use the application by placing illustrations .

1.1.2 Survey

The number of users of the my health application exceeded [30 million], which reflects the importance of the application in improving access to health services in the Kingdom, and these statistics are considered a strong indicator of the effectiveness of the "my health" application in improving the quality of health services, facilitating access to medical information, supporting public health in the community, and enhancing the ability of the Ministry of Health to meet the needs of citizens.

Data and Analysis These statistics are thought to be a strong indicator of the effectiveness of the "my health" application in improving the quality of health services, facilitating access to medical information, supporting public health in the community, and enhancing the Ministry of Health's ability to meet the needs of citizens. It has been found that %98 of users prefer to use the my health application to provide most of the electronic services that provide them with a shorter time, and a number of them prefer electronic services in terms of booking appointments and review of prescriptions and test results. We made statistics for the students who use the Sehaty application and we asked them some questions from them . The answers were.

Figure 3: About the second question what are the features that have the most benefit in the application of my health we put a lot of good things The goal was more distinctive knowledge that is useful and developed better

Figure 4: about how easy it is to book appointments, how often it is easy, and our goal is to evaluate the ease of booking, search to know if it is easy to use or need to make an easier way for users .

Figure 5: about do you advise users to use the Sehaty application, most of the answers were yes, and the aim was to know if the users are satisfied with the application or not .

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Figure 6: He was directing him, does he have suggestions for the application of my health? Most of them did not face a problem, and the goal was to increase the application with some user suggestions. As for the problem of the interfaces, they can be improved to the interface so that it describes more of the existing systems .

1.1.3 Existing System

Electronic systems that work use software and hardware that work together to perform specific functions . - Security systems and information protection so that they preserve users' information
- Electronic booking systems Allow users to book appointments with the choice of doctors and health centres.
- Health Data Management System Stores all users' health records with medical history, tests and medications.
- Notifications and alerts system Sends users about appointments, medications and necessary tests.
- Education system Health information and instructions for prevention and awareness are sent to users.

	advantages	disadvantages
Ambulance app	Open emergency notifications: You can open an report. Accurate location: Helps pinpoint your exact location and send urgent distress. Support for people with special needs: Provides support for the deaf and dumb category to submit reports. Track reports	User interface: The application interface may be intuitive for some users. Technical issues: Sometimes users may have problems connecting or determining the exact location.
my chaetr	Access to health records. Book Appointments. Communication with doctors. Notices. Integration with devices: The app can be linked with devices like Apple Watch to receive notifications and track health status12.	Limited availability: Some features may not be available to all healthcare providers. Technical issues: Sometimes users may have problems connecting or using the app. Internet dependence: Requires a good internet connection to access all services
Appointment App	Book appointments: You can book appointments at health centres and hospitals affiliated with the Department of Health. Manage appointments: Easily edit or cancel appointments. Appointment reminders: The app sends you reminders of upcoming appointments. Various services	Technical issues: Sometimes users may have problems locating or arranging appointments. Update data: There may be delays in updating health information
Tabtam Application	Medical Consultations: Provides remote medical consultations with certified doctors. Home medical services: You can request home medical services such as nursing and physiotherapy. Medication management: You can manage medications and prescriptions. Various services: such as requesting laboratory tests and vaccinations.	Cost of services: Some services may be expensive compared to other applications. Technical issues: Sometimes users may have problems connecting or using the app

Figure 7: Caption

1.1.4 Advantages / Disadvantages

which reflects the importance of the application in improving access to health services in the Kingdom. Pictures of our truth,

2 Chaptr2

2.1 Requirements

2.1.1 functional requirements for the health program

1.Personal Account Management:
- Login and create a new account using user data.
- Update profile and health information.

2.Booking Appointments:
- Search for doctors and health facilities.
- Book, modify, and cancel appointments.
- Receive appointment confirmations and ticket notifications.

3.View Medical Records:
- Access personal medical history, including prescribed medications.
- View results of medical examinations and laboratory tests.

4.Electronic Medical Prescriptions:
- Request prescription renewals electronically.
- Communicate with doctors to discuss medications.

5.Communication with Doctors:
- Consult doctors remotely via text messages, voice, or video calls.

6.Notifications and Alerts:
- Send notifications for appointment dates, medication intake schedules, and periodic health tests.

2.1.2 non-functional requirements for the health program

1.Performance:
- Ensure the system is responsive and high-performing, allowing users to access services without significant delays.

2.Security and Privacy:
- Protect sensitive user data, such as medical records and personal information, using encryption technologies.
- Ensure compliance with health data protection standards (e.g., HIPAA).

3.Scalability:
- The system must be scalable to handle an increasing number of users and data efficiently.

4.Ease of Use:
- Provide a simple, intuitive, and user-friendly interface suitable for all age groups.

5.Availability:
- Ensure 24/7 system availability with minimal unplanned interruptions.

6.Integration with Other Systems:
- Integrate with health systems, hospitals, laboratories, and medical safety databases for seamless operation.

7.Technical Support:
- Offer reliable technical support to assist users with any issues or inquiries.

8. Efficiency:

• Optimize resource usage to minimize battery and data consumption on mobile devices.

9.Device Compatibility:

• Ensure compatibility with different operating systems, including iOS and Android, and support various screen sizes.

2.2 conclusion

We concluded from the requirements, there must be a balance between jobs and performance, there must be a good balance of functional, non-functional and functional requirements And have high performance to avoid problems and focus on the experience of users and improve their experiences and work on them to increase the number of users As for security, security and privacy must be provided to users to protect data and use encryption technology so as to avoid problems and increase the number of trusted users in the application And compatibility between devices, application systems must be compatible with devices to use the largest possible number of users Appointment booking indicates the presence of the feature of modifying and cancelling appointments and to enhance the user to use it and medical records for easy access to the user's history and electronic prescriptions Ease to renew the prescription application electronically enhance the comfort of the user and reduce visiting clinics

3 Chaptr3

3.1 Design

3.1.1 System Architecture

No interface design or database has been found, so we suggested from our point of view that it might be used.

1.1.4User Interface (UI) Design For interior design and be easy and attractive to the user Responsive design to ensure that the app can be used on mobile and web platforms

User-friendly navigation Simple navigation bar action with easy access to key features Accessibility features have support for screen readers and high contrast modes to help users with disabilities.

1.2.4 The user experience (UX) focuses on providing user translation and reducing the number of unnecessary steps to access information faster

To design an API Its purpose is to integrate with external health services to obtain test results, vaccination records, etc

Database layer The database is centralised to store user information, prescriptions, tests and appointments

3.1.2 Database

MySQL Database Storing data: such as user profiles, appointment details and medical records, and the user has to store user information such as (ID, name, contact details)

Data encryption The data is stored by encrypting sensitive information in the database (such as user passwords, health records)..

The infrastructure of the application system works on servers and integration with systems in terms of servers works on strong and reliable servers to ensure and provide service for a longer time, either integration with systems works to link data and application to hospital and laboratory systems Pennsy for technical support works to provide technical support The service is twenty four hours to communicate with users, solve their problems and answer their inquiries Updates Make application updates periodically to ensure that the application is improved and be free of problems and errors and to give better performance
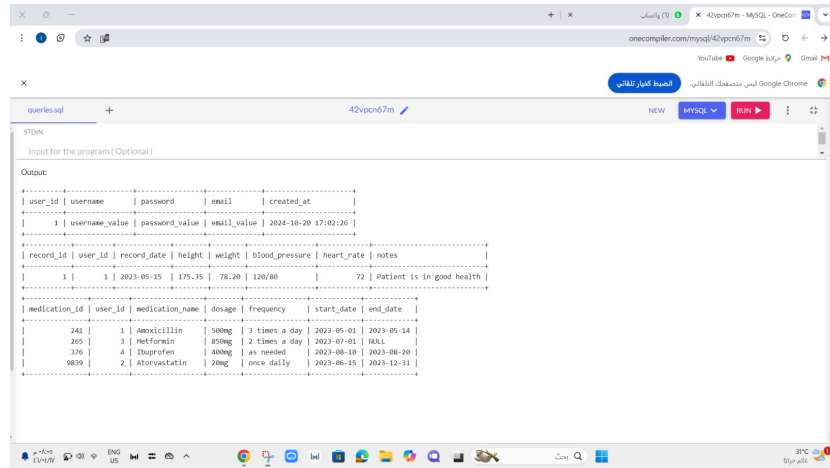
Figure 8: Database My health

3.1.3 System structure language

The languages of the system architecture have a lot of languages that optimize and organize the program better and differently, including Python code that calculates weight, height and BMI.

```python
class HealthSystem:
    def __init__(self, weight, height):
        self.weight = weight
        self.height = height

    def calculate_bmi(self):
        return self.weight / (self.height ** 2)

person = HealthSystem(70, 1.75)
bmi = person.calculate_bmi()

print("BMI:", bmi)
```

Figure 9: Weight and height only: the user enters the weight and height. Body mass index (BMI) calculation: calculates BMI directly

3.2   application

Explain how to use the application and access the needs more easily
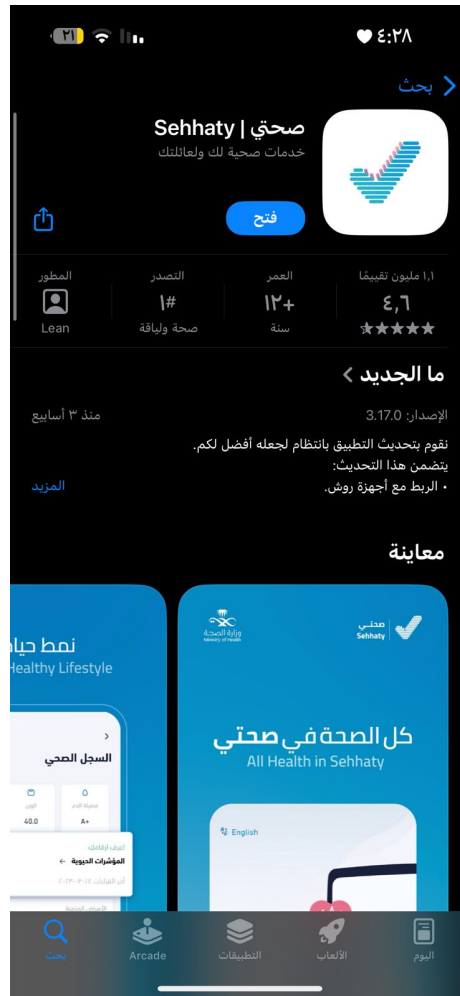
Figure 10: Go to the App Store, type in the search box "My Health" then click
on Install.
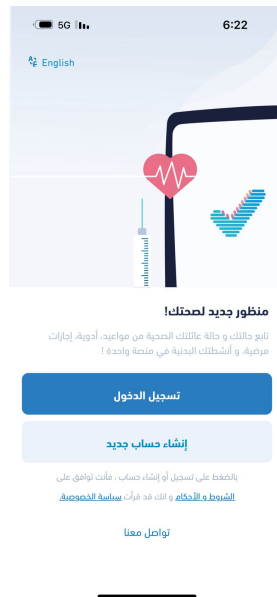
Figure 11:

Login or Create a New Account Screen This screen is the first thing you see when you open the application. Options: Log in: If you already have an account, you can enter your login details (ID number and password) to access your services. Create a new account: If you are a new user, you will need to enter your personal details such as name, national ID or residency number, mobile number, etc. to create an account Also, at the top there is an option to change the language to English by clicking on English At the bottom of the screen, there is a "Contact Us" link, allowing users to access contact information in case they need assistance or inquiries.
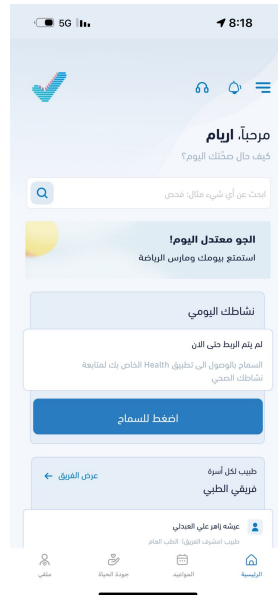
Figure 12:

1.Three horizontal lines: Usually indicates a navigation menu containing settings or additional options. This menu is used to provide quick access to multiple sections within the application.

2. The bell usually represents notifications. When clicked, the user can see important alerts or messages, such as updates or reminders related to activities or health events.

1. User greeting: At the top, a welcome message such as Hello Aryam appears with a question about the user's status today.

2. Search bar: There is a search bar at the top, allowing the user to search for specific content or information easily.

3. Weather: Under the search bar, a section appears that displays the average weather today, providing information about the current weather.

4. Today's activity: There is a section dedicated to Today's activity that includes details about the physical or health activities that can be done.

5. Allow button: There is a button titled Press to allow, which indicates an action that the user can take to activate certain features.

6. Bottom menu: There is a navigation bar at the bottom that contains options such as "Home", "Quality of Life", "Content", and others, making it easy to access different sections of the application.
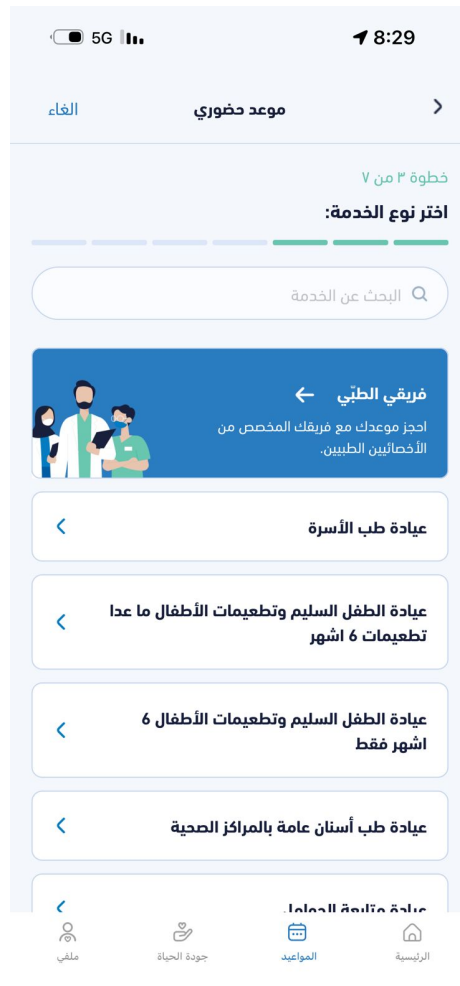
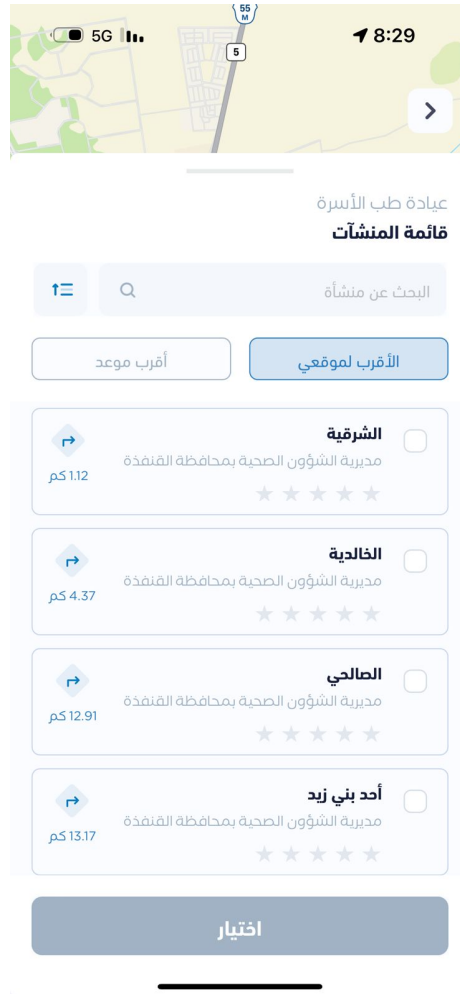Figure 13: Click New Appointment Booking

Figure 14: Choose the type of service

Figure 15: Choose the nearest health center to you, then click on what suits you (in-person appointment, immediate consultation, virtual appointment

Figure 16: Select appointment details (date and time)

Figure 17: Review the appointment details and click Confirm Booking

Figure 18:

- User details: Displays the username "am Zubaidi "with his health number"30000199692793". There is also a Details button to view more information about the health profile.

- Alerts: A message appears in the middle of the screen titled Demo launch from the user evaluating the services provided at this beta stage of the application.

-Our partners: A list containing the names of health facilities that have been successfully linked with the" Nafis " project for the unified health file. Icons are displayed for some facilities such as the Saudi Ministry of Health, the Johns Hopkins Center, and others, with the explanation that there are more than 40 facilities available.

- Health profile: Displays multiple sections to enable the user to access health information easily. The sections are arranged in a grid of

- icons and contain: Medicines: to access the prescriptions of medicines. Health record: to view the user's health history. Laboratory tests: to view the results of the tests. Women's health: a section dedicated to women's health. Visits: to view hospital visits. Operations and procedures: to see the surgeries or medical procedures that have been performed. Vaccinations: to follow the vaccination history. Prescriptions: to view prescriptions
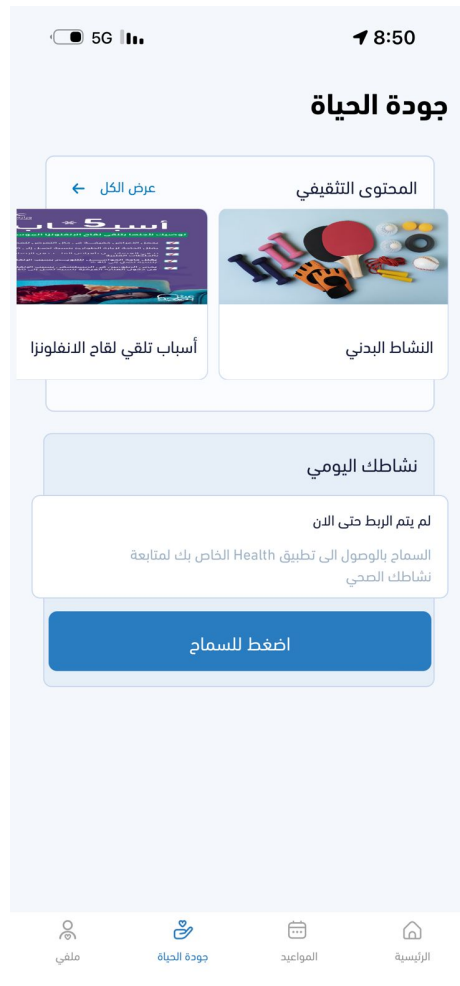
Figure 19:

3.3 Conclusion

Summary of what has been done in the architecture of the system my health application has been working on:User interface design (UI)In terms of interior design, our work should be easy and attractive to the user.The design will be responsive to ensure the use of the application and others. User experience (UX)Focus on delivering a smooth user experience and reducing unnecessary steps to access information quickly. API design Their purpose is integration with external health services .MySQL database: storing data such as user profiles.Data encryption: encrypted data is stored to protect sensitive information. Structure of the systemPowerful servers: to ensure the service is provided for a long time. Systems integration: linking data and application to hospital and laboratory systems.Technical support: Provide technical support around the clock to solve problems , periodic updates. Application usage CIt was explained how to download the application from the App Store and install it.How to log in or create a new account: enter user data to log in or create a new account and others.

4 Conclusion

In conclusion, we can conclude that the "My Health" application is an effective tool to promote health awareness and motivate individuals to take positive steps towards improving their lifestyle.my health application is designed specifically to meet health care needs and is based on the services provided by the Ministry of Health and is characterized by Ease of Use and aims to develop awareness and send reminders of important appointments. We look forward to developing it and encourage all users to continue to use it and benefit from it to the maximum with its features to determine and achieve their health goals

5   References

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