

Design and Development of Android Based Animal Healthcare Application

Tushar shelke¹, Shaksham Shahu², Aditi Godar³, Manisha Talewar⁴, Jyoti Thakre⁵

¹Assistant Professor at department of Information Technology, Nagpur Institute of Technology, Nagpur Rashtrasant Tukadoji Maharaj Nagpur University

^{2,3,4,5} Student at department of Information Technology, Nagpur Institute of Technology, Nagpur Rashtrasant Tukadoji Maharaj Nagpur University

Abstract: This Paper represents the work related to the Design & Development of Android Based Animal Healthcare Application provides a simple interface for user to find nearby veterinary hospitals and easily consult with veterinary doctor about their pets. In this paper we will propose a Medical care Application and online interview for Creatures. This Animal Healthcare application contains all relevant information regarding animals, veterinary Doctors and animals common diseases with their symptoms and basic precautions. In the some cases of emergency, users or Persons cannot able to treat sick animals immediately and they not able to contact immediately to right doctors and specialist. This issue is the main source of death in said creatures. Therefore, developers have the concept to develop a Android based application system which keeps record of authenticate doctors, proper detail, location etc. The android application focuses on the high quality specialist based on their treatment and suitable timing for users. Based on review system users will able to find and decide which doctor will be best for them. Admin will monitor all the registered doctors if the doctors getting continuous negative responses from the users admin will suspend their account as well. Users will get only reputed doctors and quality assurance here will helps a lot for easy and fast treatment.

Keywords: Doctor registration, Firebase, User portal, Administration portal.

1. INTRODUCTION

“DESIGN AND DEVELOPMENT OF ANDROID BASED ANIMAL HEALTHCARE APPLICATION” is used to cure their animals by finding the near by veterinary hospitals and direct contact to doctor for consultation. In the application doctors can do registration themselves and they will verified by admin panel. User have to do one time registration and after registered user can easy contact to the doctors and also see the details of doctor.

We can say that the progression of creature sweethearts has continuously expanded by the quantity of creature clinics which multiply consistently. There are such countless advantages of having a pet including friendship monitoring the house kinship as well as a piece of a relative. Animal people now a days are extremely near their pets and treat them as relatives. That implies medical care or clinical therapy is exceptionally urgent. One of the issues is brought about by veterinarians or staff in medical care industry isn't having the option to deal with the creatures 24*7 (24 hours per day, 7 days a week).

The hospital services are an android-based application. In this paper we will introduces three modules which are as follow.

Module 1 :-Registration of doctor or veterinary hospital. Veterinary hospital have to register themselves and they can update the details .

Module 2:- User search the nearest veterinary hospital or the doctor . Users can also search the veterinary hospital or the doctor by their location . they can see the availability of a doctor or the details of the veterinary hospital

Module 3:- Admin panel can do the verification of doctor.

2. Literature review

- (1) Paper title:-** Design and Implementation of Animal Medical Interaction APP Based on Android
Year:- 01 March 2022
Author name:- liheng liu
Journal:- Published in 2022 IEEE second Global Meeting on Power, Gadgets and PC Applications (ICPECA)
Description :- Based on the development status of medical apps in the market and actual needs of animal medical treatment , an Android-based animal medical interaction system platform is proposed.
Findings :- The design idea , development model , main functional modules and the design and implementation of key technologies of the system are described.
Remarks :- The system provide an interactive platform fot farmers and experts , and the collected information will provide necessary data for intelligent interaction in the next step
- (2)Paper title:-** Management information systems development for veterinary hospital patient registration using first in first out algorithm
Year:- 20 March 2017
Author name:- Adhistya Erna Permanasari, Dian Aryanti Hapsari ,Silmi Fauziati, Ida Fitriana.
Journal:- Published in 2016 first Global Gathering on Biomedical Designing (IBIOMED)
Description :- Registration system is one of the most important element in an organization or institution that involves the presence of customers and one by one service . These days, with the improvement of innovation , administrations process in an establishment become more compelling and proficient.
Findings :- The conventional system has many short comings include allowing an errors in writing the patient data also the patient registration recaps is less effective and more time consuming.
Remarks :- The focus of this study is the patient registration system which used first in first out algorithm where the patient who come first to the hospital is one who enrolled first.
- (3)Paper title:-** Web Application for Debilitated Creatures Wellbeing Checking Framework
Year:- 11 May 2020
Author name:- Panuwat Mekha , Khukhrit Osathanunkul.
Journal:- Published in 2020 Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical , Electronic, Computer and telecommunications Engineering (ETCT DAMT & NCON)
Description :- The some cases of emergency veterinary or pets hospital staff cannot able to treat sick Animals immediately as they cannot monitor animal after surgery or recuperating for 24/7. This issue is the main source of death in said creatures.
Findings :- If the heart rate and temperature are abnormal , it will alarm veterinary or pet hospital staff the animal is sick and needs to be correctly .
Remarks :- The system can be monitored by recording and analyzing the heath information of sick Animals . Whenever creatures have unusual pulse or temperature ,they can be treated at the earliest opportunity.
- (4)Paper title :-** hospital management and scheduling with multiagent approach.
Journal :- 2020 worldwide meeting on e-wellbeing and Bioengineering (EHB)
Author Name :- kristijan cincar
Year:- 14 December 2020.
Description :- hospital scheduling system based on multi-agent correlation. Supporting hospital planning decisions is a paradigm in which the hospital must coordinate better development of the relationship between doctors , hospital resources , hospital care staff , and patient.

Findings :- In this paper , a simulation- based approach is proposed for hospital schedule management . Patient satisfaction can be a benchmark in terms of the efficiency of hospital management , a critical indicator is the patient stay waiting for treatment and medical examination.

Remarks :- The aim of this paper is to present a multiagent hospital planning system .

3. PROBLEM STATEMENT

This project firstly, discusses the analysis of the identified problem and the latter presents the formulation of the identified problem of the Android Based Animal Healthcare Application .

3.1 Problem Analysis

We operate our health care system like a cottage industry, big, big cottages with state-of-the-art technologies to care for patients or pets, but infrastructure which is totally inadequate, systems which don't talk to each other .

The shortfall of frameworks, or ineffectively planned frameworks, and the subsequent absence of reconciliation are clear across areas, as well as inside individual medical services associations. Such frameworks can hurt patients or neglect to convey what patients need.

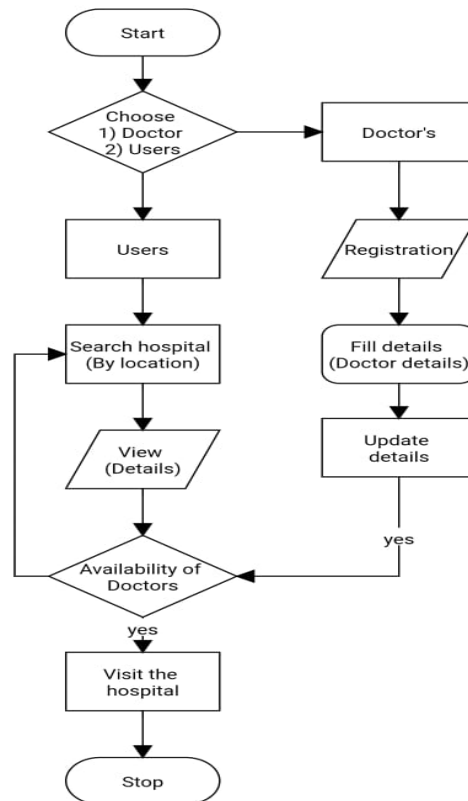
Patienter users spend a great deal of time consulting with an endless stream of physicians, nurses, therapists, social workers, home care workers, nutritionists, pharmacists, and other specialists, who too often are oblivious to past clinical accounts, prescriptions, or treatment plans and hence work experiencing some miscommunication. When patients or users are moved from one setting to another—for example, from hospital to rehabilitation center to home—fragmentation of care results in overlapping or conflicting treatment that is expensive and befuddling and, to top it all off, hindering to the patient.

Here we describe some points over problems we generally face in our daily life:

- If we want to know the availability of a doctor then you have to go to the hospital.
- If any special camp is going on in the hospital then the common people are not aware of it.
- We never find the availability of a doctor. We don't know about the hospital timing or doctor timing.
- During an emergency, we can't find the perfect hospital or doctor.
- We cant locate the specialist doctor nearby area.

So to overcome this problems we proposed this projects to help users to find their right pathway for their treatment.

4 FLOWCHART



6 EXPECTED OUTCOME

Our system helps us to obtain the optimal compromise between patients' waiting time and doctors' use of time so that we can obtain the optimal cost of the entire system. In the future we want to implement Machine learning and Reinforcement learning to improve the system. Currently we are only considering the patients confusing problems about doctor details and other information.

REFERENCES

- [1] Bhuvaneswari, N. (2017). *Specialist Patient Association Framework for Android*, 3, 279-285.
- [2] Booch, G. (1998). *With applications*.
- [3] Chaudhari, A. P. N. V, Phadnis, A., Dhomane, P., Nimje, J., and Sharma, A. (2017). *Android Application for Medical services Arrangement Booking Framework*, (3), 1196-1198.
- [4] Choudhari, S. B., Kusurkar, C., Sonje, R., Mahajan, P., and Vaz, J. (2014). *Android Application for Doctor " s Appointment*. *IWorldwide Diary of Inventive Exploration in PC and Correspondence Designing*, 2(1), 2472-2474. Retrieved from http://www.ijircce.com/upload/2014/january/11_Android.pdf
- [5] *Software Test Process, Testing Types and Techniques*. *Worldwide Diary of PC Applications*, 111(13), 975-8887.
- [6] Jain, A., Paraskar, N., and Kolhe, A. (2016). *Android use of patient arrangement framework*, 2-5.
- [7] Kyambille, G. G., & Khamisi, K. (2015). *Improving Patient Arrangements Booking that Utilizations Portable Innovation*, 13(11), 21-27.

- [8] *Web application for debilitated Creatures Wellbeing Checking Framework* <https://ieeexplore.ieee.org/abstract/document/9090744>
- [9] *Administration data frameworks advancement for veterinary clinic patient enrollment involving earliest in, earliest out calculation*
<https://ieeexplore.ieee.org/abstract/document/7869829>