MEDI-E-CONSULT

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Abstract: A medical application android app is a software program that can be installed on a device running the Android operating system, such as a smartphone or tablet, and is designed to help users access and manage their medical information and receive medical assistance. providing users with access to emergency medical information and resources, such as phone numbers for poison control or emergency services. providing information about potential causes and treatment options for various symptoms. This project is based on the Mobile Application for online consultancy for people all around the world. This App allows us to consult ourselves while sitting at our homes. From this application, a user can input their symptoms, and based on the symptoms we can get to know the disease and can have the basic information regarding that disease. It provides links for more information and also options for finding nearby hospitals through google maps and provides the option for emergency calls.

Keywords: Medi e-consults, teleconsulting, telehealth, telemedicine.

I. INTRODUCTION

Electronic consultations (e-consults) are a promising approach to the challenge of improving access to specialty care. E-consults offer a rapid, direct, and documented communication pathway for consultation between primary care and specialist. They may avert the need for a face-to-face visit between specialist and patient. As a result, they have the potential to enable cost-effective and convenient care for patients while improving access to and coordination of specialty care across the system. As such, they may offer an appealing new modality for rational appropriation of health care services. We define an e-consult as an asynchronous communication between healthcare providers that occurs within a shared electronic health record (EHR) or secure

Web based platform. Referring providers send a consultation request to specialists, who can respond by answering the consult question, requesting more information, and/or scheduling a specialist appointment. The concept of using provider-to-provider communication to precede, enhance, or replace specialty visits is not new.

"Curbside" visits are common, and telemedicine modalities, including email and video conferencing, are increasingly used 1,2, but each has limitations. Curbside inquiries are informal, undocumented communications that no longer suggest expert evaluation of records and require simultaneous communication. Three email queries that are asynchronous but are not integrated into EHRs and do not require data evaluation. Four-way video conferencing between operators requires specialized hardware and simultaneous connections. Electronic consultations address many of these constraints; They formalize the position of chancellor, come out within a flexible and committed platform, and no longer require people to submit simultaneously. E-consultation has been pursued in increasing numbers in US academic centers, personal healthcare settings, and the Veterans Affairs healthcare facility, as well as internationally. Still, studies of its use and impact have lagged behind the enthusiasm for its implementation.

II. LITERATURE SURVEY

Both healthcare providers and patients can use Medical Consulting Apps to improve access to healthcare and manage data and medical needs. For healthcare providers, scientific consultation apps can provide a convenient way to connect with patients remotely and provide virtual care offerings, including follow-up consultations or appointments. Healthcare providers can also use medical advice apps to record and process patient data, including medical history, medications, and test results. For patients, medical consultation apps can provide a convenient way to access and monitor personal health statistics and contact healthcare providers remotely for medical assistance. Medical consultation apps can also help patients keep track of their appointments and medications and provide access to academic resources and records on many clinical conditions and treatments.

Overall, medical advice from apps can be a valuable tool for healthcare providers and patients to improve access to healthcare and manage medical desires. Integration with existing healthcare structures: Many scientific consulting applications are developing as standalone teams. However, there may be possibilities to integrate them more easily with existing digital health

records or with different healthcare structures.

Di Cerbo et al. [2015] The use of telemedicine has grown in many medical fields due to the increase in the number of "e-patients." This narrative summary provides an overview of the evolving use of telemedicine in private medical specialties and shows how its use can improve inpatient treatment. A search of PubMed/Medline, Embase, Web of Science, and Scopus fully used the following keywords: telemedicine, teleconsultation, telehealth, e-fitness, and e-medicine. The articles from 1996 to 2014 were selected based on their content (extraordinary and new). Telemedicine has already been applied to exclusive areas of medical practice and is as effective as face-to-face hospital treatment, at least for predicting and treating certain diseases. Telemedicine is time and value-efficient for patients and healthcare professionals, encouraging its wider use. Telemedicine provides professional hospital treatment for patients with hospitalization problems and ensures continuity of care and the use of available health resources. The use of telemedicine opens up new horizons for patients seeking a second medical opinion for their pathology, as they can access medical resources remotely that would otherwise require prohibitive costs and time.

Amadi-Obi et al. [2014] Their review is part of LiveCity's project to look at the history and current packages of telemedicine within a pre-healthcare setting. A search of digital databases was performed in combination with Medline, Extract from Medical Database (EMBASE), Cochrane, and Cumulative Index to Nursing and Related Health Literature (CINAHL) for relevant articles. All studies that reported on the use of telemedicine in prehospital or emergency care settings were protected. Of the total of 1279 articles reviewed, 39 met the inclusion criteria and were seriously reviewed. Most of the studies were about stroke treatment. Studies indicated that regular telemedicine had a remarkable effect on hospital emergency treatment. It has improved prehospital stroke and myocardial infarction resolution and improved tissue thrombolytic administration control in acute ischemic stroke. Telemedicine provides the opportunity to embellish the control of the affected person. However, there needs to be more definitive research that has established whether or not it affects clinical outcomes.

Bahaadinbeigy et al. [2010] At some point, telemedicine researchers tend to consult more than one bibliographic database to retrieve the widest variety of publications while performing review tasks. Online

Medical Literature Analysis and Retrieval (MEDLINE), the Excerpta Medica Database (EMBASE), and the Cumulative Index to Nursing and Allied Health Literature (CINAHL) are three popular biomedical databases that can be used to form opinions. Access to the MEDLINE database is flexible and seamless, while EMBASE and CINAHL are not free and sometimes difficult for researchers in small study centres.

Solanas et al.[2014] The new generation of cellular health through the widespread adoption of ubiquitous computing and cellular communications has opened up opportunities for governments and organizations to rethink their approach to healthcare. At the same time, the shape of global urbanization presents a unique challenge. It attracts interest in the direction of cities that are expected to gather more population and provide services to citizens in a green and humane manner. These trends have led to the emergence of cellular fitness and smart cities. In this article, we introduce the new idea of Smart Fitness, a context-aware complement to mobile fitness within smart cities. We provide an overview of the main areas of information that can be involved in building this new idea. In addition, we discuss the main challenging situations and opportunities that s-Health could mean and

provide common ground for further research.

Agusti Solanas et al. [2014] The new era of mobile health ushered in by the wide adoption of ubiquitous computing and mobile communications has brought opportunities for governments and companies to rethink their concept of healthcare. Simultaneously, the worldwide urbanization process represents a formidable challenge and attracts attention toward cities that are expected to gather higher populations and provide citizens with services in an efficient and human manner. These two trends have led to the appearance of mobile health and smart cities. In this article we introduce the new concept of smart health, which is the context-aware complement of mobile health within smart cities. We provide an overview of the main fields of knowledge that are involved in the process of building this new concept. Additionally, we discuss the main challenges and opportunities that s-Health would imply and provide a common ground for further research.

III. METHODOLOGY

The methodology for developing a medical application android app will depend on a number of factors, including the specific goals and features of the app, the resources available for development, and the target audience. In general, however, the

development of a medical application android app can be broken down into several key steps:

● **Define the problem or need that the app is intended to address**: This could include issues related to access to healthcare, managing personal health information, or addressing specific medical conditions or symptoms.

● **Identify the target audience**: Understanding the specific group of users that the app is intended for can help to guide the design and features of the app.

● **Define the intended use cases**: Understanding how the app will be used can help to inform the design and features of the app.

● **Develop a conceptual framework**: This should include a clear understanding of the purpose and goals of the app, as well as the target audience and intended use cases.

● Design and prototype the app: This may involve creating wireframes and mockups of the app's user interface and functionality.

● Test and iterate: Testing the app with a small group of users can help to identify any issues or areas for improvement.

● Launch and maintain the app: This may involve releasing updates and fixing any issues that arise over time.

● Determine the development team: Depending on the complexity of the app, you may need to bring on a team of developers, designers, and other specialists to help bring the app to life.

● Gather and analyze data: Depending on the specific features and functionality of the app, you may need to gather data from various sources, such as medical literature or user feedback, to inform the design and development process.

● Integrate with existing systems: Depending on the intended use of the app, you may need to integrate it with other systems or platforms, such as electronic health records or telemedicine platforms.

● Consider privacy and security: Medical apps often deal with sensitive personal and medical information, so it is important to consider the security and privacy of the app and its users. This may involve implementing measures such as secure login systems and encrypted data storage.

● Plan for ongoing maintenance and support: The development of a medical application android app does not end when the app is launched. It is important to have a plan in place for ongoing maintenance and support, including the release of updates and bug fixes as needed.

Overall, the development of a medical application android app requires careful planning and

attention to detail to ensure that the app is effective, user-friendly, and secure

SYSTEM ARCHITECTURE

The data-hiding PROCESS using the steganographic technique in this project can be explained using this simple block diagram (Architecture). The graphical block representation of this system is shown in **figure**
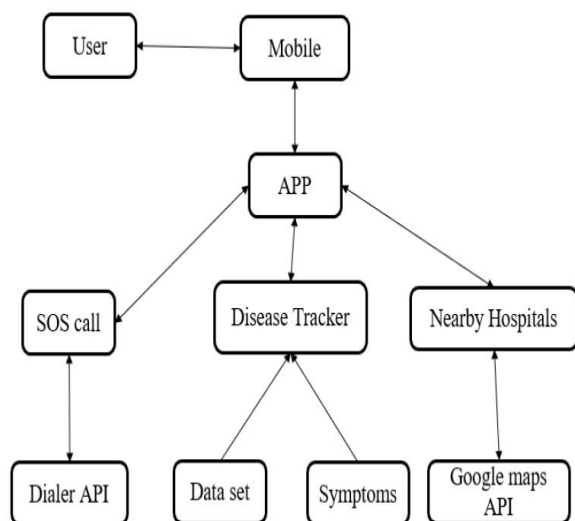

Fig.1 System architecture

Architecture Components:

User interface:

This is the front-end of the application, which is accessible to patients and healthcare providers through a web browser or a mobile app. It allows users to register, login, and access the various features and services offered by the platform.

Communication infrastructure:

This component enables secure and reliable real-time communication between patients and healthcare providers. It may include video conferencing software,

messaging tools, and other technologies to facilitate the telemedicine consultation.

Integration with external systems:

Telemedicine applications often need to integrate with other healthcare systems, such as electronic medical record (EMR) systems and laboratories. This component enables the exchange of data with these external systems to provide a more comprehensive and seamless telemedicine experience

IV. DESIGN AND IMPLEMENTATION

The design and development tools used include the following

● **Android Studio**

Android Studio is a development environment for building Android apps. It is based on the popular IntelliJ IDEA Java integrated development environment (IDE) and includes a range of tools and features specifically designed for Android development.

Android Studio is the official development environment for Android, and it is the primary tool used by developers to build, test, and debug Android apps. It includes a range of features that make it easier to develop Android apps, including a visual layout editor, a debugger, and an emulator

● **Java**

Java is an object-oriented language, which means that it is based on the concept of "objects"

that contain data and code to manipulate that data. Java is designed to be easy to learn and use, and it has become one of the most popular programming languages in the world. Java is used to build a wide range of applications, including web, mobile, and desktop applications. It is also commonly used to develop games, as well as to build applications for scientific and engineering fields.

● **Figma**

Figma is a collaborative web application for interface design, with additional offline features

enabled by desktop applications for macOS and Windows. The feature set of Figma focuses on user interface and user experience design, with an emphasis on real-time collaboration, utilizing a variety of vector graphics editor and prototyping tools. The Figma mobile app for Android and iOS allows viewing and interacting with Figma prototypes in real-time on mobile and tablet devices.

Algorithm :

Step 1: The sets of symptoms entered by the user are stored in arrays.

Step 2: It performs the search algorithms containing the data stored in hash maps

with the arrays and selected through switch case statements for the accurate match of the symptoms.

Step 3: When the symptoms are perfectly matched with all the symptoms which are there in the hashmaps then the disease will be directly searched from the existing data and the output will be displayed.

Step 4: Else the disease which contains the majority matches count will be considered and the output data for that disease is generated and displayed

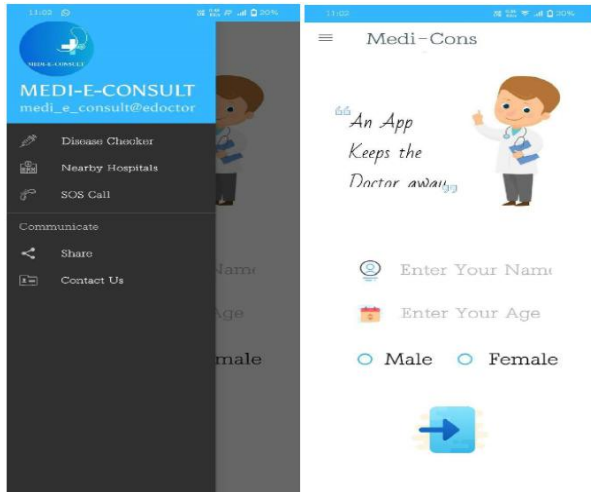## V.   RESULTS AND DISCUSSIONS

Fig .2 Welcome page

Fig.3 Homepage

After the welcome page, the user will be redirected to the home page of our application and here the user can be able to access all the modules which we have implemented can be seen in the menu of the home page. The home page contains the text fields where the user can input their name, age ,gender and continue to the disease checker module for the further process

This module contains a set of drop down menus where the user can input the symptoms and when he submits the symptoms using know your disease button then it will prompt the user to the disease that the symptoms may cause.
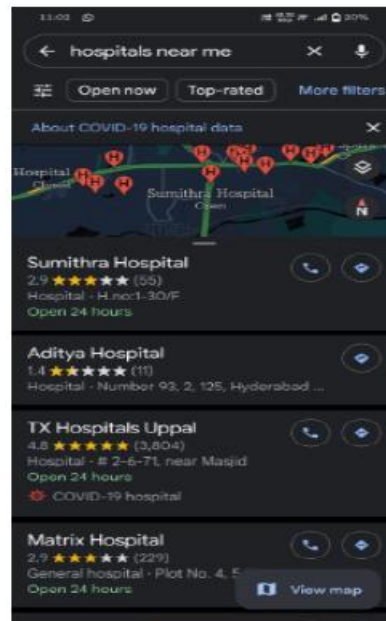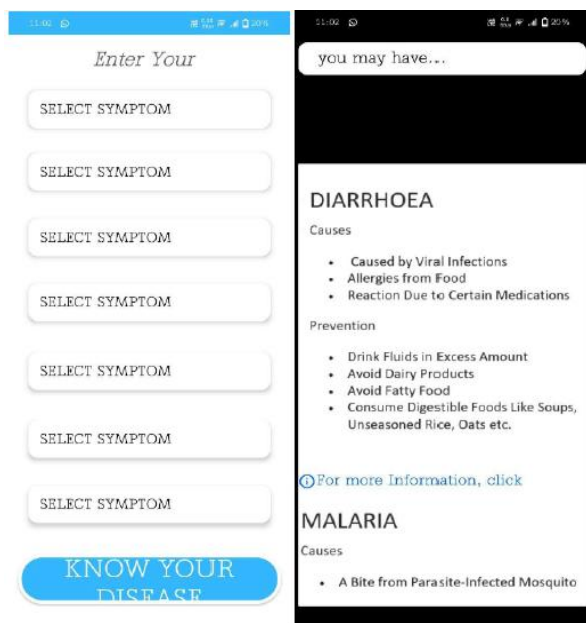

Fig.5 Nearby hospital
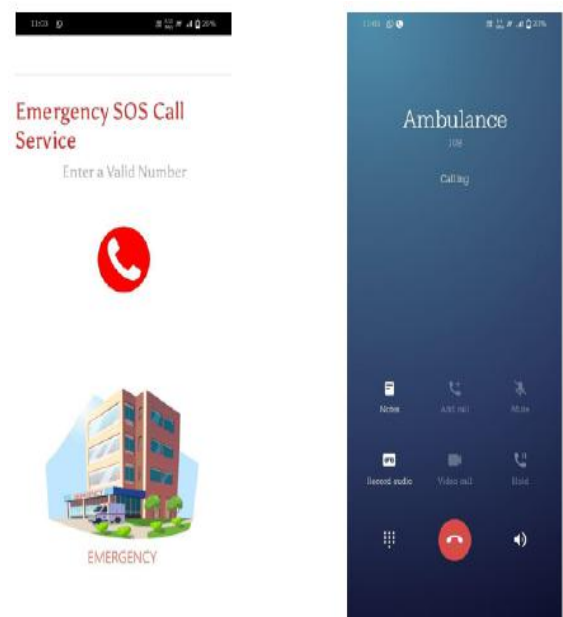

Fig.4 Disease Checker

Fig.6 SOS Call Service

The SOS (Save Our Ship) Call Service module allows us to make some emergency calls when there are any emergency conditions.
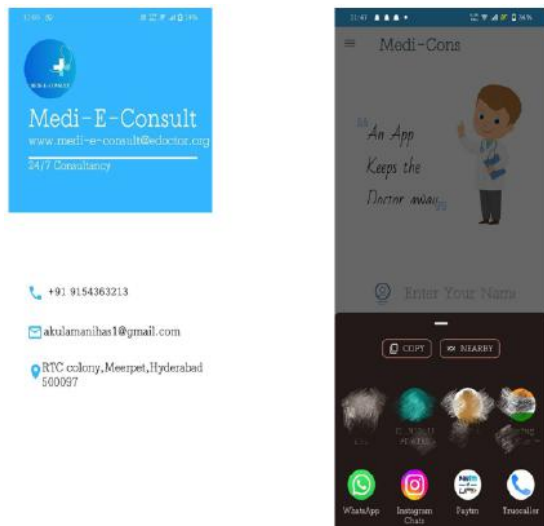

Fig.7 Share and Contact Us

VI. CONCLUSION

Telemedicine platforms like MediConsult offer a convenient and accessible way for patients to connect with healthcare providers and receive medical care remotely. These platforms have the potential to revolutionize the way healthcare is delivered and can improve access to care for patients in underserved or remote areas. However, there are also challenges to be addressed in the implementation and use of telemedicine platforms. These challenges may include issues related to privacy and security, the need to integrate with other healthcare systems, and the need to ensure that telemedicine services are accessible to all patients.

Overall, telemedicine platforms like MediConsult have the potential to improve the healthcare experience for patients and providers, and there are many opportunities for future enhancements and innovations in this field. It is important for telemedicine platforms to address the challenges mentioned above in order to ensure the success and sustainability of their services. This may involve implementing robust security measures, integrating with other healthcare systems, and working to ensure that telemedicine services are accessible to all patients.

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