# Digital Care

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## Introduction

The Medical Consultation Application is an innovative platform aimed at providing specialized medical consultation services to users via smartphones or the internet. This application allows users to access reliable medical information, communicate with specialized doctors, and receive timely medical consultations. In light of the increasing health challenges, it has become essential to provide technological solutions that facilitate access to healthcare.

## 1 Digital Care App Requirements

## 1.1 Functional Requirements

## 1.1.1 Providing Remote Medical Consultations

The system must allow users to obtain medical consultations via phone or video.

#### 1.1.2 User Registration

The system must include an interface for registering new users and storing their personal information.

#### 1.1.3 Appointment Scheduling

The system must enable users to schedule appointments according to their schedules.

#### 1.1.4 Providing Reliable Medical Information

The system must include a library of medical information to help users understand their symptoms.

#### 1.1.5 Improving Communication between Patients and Doctors

The system must provide effective means of personal communication between patients and doctors.

#### 1.1.6 Providing Continuous Support for Common Health Problems

The system must allow users to receive continuous support for common health problems.

#### 1.1.7 Securing Personal Data

The system must include mechanisms to protect users' health information and personal data.

## 1.2 Non-Functional Requirements

### 1.2.1 Ease of Use

The system must be user-friendly, with a simple and straightforward user interface.

### 1.2.2 Security and Privacy

The system must include a strong security system to protect user data and ensure privacy.

## 1.2.3 Availability

The system must be available 24/7 to meet users' needs at any time.

#### 1.2.4 Cost

The cost of the services should be reasonable, with subscription options suitable for students and low-income groups.

#### 1.2.5 Performance

The system must be able to handle a large number of users simultaneously without affecting performance.

## 1.2.6 Technical Support

Technical support must be available to assist users with any issues they may encounter while using the system.

## 2 Digital Care Task

## 2.1 Consultations

Allow users to obtain medical consultations via phone or video.

## 2.2 System Availability

Ensure the system is available 24/7 to meet users' needs at any time.

## 2.3 Cost Management

Provide affordable service options with flexible subscription models.

## 2.4 Medical Information Library

Provide access to a library of reliable medical information to help users understand their symptoms.

## 2.5 Data Security

Ensure secure handling of users' health information and personal data.

## 2.6 Technical Support

Provide technical support to assist users with any issues they may encounter while using the system.

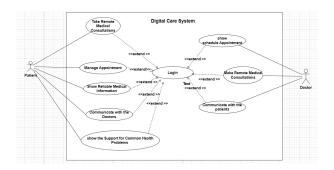


Figure 1: Enter Caption

## 3 Purpose Of The App

The program aims to facilitate access to medical consultations through an electronic platform, helping patients obtain convenient and fast healthcare without having to go to the hospital.

### 3.1 Problems it Solves

## 3.1.1 Inability to Access Healthcare

Some people face difficulty in reaching hospitals due to lack of transportation or long distance.

## 3.1.2 Long Waiting in Queues

Waiting for a long time to obtain medical advice is a major challenge for patients.

### 3.1.3 Concern about Infection

Some may avoid going to the hospital due to infection.

## 3.2 Needs it Addresses

### 3.2.1 Providing Immediate Remote Medical Consultations

Providing immediate remote medical consultations to patients.

## 3.2.2 Continuous Support for Common Health Problems

Continuous support for common health problems without having to visit hospitals.

#### 3.2.3 Access to Reliable Medical Information

Access to reliable medical information to help them understand their symptoms.

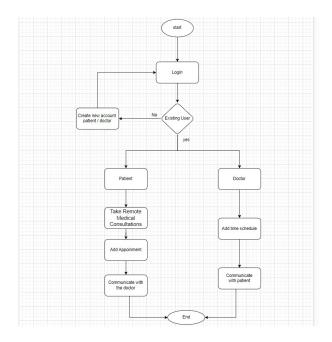


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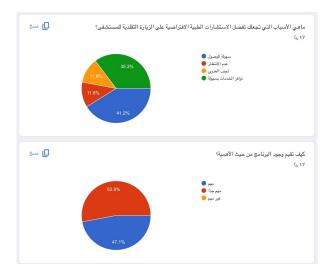


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### 3.3 Display a Survey Based on Asking Some Questions to People

We conducted a survey of students to collect their opinions about this program and the result was as follows:

Based on the survey results, several points emerge about the importance of the program and improving program implementation.

The reasons that make students prefer virtual consultations vary between ease of access (41.2%), not needing to move (35.3%), in addition to infection concerns.

The conclusion shows that most students consider virtual medical consultations important, as 52.9% feel that the presence of the program is very important and effective.

Among the important advantages that students expect are ease of use (50%) and reducing costs (16.7%). These points indicate that the program can attract more users if it focuses on simplifying the process and providing lower costs compared to going to the hospital.

The most common concerns are the lack of personal communication with the doctor (47.1%), and concerns related to privacy and information security (29.4%). These concerns must be addressed by providing data protection and providing effective means of communication that allow the patient to feel comfortable.



Figure 4: Your caption here

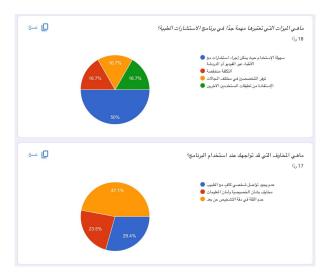


Figure 5: Your caption here

## 3.3.1 How to Improve the Program

Improve Communication between Patients and Doctors Provide effective ways of personal communication so that the patient feels comfortable and reassured.

**Enhance Protection and Security** Provide a strong security system that protects users' health information and personal data.

Ease of Use Ensure that the system is easy to use, and provide users with a guide on how to use it effectively.

## 3.4 Similar Applications

There is a similar program for digital care:

## 3.4.1 Teladoc Health

Advantages Provides medical consultations via phone or video. Available 24 hours a day.

**Disadvantages** The cost of services may be high for some users. Lack of specialists in all health fields.

Teladoc Health	Digital Care	In Terms of
Phone or video consul-	Instant remote medical	Services provided
tations with professional	consultations	
doctors		
Special services including	Support for common	
mental health, dentistry,	health problems	
and other medical services		
Provides archives of	Providing reliable medical	
health problems and the	information	
ability to communicate		
with specialist doctors		
Saves patient waiting time	Lack of access to health	Problems it solves
by providing instant con-	care	
sultations		
Addresses challenges re-	Long waiting times for	
lated to accessing care in	consultations	
isolated areas		
Provides medical support	Concern about infec-	
to patients who are afraid	tion, especially during	
to go to hospitals	epidemics	
Simple and easy to use	Focuses on facilitating ap-	Ease of use
interface but may require	pointments and consul-	
some initial registration	tations according to the	
	user's schedule	
Service costs may vary	It can be more financially	Cost
and often require sub-	convenient for students	
scriptions	or low-income groups be-	
	cause it is low cost	

## Conclusion

In conclusion, the requirements for implementing digital healthcare have been reviewed, encompassing both functional and non-functional requirements necessary to ensure the provision of reliable and effective medical consultation services. The importance of offering remote medical consultations, user registration, appointment scheduling, and securing personal data has been emphasized.

Additionally, the primary purposes of the application were discussed, such as facilitating access to healthcare and reducing issues related to waiting in hospitals, as well as concerns about infections. The results of a survey conducted with students indicated a significant interest in virtual services, highlighting the importance of ease of use and low costs to attract more users.

Finally, a comparison was made between the digital healthcare application and similar applications like Teladoc Health, emphasizing the features and drawbacks of each. The findings suggest that the digital healthcare application could be an ideal option to meet user needs if communication and security are improved, thereby enhancing their trust in using this service.