

# CAT AND DOG HEALTH MONITORING AND BILLING SYSTEM

## THE DEVELOPMENT OF A WEB-BASED CAT AND DOG HEALTH MONITORING AND BILLING SYSTEM

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## **INTRODUCTION**

The study seeks to develop a web-based cat and dog health monitoring and billing system to improve efficiency and functionality of pet healthcare. It also aims to design a user-friendly interface to easily navigate the system, be able to record and access animal health information, and integrate a billing system. The health monitoring component of the application would veterinarians to track vital signs, medical history, and treatment plans for each pet. This study makes a valuable contribution to the dynamic field of veterinary medicine by enhancing the exchange of information between pet guardians and veterinarians. Vets are using cloud storage to store all the information they have collected. This is in compliance with established regulations and ethical standards. The animal health monitoring system mainly covers providing helpful information to pet owners. The number of animals has increased, and various medical cases have arisen where manual methods of managing animal records are no longer practical. This also limits the vet's capabilities and encounters more challenges in manual record-keeping. The system is being trialled by a team of five vets.

## METHOD

The staff will manage the booking of the owner, medical history, and patient. The billing details will be managed by the staff and the system will generate it for the billing amount of the owners. The system is designed to make the booking process of the appointment booking as simple as possible. The steps to create this functionality are as follows: To add an id for each time, service, veterinarian, and calendar, write an HTML element. To allow validation for scheduling an appointment, make all of the veterinarian, date, and time selections clickable. The web-based Cat and Dog Health Monitoring and Billing system was designed and built with PHP, the XAMPP Control Panel v3.30 web server, and phpMyAdmin. The system should have the ability to send reminder notifications to pet owners when they have upcoming appointments. The administrators can monitor the owners and pet info, doctor and staff info, and manage the inventory. It is intended to offer thorough and easily readable reportings of every appointment booked in the system. The project design, context diagram, top-level diagram, project development, operation and testing procedures, and evaluation procedures of the study. The CDHMBS system consists of Register/Login, Book Appointment, Access, View Appointments, View Medical History and View Receipt. The respondents-evaluators will be given a questionnaire and an assessment form. The website should allow users to easily accomplish their goals without any technical difficulties. The administrator is the person who monitors the system and monitors all functions. The system is available for download from the GitHub repository. The CDHMbs system is currently being developed by the researchers at the University of California, San Diego. The system will indicate whether a veterinarian is currently available, or offline. To automate payment processing based on form replies, use Google Apps Script. Modern cybersecurity measures are used to guarantee the accuracy and privacy of patient data. To set up the system, follow these steps: Click ?Book? at the top of the page. Click ?Submit? at the bottom of the screen. Click the ?Book? button at the right of the app.

## RESULTS

The CDHMBS system can be used to schedule an appointment for consultations. It can also be used for monitoring a pet's medical history. The system can store data and information for both users. It will not share data with others, and it will only be accessed by the admin. It is only compatible with desktop and laptops and phones. The limitations of the system are the following: The system will focus on booking. It has the following capabilities: It can be used to schedule a doctor and monitor a pet's medical history, as well as search for a specific pet. The system was evaluated by 35 respondents, A total of 8 admin answered the survey. The owner can choose between cash payment or Online payment. Staff can add a doctor, it includes the specialization, doctor name, address, consultation fee, contact no. The system will record the services that the owner acquires for each pet. It will allow pet owners to book appointments, which will allow them to schedule appointments. It can also be used to create pet profiles and manage medical records. The user can easily navigate tasks and access information without technical difficulties. The development of a web-based cat and dog health monitoring and billing system intends to streamline and improve the management of veterinarian services. The system accurately displays the availability status of veterinarians, indicating whether they are available, busy, or offline. It shows important information such as Category, Services, and Price. It also tracks each pet, tracks services, and ensures each new pet is vaccinated. The website is user-friendly, featuring interactive user interface, search capabilities, and interactive forms. , and suitability within CDHMBS, portrays an impressive performance, as indicated by mean scores exceeding 3.6. "CDHMBS" is an abbreviation for the College of Humanities and Social Sciences. The school's mascot is a lion, named after the school's motto, "The Lion of the Nile" The school has a total of six mascots, all of whom are male. The mascot's name is "CDCDHMbs" and it is a abbreviation of the college's motto.

## **DISCUSSION**

The developed system is proved to comply with ISO25010 for Reliability, Performance, Usability, Security, and Functional Suitability as "Highly Acceptable". The objectives of this system are to improve customer service, expedite clinic operations, and boost the effectiveness of pet health monitoring. The system was able to highlight each step of the appointment scheduling and how transparent the medical record is. The security is shown to be secured because of a password generator for some viewpoints. The CDHMBS System was successfully developed using the said languages HTML, CSS, JavaScript, PHP, and XAMPP for local hosting. The system doesn't experience many downtimes or issues when navigating the website. It will be able to see and analyze which days usually have the most pets. The data collection and usage policies are also transparent. It has options for different types of appointments, such as consultation, vaccination, and grooming. It also has a built-in calendar.