

HOSPITAL FINDER APP

A PROJECT REPORT

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PRESIDENCY UNIVERSITY


SCHOOL OF COMPUTER SCIENCE AND ENGINEERING


CERTIFICATE


This is to certify that the Project report “**HOSPITAL FINDER APP**” being submitted by “**D THARUN, CHANDAN B M , DHANUSH R , SHASHANK Y.C**” bearing roll number(s) “ **20201CSE0552 , 20201CSE0560 , 20201CSE0540, 20201CSE0586** ” in partial fulfilment of requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering is a bonafide work carried out under my supervision.


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DECLARATION

We hereby declare that the work, which is being presented in the project report entitled **Hospital Finder App** in partial fulfilment for the award of Degree of **Bachelor of Technology in Computer Science and Engineering**, is a record of our own investigations carried under the guidance of **Mrs. RAKHEEBA TASEEN**, Associate Professor, School of Computer Science and Engineering & Information Science, Presidency University, Bengaluru.

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

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ABSTRACT

The Hospital Finder app is a revolutionary tool designed to address the persistent challenges faced by individuals in critical medical situations. In times of emergency, one of the most daunting tasks is deciding which hospital to visit for urgent treatment. The process is often complicated by the lack of information about the available medical facilities, specialist doctors, and the availability of essential resources like medicines and blood supply. The Hospital Finder app aims to alleviate these concerns by offering a comprehensive solution that empowers users to make informed decisions during medical emergencies. At its core, the Hospital Finder app is a user-centric platform that simplifies the daunting task of choosing a suitable hospital. The app's functionality extends beyond a conventional directory of healthcare facilities. It provides users with the ability to search for nearby hospitals based on specific criteria, ensuring that the selected hospital aligns with their particular medical needs. This innovative approach addresses the multifaceted nature of medical emergencies, taking into account factors such as available medical treatments, specialist doctors, and the real-time availability of essential medications and blood supply. One of the standout features of the Hospital Finder app is its advanced search capabilities. Users can input their preferences, including location, required medical treatment, and specialist expertise, into an intuitive search bar. The app's algorithms then process this information to generate tailored results, presenting users with a curated list of hospitals that meet their specified criteria. This not only streamlines the decision-making process but also ensures that individuals can access the most relevant and timely healthcare options. Medical emergencies often necessitate specific treatments, and the Hospital Finder app recognizes this by allowing users to filter their search based on the required medical treatment. Whether it's emergency care, specialized surgeries, or routine consultations, users can refine their search to find hospitals equipped to address their specific health concerns. With its focus on real-time data, specialized treatments, community-driven insights, and adaptability to diverse healthcare landscapes, the Hospital Finder app stands as a beacon of efficiency and reliability in the realm of healthcare. Whether in a bustling urban center with numerous healthcare options or a remote rural setting with limited access, Hospital Finder aims to be a universal tool that empowers individuals regardless of their geographical location. The scalability of the Hospital Finder app is a testament to its thoughtful design. In conclusion, the Hospital Finder app emerges as a transformative solution to the common challenges faced by individuals during medical emergencies. By providing a centralized, dynamic, and reliable platform for locating nearby hospitals based on specific criteria, the app empowers users to make informed decisions tailored to their unique medical needs.

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CHAPTER-1

INTRODUCTION

The goal of the Hospital Finder app project is to create a health care portal app that enables users to look for an hospital or a physician to discuss their condition.

Digital health is a broad, multidisciplinary phrase that includes ideas from the nexus of technology and health. It is often referred to as digital healthcare or digital health. The term "digital health" describes the integration of software, hardware, and services with digital transformation in the healthcare industry. Included in the category of digital health are: mHealth applications Electronic Health Records, or EHRs Electronic Medical Record, or EMR Wearable Technology Personalized Medicine in Telehealth and Telemedicine

The worldwide smartphone revolution has sparked innovation, increasing GDP growth and creating new opportunities for a wide range of businesses.

Going forward, a smartphone app created specifically for health and wellness is called a hospital finder app. An application for health is meant to help people manage their illnesses more effectively or to help them reach their wellness objectives.

A smartphone app that offers features including scheduling appointments, accessing medical records, and diagnosing symptoms is known as a healthcare app. Applications for healthcare might be targeted at patients as well as healthcare providers. Healthcare practitioners can benefit from using telehealth, practice management, billing, and medical coding apps, among other tools, to help them run their businesses more successfully and profitably.

As new healthcare applications communicate with patients and healthcare providers to monitor, diagnose, and cure illness, the demand for virtual health is becoming more and more urgent.

Moreover, these mobile applications may target medical personnel in the same way that they target patients. Patient monitoring, telemedicine, medical categorization, and billing software are all technologies that help healthcare professionals operate their businesses more efficiently.

Not only should mobile medical applications be useful, but they should also be easy to use. This is because not everyone of the target audience for the application has the technical know-how to fully utilize the mobile application's features, and they come from a variety of backgrounds. An application's performance is greatly affected by a well-designed interface,

making it essential. The development of mobile health applications is a rapidly growing, multimillion dollar global industry. Approximately 40,000 mobile health apps can be found on

CHAPTER-2

LITERATURE SURVEY

This year, the majority of funding will probably go to digital health businesses due to growing investment in the healthcare sector . In a climate where launching healthcare technology solutions is becoming easier, innovators and investors in healthcare software development expect the number of agreements and total amount invested cash to create new standards.

In a climate where launching healthcare technology solutions is becoming easier, innovators and investors in healthcare software development expect the number of agreements and total amount invested cash to create new standards. With a 25% compound annual growth rate, the worldwide digital health industry is projected to be valued \$660 million by 2025.

With smartphones quickly becoming an extension of our lives in today's technologically advanced world, a fascinating trend of mHealth apps has gained huge appeal, enabling people to take charge of their well-being like never before. Therefore, it is not surprising that by 2020, businesses and investors in digital health would have spent over \$21 billion on these initiatives. According to Statista, in the first quarter of 2022, there were about 52,565 healthcare apps on the Google Play Store and 51,370 apps on the Apple App Store. The number of healthcare app downloads has surged by 60% worldwide since the outbreak of the global pandemic COVID-19. This is an integrated evaluation of scientific studies published between 2012 and 2016. The stages of this review followed a pre-established process, with the goal of maintaining scientific and methodological rigor, namely:

elaboration of the research question establishment of the inclusion criteria for studies and sample selection (search or sampling) literature sampling); representation of the study chosen in table style, using on account all of the similarities (data collecting); careful examination of the listed papers, identifying discrepancies and disagreements; findings interpretation/discussion; integrated presentation review in a clear and objective manner, including evidence/data discovered.

Systems Development Life Cycle

A methodical and well-defined strategy to helping software engineers produce high-quality software is the Software Development Life Cycle (SDLC). Planning, designing, developing, testing, deploying, and maintaining are among the other steps it includes. Although SDLC offers a lot of benefits, it also has certain disadvantages.

Advantages:

- **Methodical Approach:** The Software Development Life Cycle (SDLC) offers a systematic method for developing software, enabling developers to plan and arrange their tasks more effectively. This tactic also guarantees software delivery on time, boosts productivity, and lowers mistake rates.
- **Risk Management:** Software Development Life Cycle (SDLC) assists in recognizing and controlling risks related to software development. Moreover, developers can reduce the overall risk of software development by identifying potential risks early in the process and taking appropriate action to mitigate them.
- **Software Development Life Cycle (SDLC)** provides a consistent framework and procedure to promote software development consistency. Moreover, consistency ensures that the final result meets the client's expectations and contributes to the improvement of software quality.
- **Collaboration:** The SDLC fosters teamwork by providing participants with a common application structure and language for communication. This collaboration

Disadvantages:

- **Time-consuming:** The SDLC may take a long time if the development process is complex. If this causes a delay in software delivery, clients can grow irate.
- **Lack of flexibility:** If requirements change while the project is being created, the SDLC might not be able to be adjusted. This inflexibility could result in a finished product that isn't up to the client's standards.
- **High Upfront Cost:** The SDLC requires a significant initial time, money, and resource investment. Moreover, this can serve as a barrier to entrance for fledgling businesses or small enterprises without the capital to commit to the SDLC.
- **Sometimes fixing bugs in code takes a long time, and if there are a lot of them, deadlines may be missed. The final consumer doesn't**

Systematic Design of Instruction

A comprehensive and systematic strategy for creating instructional solutions to performance issues, instructional systems design (ISD) combines theory, research, and data gathered from field settings with real-world application.

Advantages:

- based on a combination of theory, study, and practical experience. Major decisions about the design of teaching are based on research and experience in human learning, instruction, and general systems theory, in contrast to many other forms of training or instruction that are largely centered on historical practices, fads, or opinions (also known as pseudo-instruction).
- reproducible and empirical outcomes. To optimize cost-effectiveness, instruction is created to be used as many times as possible with as many students as possible. It is proposed that the accompanying costs are justified by the reusable nature of the instruction produced by the systematic design approach.
- Start by analyzing the knowledge and skills that students should possess after receiving education. Planning and decision-making that follows can be successful and accurate when such claims are made Produces

Disadvantages:

- fails to consider how learners' needs and interests are evolving. Instructional designers work with subject matter experts to create learning objectives, instructional strategies, and assessment tools prior to giving training.
- only offers one fundamental teaching tactic. Numerous research-based instructional strategies that can be used to improve learning are revealed by a cursory survey of the instructional development literature.
- The classic criterion-referenced assessments are the focal point of the learner evaluation discussion. Evaluations of performance and portfolio are not given much thought.
- provides procedures for formatively assessing training, but ignores important issues with user interface that arise in technology-based learning. Instructional designers and

developers are now using usability engineering tools and methodologies to test computer interface design.

User Centered Design

Putting consumers at the center of product design and development is known as user-centered design, or UCD. User-centered design (UCD) is an iterative design approach wherein designers prioritize the needs and desires of users throughout the whole design process.

Advantages:

- Boost sales: Customers are more inclined to buy a good or service that meets their needs. Boost competition: If your product more successfully meets the needs of the consumer, they are less likely to favor the offerings of other companies.
- Ensure that users have a great experience with your brand or organization to foster loyalty and a favorable reputation. help you acquire information that could result in creative new goods or services
- Test products with end users while changes are still financially feasible to save your organization both time and money.help you create safer and more effective products
- Give your clients a sense of ownership over the good or service you provide. Removing the need for late-process design changes, avoiding large costs and time delays

Disadvantages:

- Subjectivity: UCD mostly relies on user preferences and comments, which can be subjective. Various users could hold divergent opinions, which makes it challenging to create a design that appeals to everyone.
- Time-consuming: It can take some time to conduct thorough user research, usability test, and implement continuous feedback loops. It might not be feasible to accomplish this in projects with tight deadlines or few resources.
- Cost: Putting UCD into practice can be expensive, particularly if it calls for multiple iterations of user testing, hiring outside researchers, or building feedback prototypes. Smaller or less funded projects could find it difficult to allocate funds for thorough UCD.

- Overemphasis on current demands: Meeting the wants and preferences of current users is a common focus of UCD. Users might not always be able to explain things clearly, which could result in a lack of creativity.

CHAPTER-3

RESEARCH GAPS OF EXISTING METHODS

3.1 EXISTING METHODS

3.1.1. Word of Mouth: Traditionally, people rely on recommendations from friends, family, or neighbors when facing a medical emergency. This method, while personal, is subjective and may not always lead to the most suitable hospital based on the specific medical needs of the patient.

3.1.2. Internet Search Engines: Many individuals turn to search engines to find nearby hospitals. However, the search results are often generic and may not provide detailed information on the services offered, specialist doctors available, or the availability of specific medicines or blood types.

3.1.3. Hospital Directories: Some regions maintain directories listing hospitals and their contact information. However, these directories usually lack comprehensive details about the services and facilities provided by each hospital. Users may still need to visit or call each hospital individually to gather the required information.

3.1.4. Government Health Portals: Some countries have health portals that provide information on healthcare facilities. These portals may include a list of hospitals, but the information may not be up-to-date, and details on specific medical treatments, doctors, or medicine availability may be limited.

3.2 PROPOSED METHODS

Overview:

Hospital Finder is a comprehensive solution designed to address the challenges faced by common people during medical emergencies. It aims to provide a user-friendly platform that

enables individuals to search for nearby hospitals based on specific criteria such as medical treatment, specialist doctors, medicine availability, and blood supply.

3.2.1. Search Filters:

- Users can filter hospitals based on the required medical treatment, ensuring that they find facilities equipped to handle their specific health needs.
- Specialized search options for finding hospitals with expert doctors in various fields, making it easier for users to access the right expertise.

3.2.2. Real-Time Information:

- Hospital Finder will leverage real-time data to provide accurate and up-to-date information about each hospital. This includes current availability of medicines and blood supply.

3.2.3. User Reviews and Ratings:

- Users can contribute to the platform by leaving reviews and ratings based on their experiences. This feature helps others make informed decisions about the quality of services provided by each hospital.

3.2.4. Emergency Contact Information:

- The app will include emergency contact information for each hospital, enabling users to quickly reach out in critical situations.

3.2.5. Notification System:

- Hospital Finder will implement a notification system to alert users about any critical updates, such as the availability of a specific medicine, urgent blood donation requests, or changes in a hospital's status.

3.2.6. Integration with Healthcare Providers:

- Collaboration with hospitals and healthcare providers will allow for seamless integration of data, ensuring that the information on the platform is accurate and comprehensive.

3.2.7. User-Friendly Interface:

- The app will be designed with a simple and intuitive interface, making it accessible to users of all ages. Clear and concise information will be presented to assist users in making quick and informed decisions.

CHAPTER-4

PROPOSED METHODOLOGY

4.1.1. User Interface Design:

- Develop an intuitive and user-friendly mobile/web application interface for Hospital Finder.
- Include features like search bar, filters for medical treatment, specialist doctors, and medicine/blood availability.

4.1.2. Database Creation:

- Establish a comprehensive database containing information on hospitals, medical treatments offered, specialist doctors, and current medicine/blood supplies.
- Regularly update the database to ensure accuracy.

4.1.3. Geolocation Integration:

- Implement geolocation services to allow users to search for nearby hospitals based on their current location.
- Integrate maps for easy navigation to the selected hospital.

4.1.4. Search Algorithm:

- Develop a robust search algorithm that considers user preferences such as required medical treatment, specific doctors, and availability of medicines/blood.
- Prioritize search results based on proximity and relevance to user needs.

4.1.5. Real-time Updates:

- Establish a system for hospitals to update their current medical facilities, doctor availability, and medicine/blood supplies in real-time.
- Implement push notifications to alert users about important updates.

4.1.6. User Reviews and Ratings:

- Include a feature for users to leave reviews and ratings for hospitals based on their experiences.
- Provide a feedback loop for hospitals to address concerns and improve services.

4.1.7. Emergency Contacts:

- Integrate emergency contact information for each hospital, including helpline numbers and direct communication channels in case of urgent inquiries.

4.1.8. Security and Privacy Measures:

- Implement robust security measures to protect user data and privacy.
- Ensure compliance with healthcare data protection regulations.

4.1.9. Collaboration with Healthcare Institutions:

- Collaborate with hospitals and healthcare institutions to gather accurate and up-to-date information.
- Establish partnerships to enhance the credibility and reliability of the Hospital Finder platform.

4.1.10. Public Awareness Campaign:

- Launch a public awareness campaign to inform the community about the Hospital Finder application and its benefits during medical emergencies.
- Utilize social media, local news, and community outreach programs.

By following these steps, Hospital Finder aims to provide a reliable and efficient solution for common people to find the most suitable and accessible medical assistance during emergencies.

CHAPTER-5

OBJECTIVES

5.1. Health Monitoring:

- Track and monitor users' health data such as heart rate, blood pressure, and physical activity.
- Provide real-time feedback on health metrics to assist users in managing and improving their well-being.

5.2. Medication Management:

- Remind patients to take their medicine on time.
- Maintain a note of your medication history and dosage.
- Provide details on probable medication interactions.

5.3. Appointment Scheduling

- Users should be able to plan and manage appointments with healthcare providers.
- Remind them about scheduled appointments.

5.4. Telemedicine and consultation:

- Remote consultations with healthcare providers can be facilitated using video calls or chat.
- Provide a platform for consumers to obtain medical advice without having to physically visit a clinic.

5.5. Emergency Services:

- Include features for contacting emergency contacts or contacting emergency services.
- Provide location-based services for rapid response in urgent situations.

5.6. Collaboration with Healthcare Providers:

- Allow for easy communication between users and their healthcare professionals.
- Share important health information with approved medical experts
- Incorporate a personalized user profile feature, allowing users to save favorite hospitals, track their medical history, and receive relevant updates or notifications.
- Enable users to filter search results based on specific criteria such as insurance acceptance, ratings, and patient reviews for a more informed decision-making process..

- Develop an intuitive user interface to ensure seamless navigation for users searching for hospitals based on location, services, or specialties.
- Implement a robust search algorithm that efficiently retrieves accurate and up-to-date information about hospitals, including bed availability, medical services offered, and contact details.
- Integrate geolocation services to provide real-time proximity-based results, helping users find the nearest hospitals in emergency situations.
- Ensure data accuracy and reliability by establishing a secure connection to a reliable healthcare database, regularly updating hospital information, and implementing a feedback system for users to report any discrepancies.
- Implement a telemedicine integration to provide users with the option of virtual consultations or appointments, enhancing accessibility to healthcare services.
- Prioritize accessibility features, ensuring the app is user-friendly for individuals with disabilities, supporting features like voice commands and text-to-speech functionalities.
- Establish secure user authentication and data privacy measures to protect sensitive information, adhering to relevant healthcare data protection regulations.
- Integrate a comprehensive feedback system to gather user opinions and continuously improve the app based on user experiences and evolving healthcare needs.

CHAPTER-6

SYSTEM DESIGN AND IMPLEMENTATION

The design and implementation of the Hospital Finder system involve careful consideration of various aspects to ensure its effectiveness in addressing the challenges faced by individuals during medical emergencies. Below is an outline of the system design methodology and implementation strategies:

6.1. System Design:

6.1.1. Requirements Analysis:

- Identify user requirements through surveys, interviews, and feedback from potential users to understand their preferences and priorities during medical emergencies.
- Determine key features such as search criteria (medical treatment, specialist doctors), real-time updates, and user-friendly interface

6.1.2. System Architecture:

- Adopt a client-server architecture where the client (user interface) interacts with a centralized server hosting the hospital database and search algorithms.
- Utilize a scalable and modular architecture to accommodate potential expansion and enhancements.

6.1.3. Database Design:

- Design a robust database schema to store information about hospitals, medical treatments, specialist doctors, medications, and blood supply.
- Implement relationships between entities, ensuring data integrity and efficient retrieval.

6.1.4. User Interface Design:

- Develop an intuitive and responsive user interface for the mobile or web application.
- Prioritize simplicity and clarity to facilitate ease of use during stressful situations.

6.1.5. Search Algorithms:

- Implement advanced search algorithms to enable users to find hospitals based on specified criteria like medical treatments and specialist doctors.
 - Optimize algorithms for speed and accuracy to provide real-time results.
-

6.2. Implementation:

6.2.1. Technology Stack:

- Choose appropriate technologies for the frontend (ReactJS for web, React Native for mobile) and backend (Node.js, Express.js).
- Use a reliable database system like MongoDB or PostgreSQL for data storage.

6.2.2. Real-time Data Integration:

- Establish direct connections with healthcare providers and hospitals to receive real-time updates on their services, available treatments, and specialist doctors.
- Implement mechanisms like webhooks or scheduled API calls for continuous data synchronization.

6.2.3. Geolocation Services:

- Integrate geolocation services to enable users to search for nearby hospitals based on their current location.
- Utilize GPS data to provide accurate and real-time distance information.

6.2.4. User Authentication and Authorization:

- Implement secure user authentication mechanisms (e.g., OAuth, JWT) to ensure that users' personal information and search history are protected.
- Define role-based access controls for administrators and general users.

6.2.5. Feedback Mechanism:

- Develop a feedback system where users can rate and share their experiences with hospitals.
- Implement analytics to gather user feedback and continuously improve the system based on user insights.

6.2.6. Scalability and Load Balancing:

- Design the system to be scalable, allowing for increased user load and potential expansion to cover more geographical areas.
- Implement load balancing strategies to distribute incoming traffic evenly across

multiple servers.

6.2.7. Community Engagement:

- Facilitate community engagement by integrating social features where users can share recommendations and insights with each other.
- Encourage hospitals to actively participate in the system by providing accurate and up-to-date information

6.2.8. Testing and Quality Assurance:

- Conduct extensive testing, including unit testing, integration testing, and user acceptance testing.
- Implement error handling and logging mechanisms to identify and resolve issues promptly.

6.2.9. Deployment and Maintenance

- Deploy the system on reliable and secure hosting infrastructure (e.g., AWS, Azure).
- Establish regular maintenance routines to address updates, security patches, and improvements based on user feedback.

By following this system design methodology and implementing these strategies, the Hospital Finder system can effectively serve its purpose of providing crucial information to individuals during medical emergencies, ultimately contributing to improved healthcare decision-making.

CHAPTER-7

TIMELINE FOR EXECUTION OF PROJECT(GANTT CHART)

An illustration of a project schedule that displays tasks and the times associated with them is called a Gantt chart. It's a bar graph that shows the beginning and ending dates of each project component. Tasks are represented by the vertical axis, while time is represented by the horizontal axis. A horizontal bar with a length that reflects the task's duration is used to symbolize each task. The main elements and traits of a Gantt chart are as follows:

- 1. Task List:** The first element of a Gantt chart is a list of the tasks or activities that must be finished for the project to be completed.
- 2. timetable:** Depending on how long the project will take, the horizontal axis shows the timetable, which is normally separated into days, weeks, or months.
- 3. Bars or Blocks:** On the chart, each activity is shown as a horizontal bar or block. The task's duration is matched by the bar's length.
- 4. Task Dependency:** Gantt charts are frequently used to illustrate task dependencies by illustrating the connections between various activities. This aids in comprehending the order in which duties have to be completed.
- 5. Milestones:** Typically indicated on a Gantt chart, milestones are important junctures or accomplishments in the project. They stand for important occasions or stages.
- 6. Color Coding:** Different characteristics, including work status (finished, in progress, or not begun), resource allocation, or task classifications, can be represented by colors.
- 7. Resource Allocation:** By showing when particular team members are available, Gantt charts may be utilized to distribute resources

TASKS	OCT	NOV	DEC	JAN
TITLE SELECTION				
TITLE DISCUSSION				
TITLE FINALIZATION				
LISTING PROCEDURE				
PROJECT IMPLEMENTATION				
FINAL IMPLEMENTATION				
CODING AND DEBUGGING				
FINAL SUBMISSION				

Fig 1- Timeline Gantt Chart 1

CHAPTER-8

OUTCOMES

Through the Hospital Finder app on their smartphone, patients can view their personal health information. Apps can inspire users to take up healthier behaviors and make it easier for patients to find medical providers. How to maintain user engagement is a special problem for mobile apps, though.

Health applications offer the ability to reduce costs, increase patient engagement and empowerment, and provide transparency into treatment outcomes.

Due to digital transformation, the healthcare industry is changing swiftly. This includes treatment management, remote and continuous patient monitoring, early disease identification, and more. Analytics, cloud computing, mobile, IoT, and AI/ML are some of the major new technologies in this change.

It is projected that the market for mHealth solutions would grow from \$50.8 billion in 2020 to \$213.60 billion in 2025 at a compound annual growth rate (CAGR) of 33.3%.

CHAPTER-9

RESULTS AND DISCUSSIONS

Hospital Finder is a comprehensive solution designed to assist individuals during medical emergencies by providing a user-friendly platform to locate nearby hospitals based on specific criteria. Users can search for hospitals based on required medical treatments, specialist doctors, and the availability of medicines and blood supplies.

The application's interface enables users to input their medical needs, such as the type of treatment required or the specialization of doctors needed. It then generates a list of nearby hospitals that meet these criteria. Additionally, the application provides real-time information on medicine and blood availability in each listed hospital.

The Hospital Finder addresses a critical issue faced by common people during medical emergencies – the difficulty in deciding which hospital to visit for necessary treatment. The app streamlines the process by offering a centralized platform for users to search and locate hospitals based on their specific requirements.

One of the key features of Hospital Finder is its ability to cater to diverse medical needs. Users can easily filter hospitals based on the type of treatment they require, ensuring they find facilities equipped to handle their specific health concerns. This not only saves time but also ensures that individuals receive the most relevant care during emergencies.

Furthermore, the inclusion of specialist doctor information enhances the app's utility. Patients can identify hospitals with professionals specializing in their medical condition, fostering confidence in the quality of care they will receive.

The real-time updates on medicine and blood availability add an extra layer of functionality. Users can make informed decisions by choosing hospitals with the necessary resources, preventing unnecessary travel and delays in treatment.

In conclusion, Hospital Finder emerges as a valuable tool in addressing the challenges faced by people during emergencies. Its intuitive interface, coupled with the ability to search for hospitals on specific criteria, positions it as an indispensable resource in ensuring timely and targeted healthcare access.

CHAPTER-10

CONCLUSION

The hospital finder app has gained a lot of attention in the past 10 years and is a global phenomenon. In order to assist people achieve their health objectives, mobile technologies—such as smartphones, software programs, and gadgets—are combined in the rapidly developing field of mHealth. Global health service delivery could change if mobile and wireless technologies are adopted in the healthcare industry. The trend of incorporating mobile health solutions into institutional health systems, the quick development of mobile networks and applications, and increased funding, regulation, and evidence have all contributed to this change.

Technology advancements have greatly expanded the potential of mobile health. Smartphones and tablets are transforming the way we utilize mobile devices for health management with features like a high-resolution camera, GPS, and embedded sensors that offer greater capabilities than a laptop or desktop.

REFERENCES

- User-centric application with a Global Positioning System for regular and emergency medical car
P. Sreelatha; Anush. S; Tamilselvan. A; Vijay. M
2023 Third International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT)
- Shrutika Tayade; Rutuja Burde; Sayali Patil; Gauri Mungase; Jayashree B. Kulkarni
2018 Fourth International Conference on Computing Communication Control and Automation (ICCUBEA) Year: 2018 | Conference Paper |
- A Mobile App to Facilitate Socially Distanced Hospital Communication During 2 COVID-19: Implementation Experience.
Cite Anyanwu EC, Ward RP, Shah A, Arora V, Umscheid CA
- FHIR-Based eConsent App for the Digital Hospital.
3 Weber M, Griessbach A, Grossmann R. Blaser J
Cite Stud Health Technol Inform. 2020 Jun 16;270.3-7. doi: 10.3233/SHT1200111
- A Smartphone-Based Model of Care to Support Patients With Cardiac Disease 4 Transitioning From Hospital to the Community (TeleClinical Care): Pilot Randomized Controlled Trial
Indraratna P, Biswas U, McVeigh I, Mamo A, Magdy J. Vickers. D. Watkins E, Ziegl A Liu H, Cholerton U Holgate K Fildes 1, Gallagher R., Ferry C, Jan S. Biggs N. Schreier G. Redmond 51, Loh E, Yu
- Use of a smartphone app to inform healthcare workers of hospital policy during sa pandemic such as COVID-19. A mixed methods observational study.Cite Helou R, Waltmans den Breejen CM, Severin JA, Hutcher MEIL Verbon A Share PLoS One. 2022 Jan 5;171110262105 do: 10.1371/journal pone 0262105 eCollection 2022
- The effect of the GoodSAM volunteer first-responder app on survivalhospital discharge following out-of-hospital cardiac arrest.Cas Smith CM Lall I Fothergill RT. Spaight R. Perks GDEur Heart J Acute Cardiovasc Care 2022 Jan 12.11/1120-31 do 10 1093/chart/2ab103
- Does hospital loyalty matter? Factors related to the intention of using a mobile 7 app Cee in YH GIL, Hau HP, Tang 15, Fu YL, Huang CM Patient Preler Adherence 2019 Jul 11,13 1283-1294 do 10.2147/PPA.5207031: eCollection 2018 Share PA 31534115

APPENDIX-A

PSUEDOCODE

MainActivity.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <LinearLayout

        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical">

        <TextView

            android:id="@+id/textView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="10dp"
            android:textStyle="bold"
            android:textSize="45dp"
            android:layout_centerHorizontal="true"
            android:layout_gravity="center_horizontal"
            android:text="Hospital Finder App" />

        <ImageView

            android:id="@+id/imageView"
            android:layout_width="wrap_content"
            android:layout_height="500dp"
            app:srcCompat="@drawable/hospitalfinder"
            tools:layout_editor_absoluteX="0dp"
```

```
tools:layout_editor_absoluteY="0dp" />

<Button
    android:id="@+id/button"
    android:layout_width="300dp"
    android:layout_height="75dp"
    android:gravity="center"
    android:layout_gravity="center_vertical|center_horizontal"
    android:textAlignment="center"
    android:textColor="@color/black"
    android:textSize="40sp"
    android:textStyle="bold"
    android:text="Click Me" />
</LinearLayout>

</RelativeLayout>
```

MainActivity.java

```
package com.example.hospitalfinderapp;
```

```
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

public class MainActivity extends AppCompatActivity {
    private Button btn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        btn = (Button) findViewById(R.id.button);

        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(getApplicationContext(),MainAppActivity.class);
                startActivity(intent);
            }
        });
    }
}
```

```
}  
}
```

```
com.example.hospitalfinder app;
```

```
//import android.support.v7.app.AppCompatActivity; Bimport...
```

```
gat App Quality rights
```

```
public class PatientLoginActivity extends AppCompatActivity (
```

```
2 usages
```

```
private Button signInBtn, goBackBtn;
```

```
4 usages
```

```
private EditText txtUsername, txtPwd;
```

```
2 usages
```

```
private Firebase Firestore db;
```

```
3 usages
```

```
private boolean flag;
```

```
private String username, password;
```

```
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {
```

```
super.onCreate(savedInstanceState);
```

```
setContentView(R.layout.activity_patient_login); signInBtn = (Button)
```

```
findViewById(R.id.loginBtn);
```

```
goBackBtn = (Button) findViewById(R.id.goBackBtn);
```

```
PatientLoginActivity Java
```

```
txtUsername = (EditText) findViewById(R.id.editTextUsername);
```

```
txtPwd = (EditText) findViewById(R.id.editTextPassword)
```

```
Project update recommended
```

```
//txtUsername.setText("dhanu");
```



```
//xtPed.setText("1234");

db FirebaseFirestore.getInstance(

Package com.example.hospitalfinderapp

import...

public class AdminViewDoctorsActivity extends AppCompatActivity {

2 usages

private Button vienBtn;

1 usage

private ListView List view;

no usages

private String[] data, array;

no usages

private ArrayList<String> dataArray;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState);

TODO

setContentView(R.layout.activity_admin_view_doctors);

List_vien = (ListView) findViewById(R.id.list_view); viewBtn = (Button)
findViewById(R.id.viewBtn);

viewBtn.setOnClickListener(new View.OnClickListener() { @Override

public void onClick(View view) {

// Adding addValueEventListener method on firebase object.

/*FirebaseDatabase database FirebaseDatabase.getInstance();

DatabaseReference myRef database.getReference("newdoctor");
}
}
}
```

APPENDIX-B

SCREENSHOTS

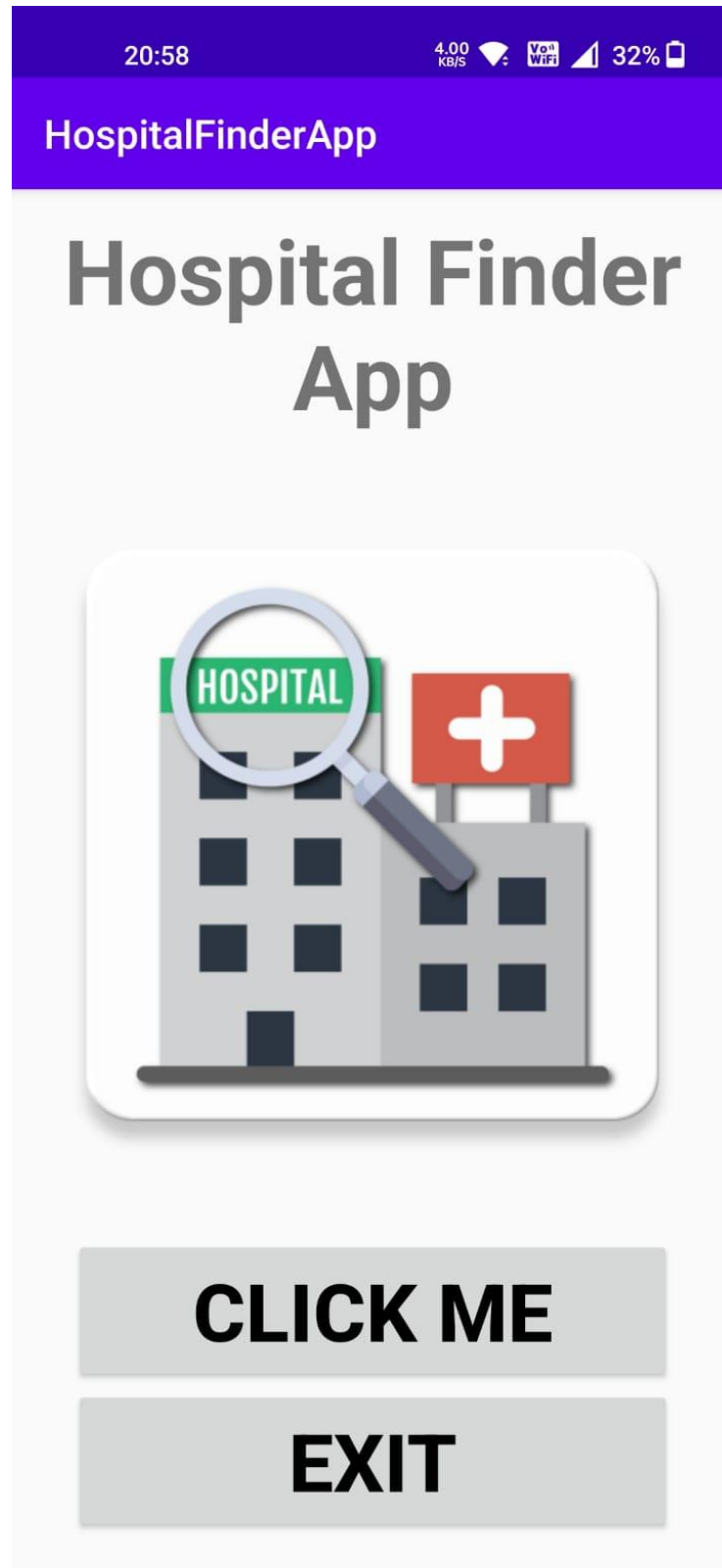
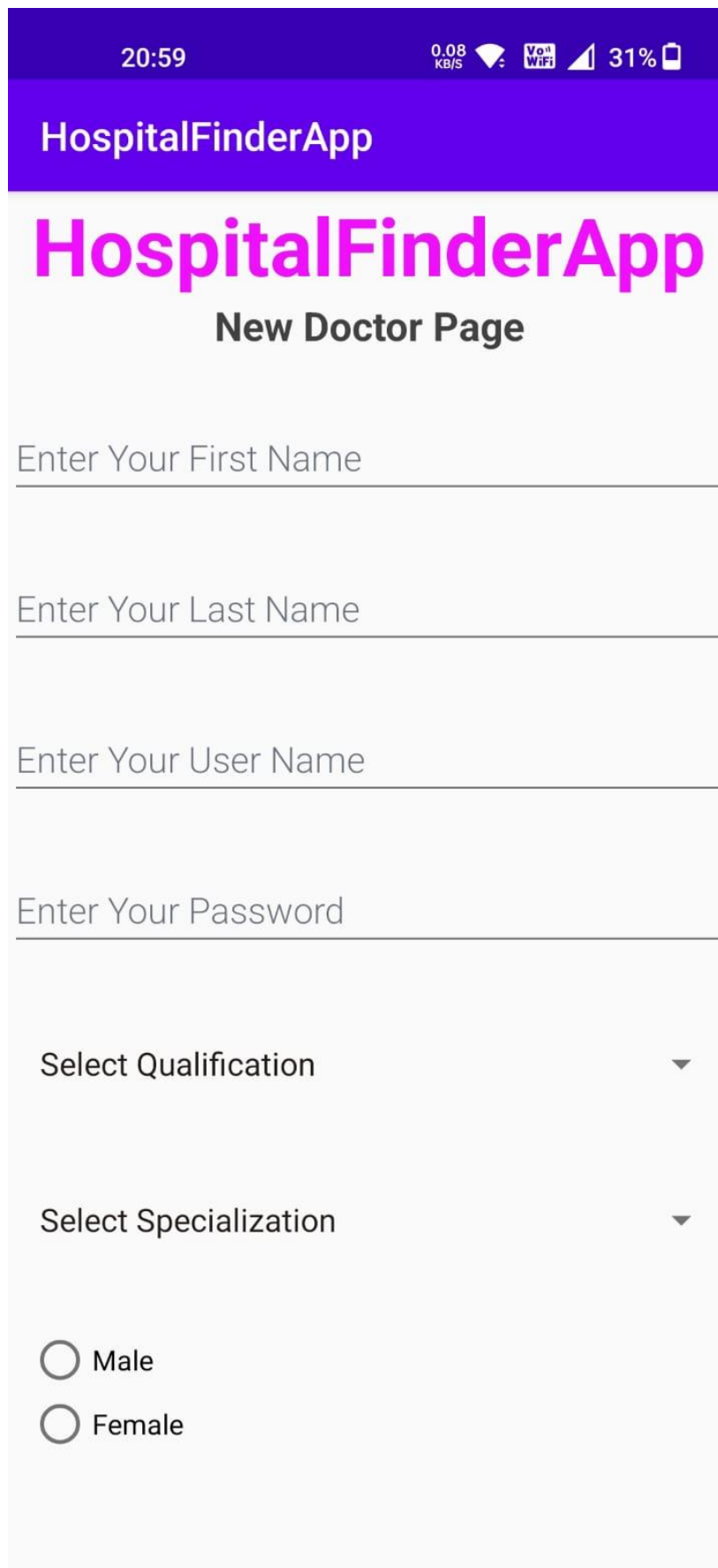


Fig 2-home 1



The screenshot shows the 'New Doctor Page' of the HospitalFinderApp. At the top, a purple status bar displays the time 20:59, data speed 0.08 KB/S, VoWiFi, signal strength, and 31% battery. Below this is a purple header with the app name 'HospitalFinderApp'. The main title 'HospitalFinderApp' is in large pink font, followed by the subtitle 'New Doctor Page' in bold black. The form contains four text input fields: 'Enter Your First Name', 'Enter Your Last Name', 'Enter Your User Name', and 'Enter Your Password'. Below these are two dropdown menus for 'Select Qualification' and 'Select Specialization'. At the bottom are two radio button options: 'Male' and 'Female'. A home indicator bar is visible at the very bottom of the screen.

20:59 0.08 KB/S VoWiFi 31%

HospitalFinderApp

HospitalFinderApp

New Doctor Page

Enter Your First Name

Enter Your Last Name

Enter Your User Name

Enter Your Password

Select Qualification ▼

Select Specialization ▼

☐ Male

☐ Female

Fig 3-Now Doctor Page 1

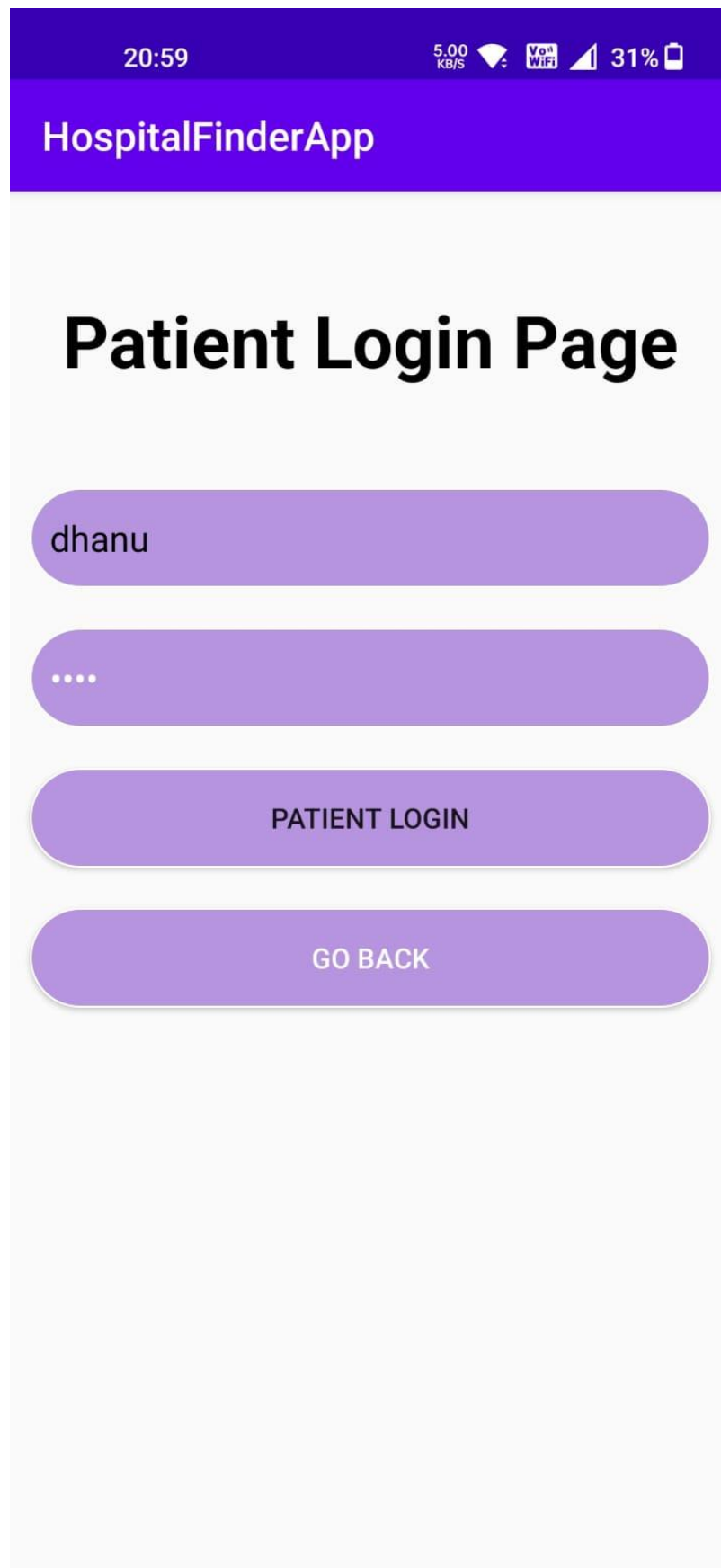


Fig 4-Patient Login Page 1

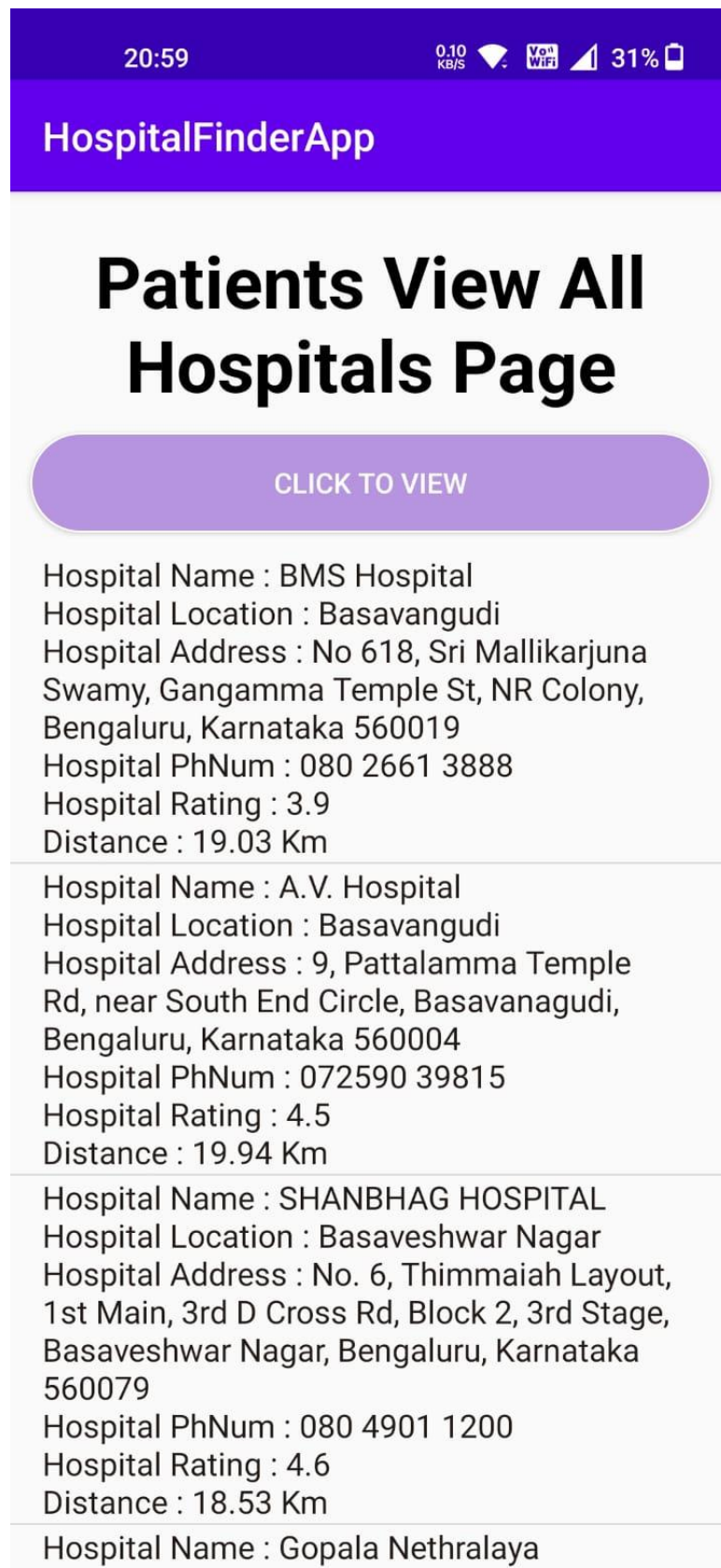


Fig 5-View All hospital 1

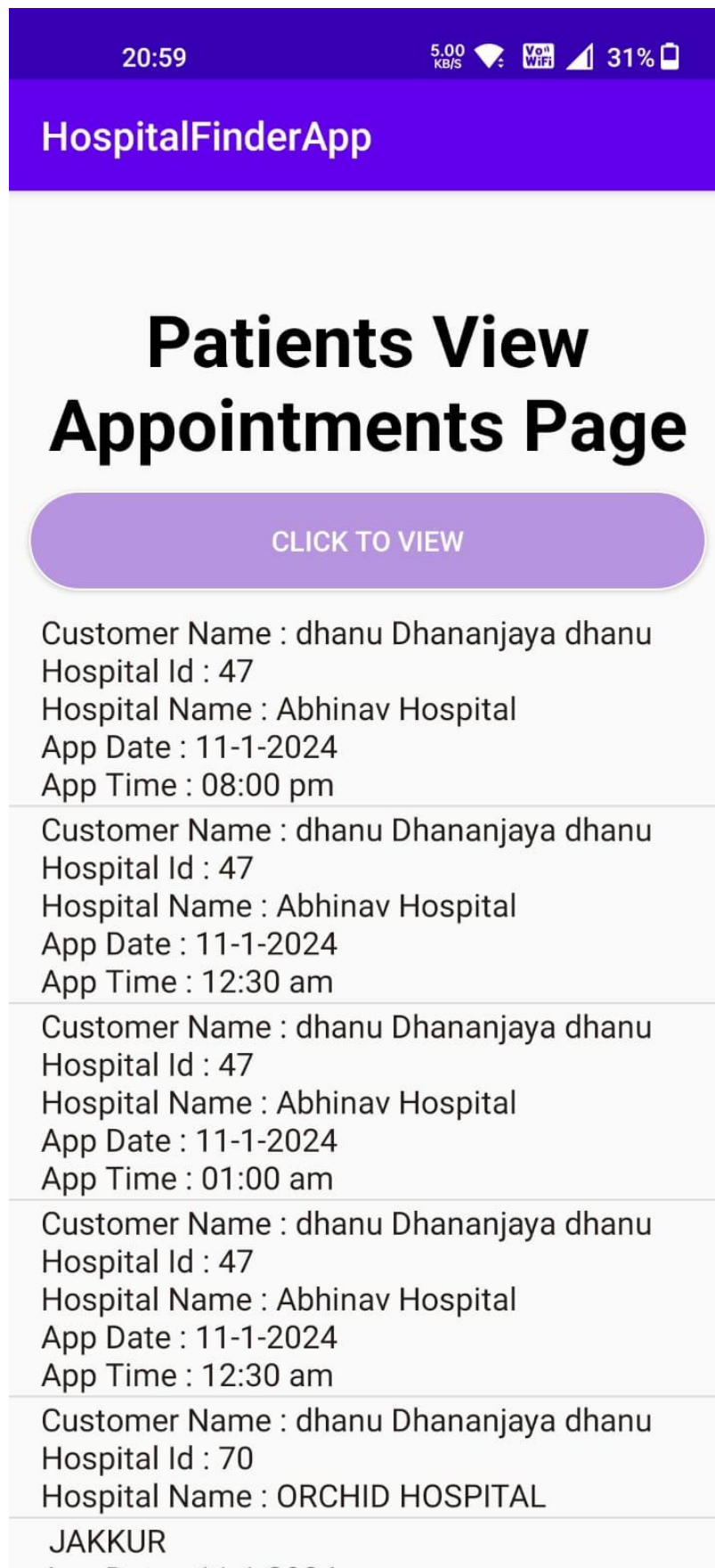


Fig 6-Appountment page 1

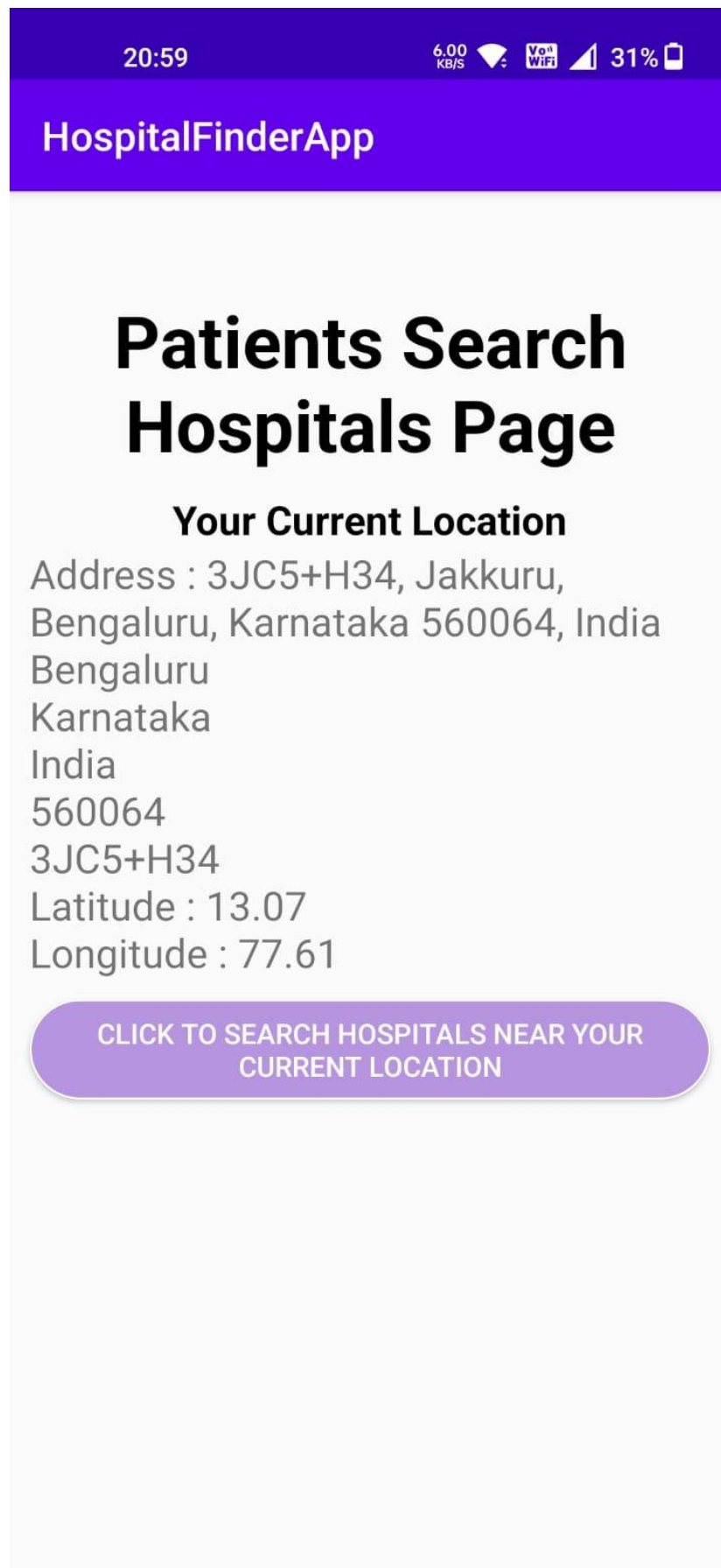


Fig 7-search hospital 1

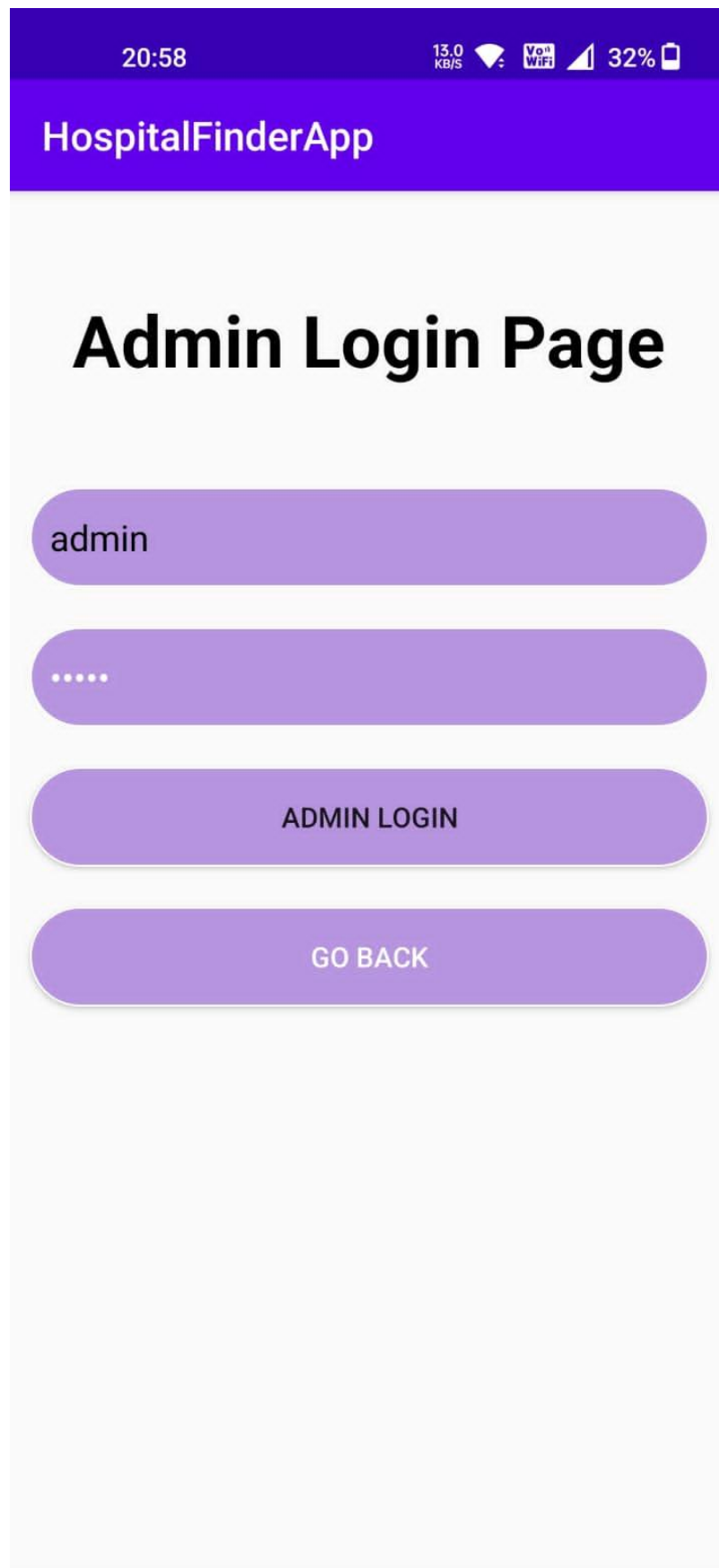


Fig 8-Admin Login Page 1

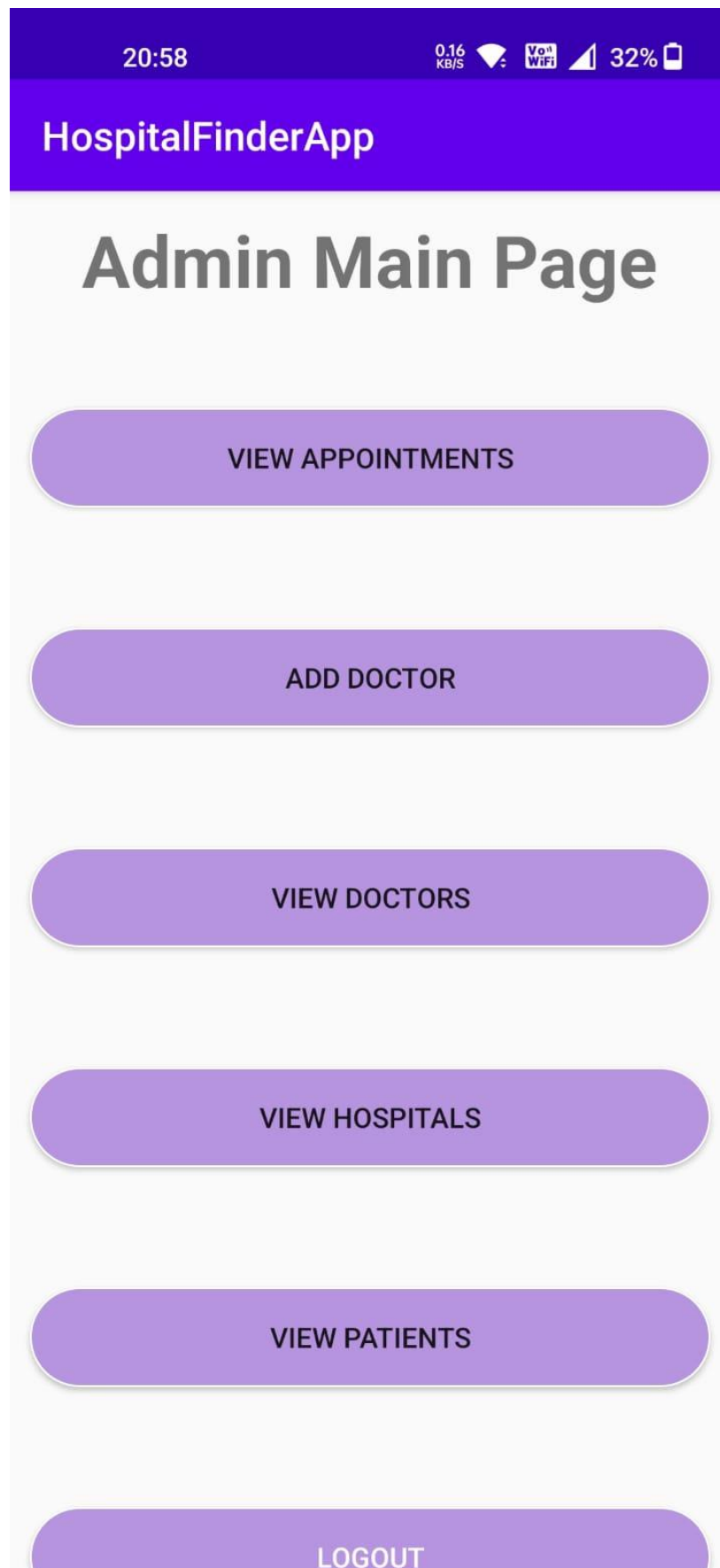


Fig 9-Admin Main Page 1

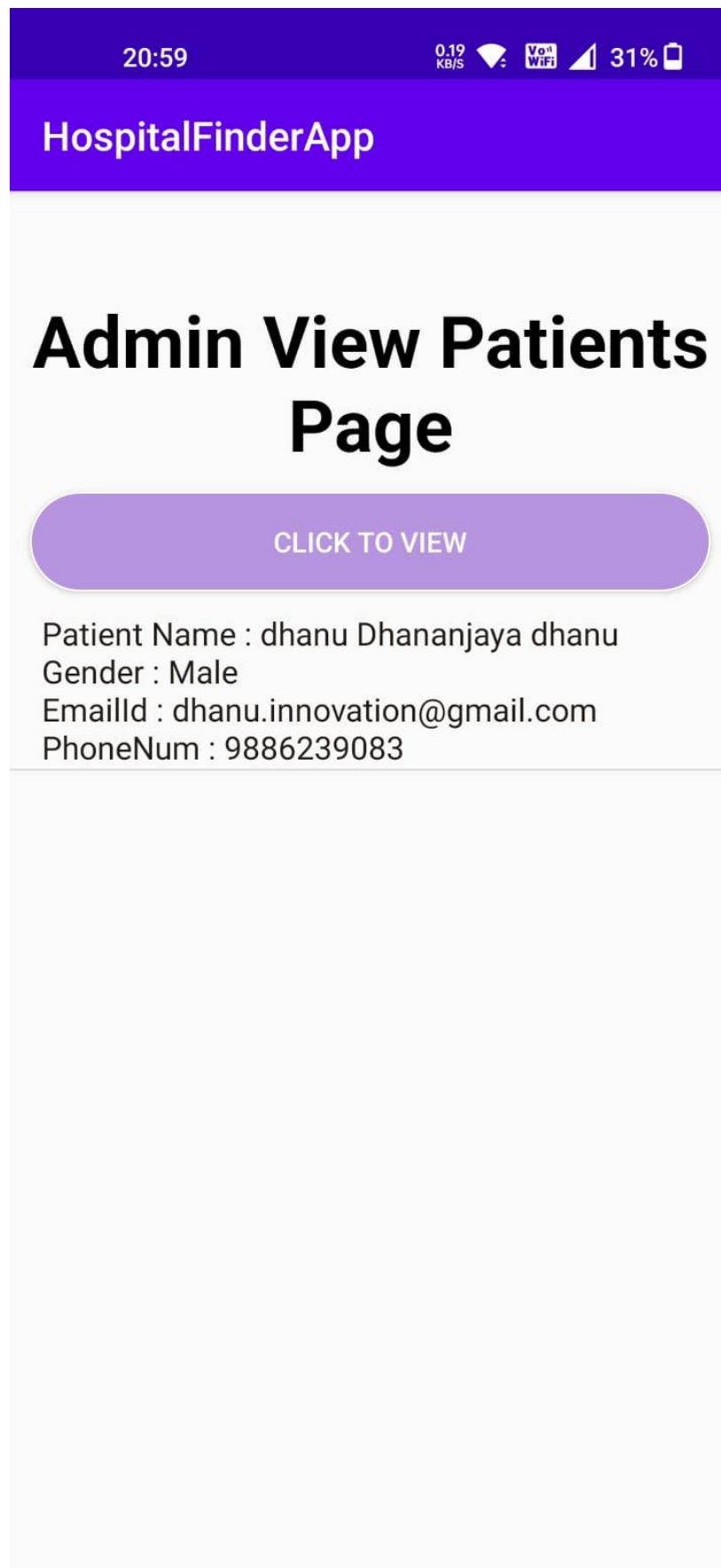


Fig 10-Admin Patient View 1



Fig 11-Admin All Hospital 1

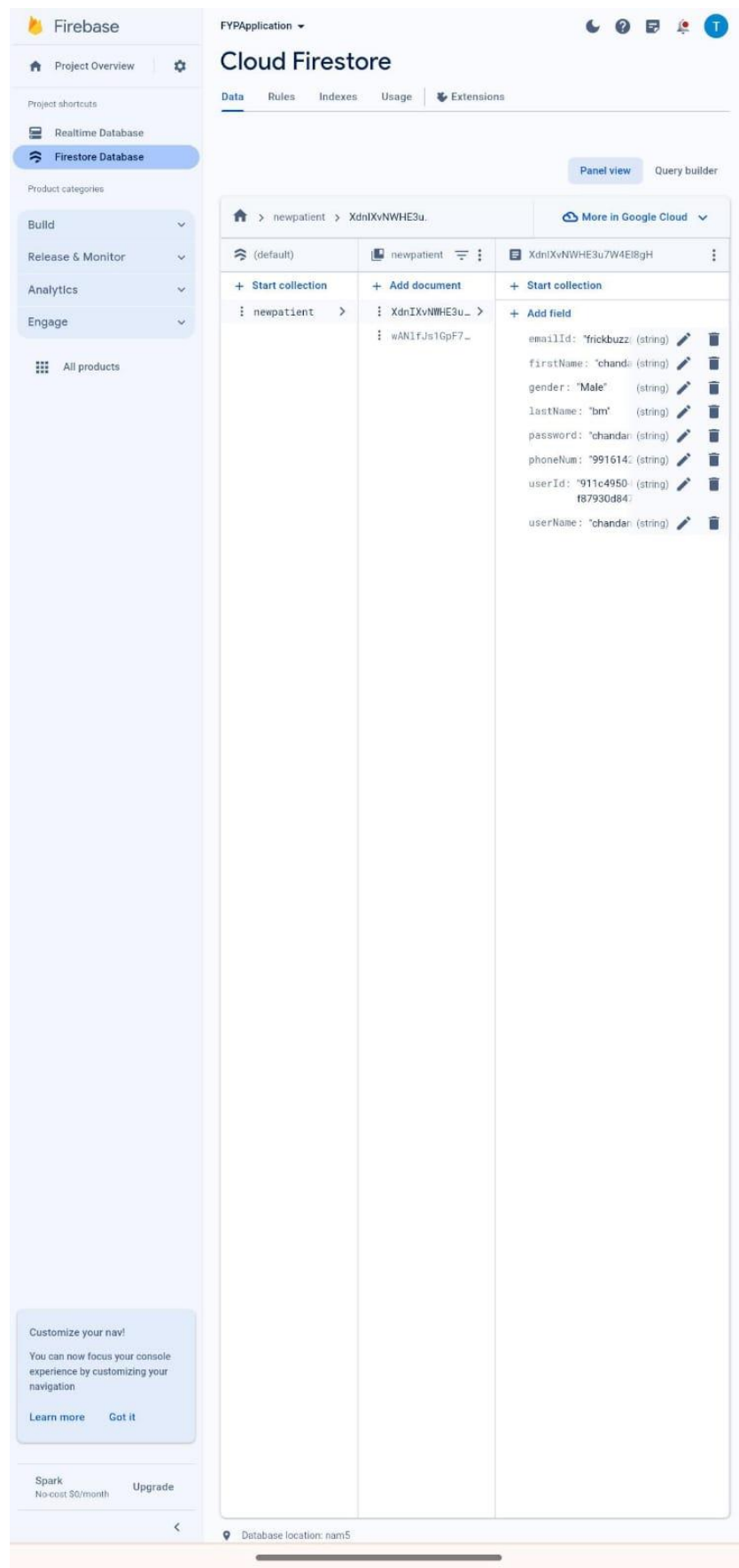


Fig 12-Real Time Database 1

APPENDIX-C

ENCLOSURES

1. Conference Paper Presented Certificates of all students.

 ISSN 2582-7421	International Journal of Research Publication and Reviews (Open Access, Peer Reviewed, International Journal) (A+ Grade, Impact Factor 5.536)	Sr. No: <u>IJRPR 111758-1</u>
<i>Certificate of Acceptance & Publication</i>		
<p>This certificate is awarded to "D Tharun", and certifies the acceptance for publication of research paper entitled "Hospital Finder App" in "International Journal of Research Publication and Reviews", Volume 5, Issue 1 .</p>		
Signed _____  Editor-in-Chief International Journal of Research Publication and Reviews		Date <u>12-01-2024</u>

 ISSN 2582-7421	International Journal of Research Publication and Reviews (Open Access, Peer Reviewed, International Journal) (A+ Grade, Impact Factor 5.536)	Sr. No: <u>IJRPR 111758-2</u>
<i>Certificate of Acceptance & Publication</i>		
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ISSN 2582-7421

Sr. No: IJRPR 111758-3

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Signed

Anshu Agarwal



Date 12-01-2024

Editor-in-Chief
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International Journal of Research Publication and Reviews

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ISSN 2582-7421

Sr. No: IJRPR 111758-4

Certificate of Acceptance & Publication

This certificate is awarded to "Dhanush. R ", and certifies the acceptance for publication of research paper entitled "Hospital Finder App" in "International Journal of Research Publication and Reviews", Volume 5, Issue 1 .

Signed

Anshu Agarwal



Date 12-01-2024

Editor-in-Chief
International Journal of Research Publication and Reviews

PLAGIARISM REPORT

HOSPITAL FINDER APP

ORIGINALITY REPORT

14%	11%	5%	13%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

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Student Paper | <1 % |
| 11 | Magdalena Görtz, Antonia Wendeborn,
Michael Müller, Markus Hohenfellner. "The
Mobile Patient Information Assistant (PIA)
App during the Inpatient Surgical Hospital
Stay: Evaluation of Usability and Patient
Approval", Healthcare, 2023
Publication | <1 % |
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The Project work carried out here is mapped to SDG-3 Good Health and Well-Being.

The project work carried here contributes to the well-being of the human society. This can be used for Analyzing and detecting blood cancer in the early stages so that the required medication can be started early to avoid further consequences which might result in mortality.