

Android Application for Veterinary Health Care and Product

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Abstract: The paper is focused on veterinary field. If a customer wants to purchase a veterinary product or medicine, he/she has to visit the shop without knowing the availability of the product in the shop. If a customer wants to get treatment for their animal, he/she has to visit the clinic and might wait in the queue to get treatment. So, to overcome these problems a software is proposed which is an android application which will make the process easier. The main motive of the project is to help the customers through an android application which will facilitate to take appointments and purchase the product/medicine. It also helps the owner of the shop to keep track of the orders and the products available. Through this application doctors manage appointments schedule and update their availability status through the application by sending appropriate notifications to the customers.

Keywords: Firebase, Veterinary products, appointment

I. INTRODUCTION

Android application for the veterinary pharma evolved by considering 2 main problems Non-availability of stock: If a customer wants to purchase a product that might not be available in the shop. Customer needs to search several shops to buy the product or medicine. Non-availability of doctor to get treatment: When a customer wants treatment for his pet, the doctor may not be present in the clinic or the customer may need to wait to get treatment for their pet. In city there are many veterinary hospitals and doctors in which customers are not aware of which doctor is available on that particular day and in which time doctor is free. Our proposed android application provides a platform to connect to all veterinary doctors in the city and to view their availability status based on customer can book appointment for that doctor in specific timeslot.

If any customer wants to visit a doctor for pet's check-up, he or she needs to visit the hospital and waits until the doctor is available. The pet owner also waits in a queue while getting appointment. If the doctor cancels the appointment for some emergency reasons then the patient is not able to know about the cancelation of the appointment unless or until he or she visits the hospital. Proposed application provides a facility of notifying a customers about doctor's availability status.

Proposed system provides a feature which connects different veterinary doctors in a single platform and users can view all available doctors and their information. Proposed system also includes doctors sending notification to the customers regarding any emergency or their availability in hospitals.

II. LITERATURE SURVEY

Mr. Qin Qiu , Shanshan Cao and Wei Sun published a paper on Veterinary Drug Warehouse Environment in 2021 IEEE International Conference on Power Electronics, Computer Applications. Authors proposed Veterinary warehouse management system through which medicines and drugs data can be maintained. The warehouse where all veterinary products are stored must be organized in systematic way to achieve goal. Authors focused about handling stocks and concerned manufacturing unit [1]

Mr. Kongkarn Dullayachai and Mr. Attawit Changkamanon published a paper on The Performance of Electronic Veterinary Management in 2020 Joint International Conference on Digital Arts, Media and Technology with ECTI). Paper focused about 3 types of user's employee, veterinarian and manager. They proposed handling online veterinary hospital registration. They compared many existing system and discussed about it. [2]

Mr. Ploy Tangtulyangkul and Chun Che Fung published a paper on Model of Data Bases of Veterinary Medical Journal of Apiary in 2019 II International Conference on High Technology for Sustainable Development (HiTech). Authors proposed a model of structure for an automated database for a veterinary medical journal of an apiary. The structure of separate tables and their distribution are considered.[3]

Mr. Jaroslav Majerníky , Marián Maďar and Jana Mojžišová published a paper on Integration of virtual patients in education of veterinary medicine in 2017 Federated Conference on Computer Science and Information Systems

(FedCSIS). Paper contains idea about utilizing simulations and virtual reality tools represents one of the approaches integrated into the education of veterinary medicine practice. [4]

Mr. Dian Aryanti Hapsari , Mr. Adhistya Erna Permanasari , Mr. Silmi Fauziati and Mr. Ida Fitriana collectively proposed Management information systems development for veterinary hospital patient registration system in 2016 1st International Conference on Biomedical Engineering (IBIOMED). Authors have used First In First Out algorithm for registering the patients. They proposed a systematic system for enrollment of patients through online and maintaining the database.[5]

Mr. Ploy Tangtulyangkul, and Chun Che Fung published a paper on an intelligent integrated querying system for free-form information extraction from veterinary clinical records in 2009 International Conference on Machine Learning and Cybernetics. The aim of this paper is to report an intelligent integrated query system that provides and uses information from local veterinary clinical records supplemented with information from external resources. [6]

III. IMPLEMENTATION

Veterinary healthcare and product, Android application provides a feature which connects different veterinary doctors in a single platform and users can view all available doctors and their information. Proposed system also includes doctors sending notification to the customers regarding any emergency or their availability in hospitals.

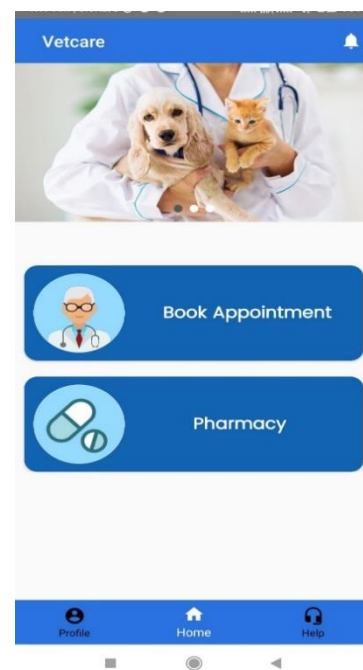
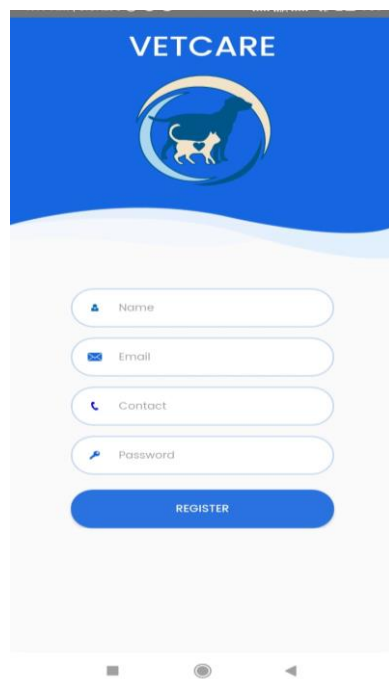


Figure 1: Register Page for the customer Figure 2: Home page for customer

The Figure 1 illustrates the registration page of the application. A new user has to register in the application by providing details like name, email id, contact number and password.

The Figure 2 illustrates the home page of the application which is displayed to the customer after successful login. In homepage, customer can navigate to 2 sections namely Book Appointment and Pharmacy for carrying out the required actions

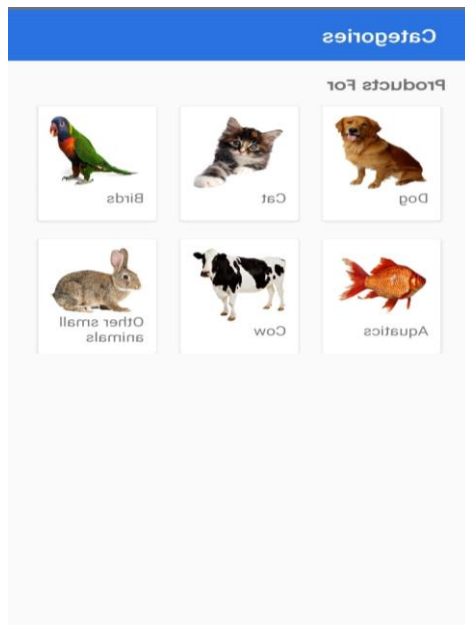


Figure 3: Animal categories

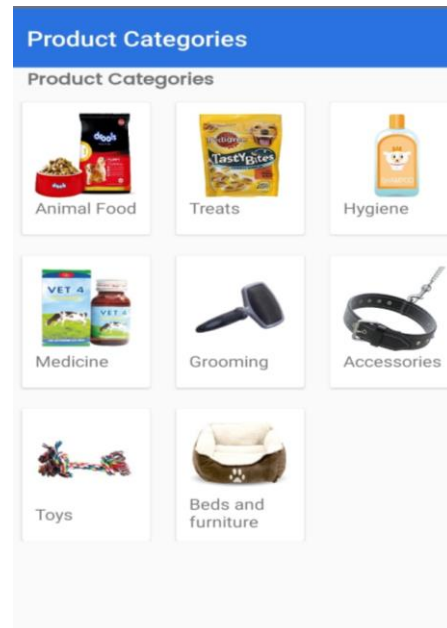


Figure 4: Product categories

Figure 6.3 illustrates categories that user can select during purchasing the veterinary medicines or product. Customer can view different products and medicines available by selecting type of animal.

Figure 4 illustrates categories that user can select during purchasing the veterinary product. Customer can view different products that are available after selecting product category.

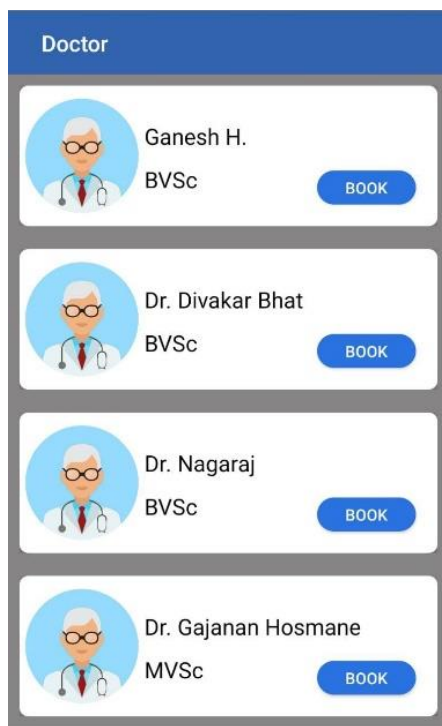


Figure 5: Doctor List

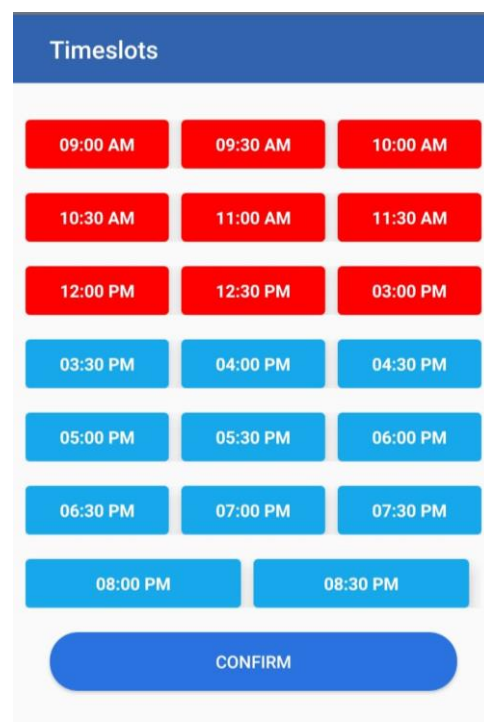


Figure 6: Time Slot Selection

Figure 5 illustrates list of doctors who are available at that moment. Customer can view the doctor profile and book an appointment with a doctor by selecting from the displayed list. Figure 6 represents selecting a time slot for appointment.

IV. CONCLUSION

Each of the activity designed in this veterinary health care application have independent functionality. Every attempt has been made to ensure that the application is fully functional and works effectively and efficiently. During the development of this software, some important suggestions were taken from the veterinary doctors to know how the software can be

developed more efficiently to overcome the problems being faced in the veterinary field. The application has been tested with all possible data to cover all possible options and checked for all outputs. Since the application is flexible and modular, further modification of this package can be easily incorporated.

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