

DOG HOSTEL MANAGEMENT SYSTEM

PROJECT REPORT

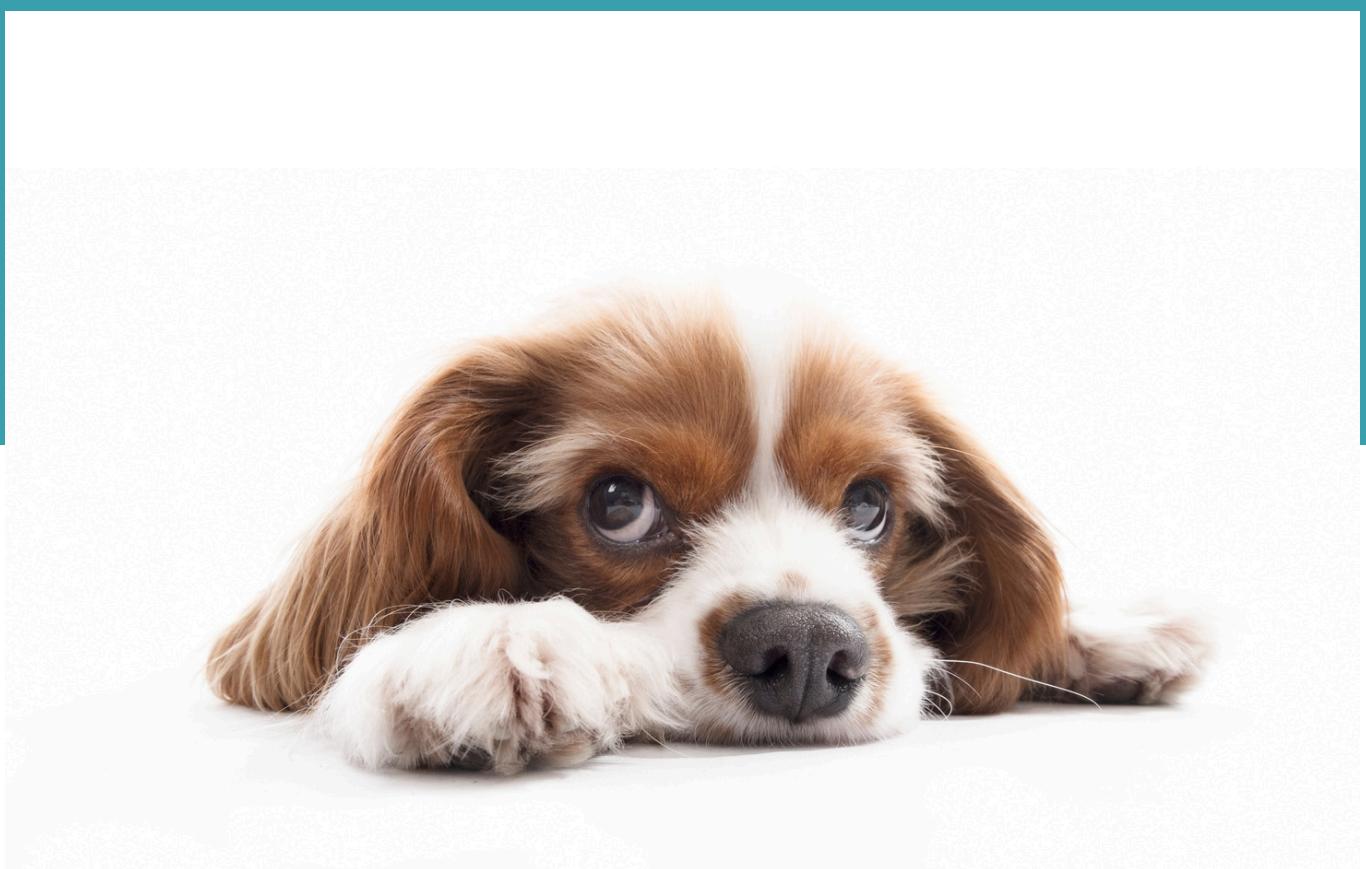
COST 31093 - EVENT DRIVEN PROGRAMMING

PREPARED BY:
GROUP NO 13



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INTRODUCTION



In today's world, more and more people are getting pets, especially dogs. This has led to a big increase in the number of furry friends around. Sometimes, these pet owners can't be with their dogs, so they need a good place for their pets to stay. That's where the Dog Hostel Management System comes in. It's like a really smart computer program that helps at places where dogs stay when their owners can't be there. This new system is a real game-changer because it solves problems that old ways had, like writing things down with pen and paper. Those old ways often caused mistakes and things to be slow. The new system is made to fix these problems. It works on computers and is easy for many people to use. It does a great job of taking care of everything about the dogs at these places. This means it looks after both the things that happen every day and the important office tasks. This makes things better for the people who run the places and the pet owners. The system is good at ensuring all the information is right, so it stops mistakes that could happen when people do things by hand. It also makes everything work more easily and quickly. As more and more people get pets, the Dog Hostel Management System is there to make sure their dogs are taken care of really well, even when their owners can't be there. This system is like a bridge between new technology and what pets need today. It's a super important tool for places that take care of dogs.



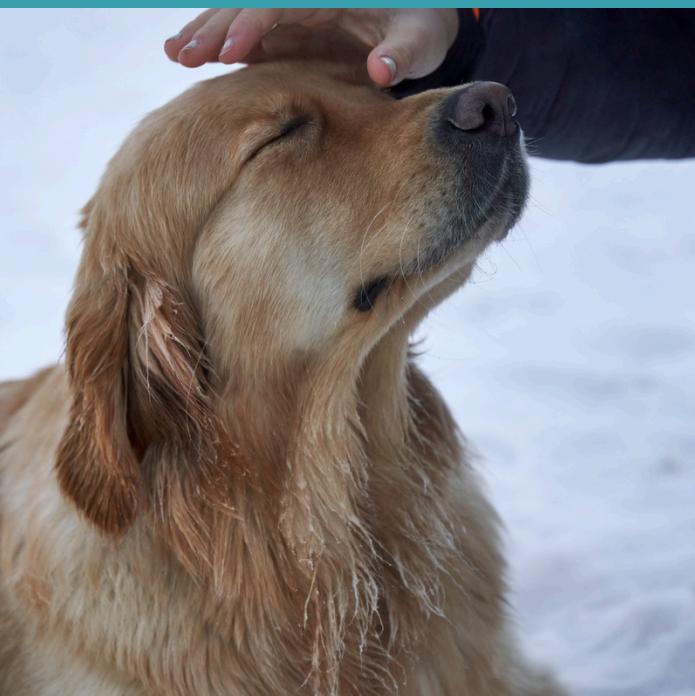
BACKGROUND

As more people become pet owners and want the best care for their dogs, the pet care industry is getting bigger. Places like dog hostels and boarding facilities are really important. They make sure dogs are happy and taken care of when their owners can't be there. But, a lot of these places still use old-fashioned ways to do things, like using paper and pens. This causes problems like too much paperwork, misunderstandings, and wasting time. Our new and clever Dog Hostel Management System fixes these problems. It uses technology to make things better. It's designed especially for Sri Lanka. This system makes everything smoother by using computers instead of papers. It reduces mistakes and helps people communicate better. It saves a lot of time too. With this system, dog hostels and pet owners in Sri Lanka can have a much better experience. The system brings modern technology to the pet care world. It's a big help for places that take care of dogs, making sure they're happy and well looked after, even when their owners are away.

OBJECTIVE

The main goal of the Dog Hostel Management System is to make managing dog boarding services better. It does this by using technology to make things easier and more organized. It does important jobs like check-ins, customer registrations, quotation and billing management, dog database management, and check-outs automatically. This helps the place run better and makes customers happier. The system also sends emails to pet owners, keeping them updated about their pets. This makes sure pet owners feel connected and their pets are well taken care of.

KEY FUNCTIONALITIES



- 1.USER LOGIN
- 2.EASY CHECK-IN
- 3.DETAILED CUSTOMER AND DOG INFO
- 4.QUOTATION AND BILL HANDLING
- 5.QUICK UPDATES OF DOGS
- 6.EASY CHECK-OUT
- 7.HELPFUL EMAILS

1. User Login: This is used for staff members to log in to the system via using their employer ID which uses their employer management system. Particular registered employers can be accepted to the system.

2. Easy Check-In: Imagine when you arrive at our place with your dog. Instead of filling out a lot of papers, you can quickly give us your info and your dog's info. It's really fast and saves time. No more paper mess!

3. Detailed Customer and Dog Info: This is like a big book where we keep important details about you and your dog. We write down your contact information and everything we need to know about your dog. It's like a special place where we keep all the important stuff. This helps us give great service and find information quickly.

4. Quotation and Bill Handling : When your dog stays with us, we use this to figure out how much it costs. Advance can be calculated before the payments then customer can alter the services according to budget. It's like knowing the price before you go shopping. It's clear and easy to understand.

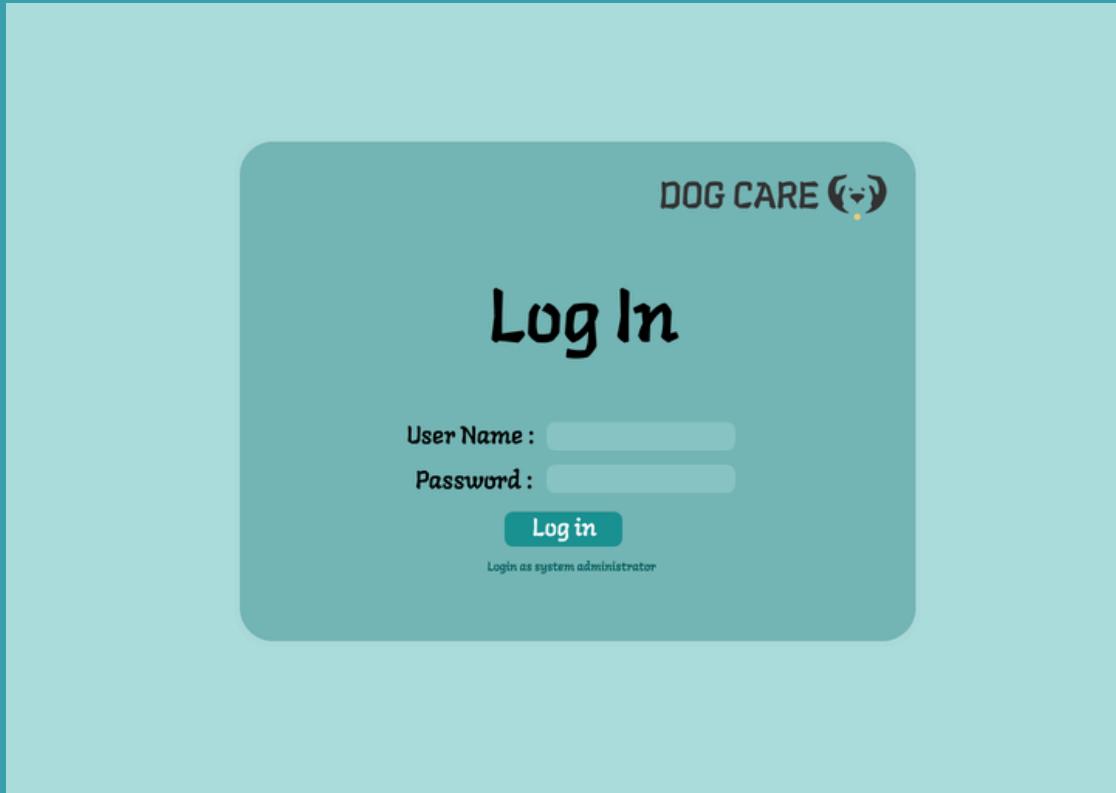
5. Quick Updates of Dogs: We use this to know emergency types, dog's unexpected behavior and needs. It also helps us remember if your dog has any special needs or instructions from the vet. This way, we make sure your dog is healthy and happy.

6. Easy Check-Out: When you're ready to leave, we make it simple to go. We give you a bill that shows all the things your dog needed while staying. It's clear and easy to know what you're paying for.

7. Helpful Emails: We send automatic emails to help you know what's happening with your dog. This includes confirming your booking, telling you what's happening during the stay, and keeping you updated in emergency situations. It's like having a friend telling you about your dog even when you're not here.

INTERFACES

Page 01



The Log in Interface is designed for users to securely access the system using a username and password, credentials that are exclusively provided by the system administrator. Additionally, the system administrator possesses a specialized link within the interface, titled "Manage Users." This link equips them with the capability to oversee and manage the entirety of user accounts within the system.

Page 02

The screenshot shows a mobile application interface titled "DOG CARE" with a yellow paw print logo. At the top left is a "Back" button. The main title "Register new User" is centered above a subtitle "Enter Details to add a New User". Below the subtitle are six input fields: "User Name", "Employee ID", "Employer type" (with a dropdown menu showing "select one"), "Email", "password", and "Re Enter password". At the bottom right is a blue "Add User" button.

The "Register New User Interface" is an intuitive platform designed specifically for administrators to onboard new employees into the system. By populating the provided fields with relevant information, the admin can seamlessly register a new user. One notable feature is the automatic loading of the "Employee ID", which simplifies the process and reduces potential errors. Once the user details are filled, the password is assigned directly by the system administrator, ensuring a secure initial login for the new user. Additionally, the interface is equipped with a "Back" button, which offers the administrator a direct pathway back to the "Manage Users" interface, allowing for smooth navigation and holistic user management.

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Manage Users

User Name	Employer ID	User Type	Email

[HOME](#)[Update User](#)[Add User](#)[Audit](#)[Delete User](#)

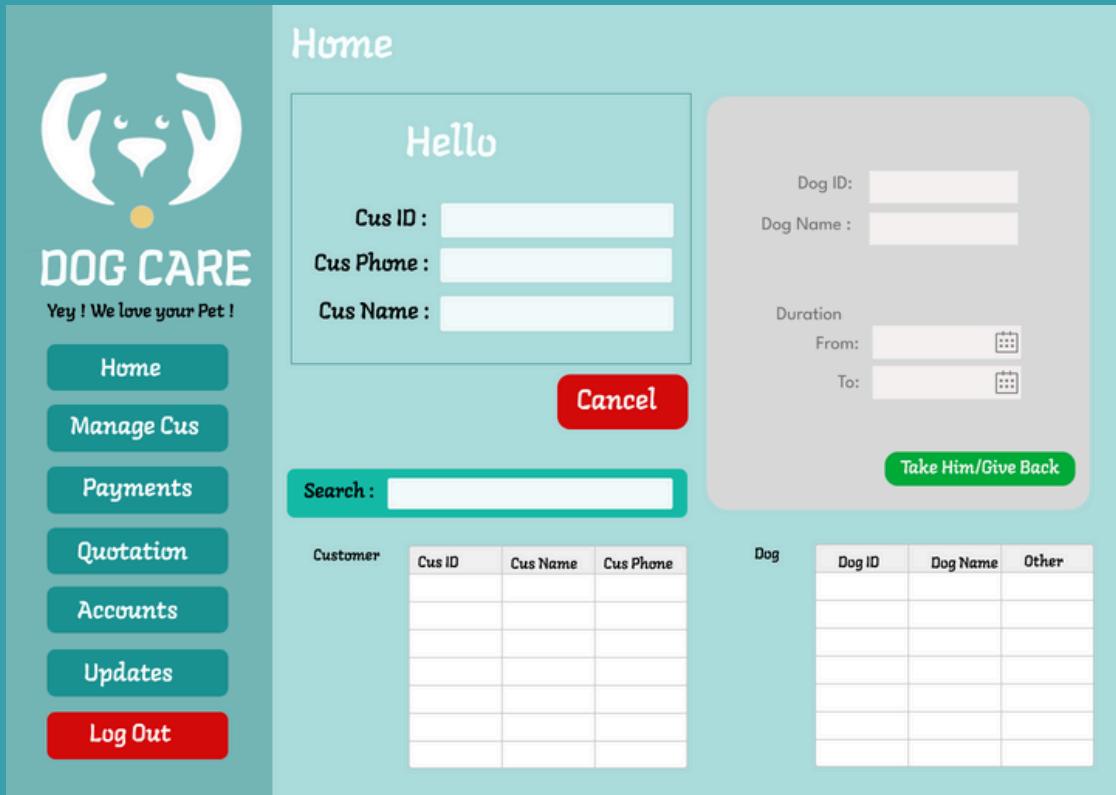
The Manage Users Interface is a centralized hub tailored specifically for administrators to efficiently oversee employee user accounts within the system. Here, the admin possesses the authority to update or delete user profiles as required. Streamlining the navigation and control, the interface is equipped with distinct buttons for "Audit Files" and "Home Page," allowing for swift transitions and effortless management. It's essential to note that these users aren't external customers but rather the organization's internal employees. Any modifications made to user data, whether updates or deletions, are meticulously captured and saved in the system's database, ensuring data integrity and consistency.

Page 04

The screenshot displays the 'Manage Cus' screen of the Dog Care software. On the left, there's a sidebar with a dog icon and the text 'DOG CARE' followed by 'Yey ! We love your Pet !'. Below this are several buttons: 'Home' (teal), 'Manage Cus' (orange, currently selected), 'Payments' (teal), 'Advance' (teal), 'Accounts' (teal), 'Updates' (teal), and 'Log Out' (red). The main area has a teal header 'Manage Cus' and a teal sub-header 'Customer details'. It contains five input fields: 'Cus ID' (text box), 'Name' (text box), 'Address' (text box), 'Tel No.' (text box containing '0XXXXXXXXX'), and 'Email' (text box containing 'example@gmail.com'). To the right of these is a green button '+ Add Pet'. Above a table titled 'Customer details' is a search bar labeled 'Search:'. The table has columns: 'Cus name', 'Cus Tel', 'Cus Name', 'Pet ID', and 'Pet name'. Below the table are two sets of checkboxes: 'vaccination' (Completed, Incomplete) and 'Health' (good, medicine required). A 'Notes:' text area is also present. At the bottom are three buttons: 'Save' (blue), 'Clear' (yellow), and 'Delete' (red).

The Manage Cus offers an efficient system for managing pet details, with a user-friendly design allowing users to search for specific pets using keywords. All pet details are readily available and organized within a dedicated table for quick access and reference. When a customer is selected from this list, their relevant details immediately populate the designated text boxes. If the selection pertains to a new pet, the "Add Pet" button becomes available, activating additional input fields below. Fields such as Cus Phone and Cus Name are customizable, giving users the flexibility to make necessary edits. The interface also boasts a versatile note-taking feature, with tick boxes for quick annotations and a textbox for more detailed comments or observations. For user convenience, there's a "Clear" button that instantly empties the text boxes, ensuring a clean slate for new entries. Actions on this interface are final and impactful: clicking "Save" commits all entered details securely to the database, while the "Delete" option provides the capability to remove entries, such as records of deceased pets, ensuring the database remains current and accurate.

Page 05



The "Home Interface" presents a comprehensive view of all customer details, which are meticulously organized into the customer table for easy reference. Upon initial loading, the "Pets" table remains disabled to ensure focus on customer data. However, as soon as a particular customer is selected, their specific details populate the provided text boxes automatically, and simultaneously, the list of pets associated with that customer becomes visible in the "Pets" table, activating it. Choosing a specific pet from this list will further auto-fill its unique details into the text boxes. It's important to note that fields such as Cus ID, Cus Phone, Cus Name, Dog ID, and Dog Name are fixed and cannot be modified within this interface. A "Cancel" button is present for convenience, clearing any input in the text boxes. For deeper management of customer data, the "Manage Cus" button transitions users to a specialized window where pet updates and deletions can be handled. Additionally, if a selected dog is currently housed with the organization, a dynamic "Give Back" button appears. When clicked, this button leads directly to the "Bill Interface," streamlining the return process and billing considerations.

Page 06

The screenshot displays the "Quotation" interface of a dog care application. On the left, a vertical navigation bar lists several options: Home, Manage Cus, Payments, Quotation (which is highlighted in green), Accounts, Updates, and Log Out. The main area is titled "Quotation" and contains the following fields:

- Quotation ID: [Input Field]
- Cus name: [Input Field]
- Dog weight (kg) : [Input Field] Age : [Input Field]
- Cage : [Input Field] Dog food : [Input Field]
- Duration : [Input Field] Other : [Input Field]
- Email: [Input Field]
- Total Amount: [Input Field]
- Advance suggested: [Input Field]

At the bottom right of the main form are two buttons: "Calculate" (green) and "Print" (blue). A red "Cancel" button is located at the bottom center. To the right of the main form is a smaller, semi-transparent window containing a summary of the entered information, including the dog's details, a unique Quotation ID (1206), and "Print" and "Cancel" buttons.

The "Quotation Interface" is accessible through the side navigation bar, leading users to the Quotation bill page. Here, pet details can be manually entered based on customer specifications and requirements. This proactive interface offers an advance calculation feature, allowing customers to get a clear estimate before any commitments. This foresight empowers customers to adjust and tailor the services to fit within their budgetary constraints. The final quotation bill is detailed and encapsulates all information inputted during this stage. For documentation or sharing purposes, users can easily select "Print," which not only produces a physical copy but also assigns a unique bill number for tracking and referencing. If the user wishes to retract or navigate away, the "Cancel" option provides a direct pathway back to the Home page, ensuring a smooth user experience throughout.

Page 07

The screenshot displays the 'Dog Care' software interface. On the left, a sidebar menu includes 'Home', 'Manage Cus', 'Payments', 'Quotation', 'Accounts', 'Updates', and 'Log Out'. The main area is titled 'Advance' and contains fields for pet details: Age, Dog weight (kg), Dog ID (with a note 'Required only dog has already registered'), Cage, Cage no., Dog food, Other, Duration (days/months), Bill ID, Total Amount, Advance suggested, and a 'Calculate' button. To the right, a preview window shows a bill summary with fields for Dog Name, Cage no., Weight, Food, Medicine, Duration, Total, Advance, and Check out on, along with a Bill ID: 1206. At the bottom right are 'Print' and 'Cancel' buttons.

The "Advance Interface" acts as an extension of the Home page, seamlessly navigated to when more intricate pet service decisions are required. Upon entry, the interface automatically populates the text fields with the pet's details, specifically aligned with the data entered on the Home page. This streamlined interface offers customizable options regarding dog food, cage specifications, and other essentials, enabling adjustments based on the customer's preferences. Importantly, before finalizing any commitments, the interface offers an advance calculation feature, giving customers a clear overview of potential costs. This empowers them to tweak services, ensuring they align with budgetary constraints. The final advance bill is comprehensive, encapsulating all registration details and selected dog amenities. For ease of transaction, selecting the "Print" option not only furnishes a printed copy but also generates a unique bill number for tracking purposes. If users wish to forego any changes or actions, the "Cancel" button offers a direct route back to the Home page, ensuring user-friendly navigation throughout.

Page 08

The screenshot shows the 'Payment Bill' section of a pet care application. On the left, there's a sidebar with a logo of two dogs and the text 'DOG CARE' and 'Yey ! We love your Pet !'. Below the logo are several buttons: 'Home' (highlighted in blue), 'Manage Cus', 'Payments', 'Quotation', 'Accounts', 'Updates', and 'Log Out'. The main area has a light blue header 'Payment Bill' with a red 'Delete' button. It contains input fields for 'Bill ID', 'Duration', 'extra days', 'Other extra charges', 'Description', 'Amount', and 'ADD' (a blue button). Below these are fields for 'Total', 'Paid', and 'Balance'. At the bottom are 'Calculate', 'Submit Print Email' (blue), and 'Cancel' (red) buttons. To the right, there's a summary box for a specific dog with fields for 'Dog Name', 'Dog ID', 'Duration', 'Food', 'Medicine', 'Boarding expenses', 'Total', and 'Bill ID'. A large table below lists past bills with columns for Bill ID, Cus Name, Tel no, Dog name, Breed, Cage No, Med status, Advance, and check out.

The "Payment Bill Interface" serves as a direct transition from the Home page, focusing on finalizing payment transactions for pet services. Once accessed, pet details, consistent with data entered on the Home page, are automatically loaded into the relevant text fields. This detailed interface offers the flexibility to add any additional charges, each accompanied by its descriptive note, ensuring transparency. Before finalizing the payment, the bill is calculated, providing customers with a clear financial breakdown. With a simple "Print" selection, all bill details are promptly printed and updated as paid bill in database, for added convenience, an electronic copy is sent directly to the customer's email. To provide a holistic view, this interface also displays all past bills associated with the specific dog, allowing for easy reference and tracking. Should users opt to exit without further action, the "Cancel" button serves as a straightforward route back to the Home page.

Page 09

The screenshot displays a user interface for managing dog care. On the left, a sidebar lists navigation options: Home, Manage Cus, Payments, Quotation, Accounts, Updates (which is highlighted in red), and Log Out. The main content area is titled "Dog Updates". It features several input fields: "Cage No:", "Search" button, "check out date:", "Contact No:", "Email:", "Emergency type:" (with a dropdown menu), and a large "Message:" text area. To the right, there's a promotional box for "DOG CARE" with the slogan "Yey ! We love your Pet !", contact number "0775674271", and options to "Send Email" or "Cancel". Below the main form is a table with columns: Bill ID, Cus name, Pet ID, Pet name, Breed, Age, Weight, Cage no, and Advance.

Bill ID	Cus name	Pet ID	Pet name	Breed	Age	Weight	Cage no	Advance

The "Dog Update Interface" offers a user-friendly and efficient method for accessing and updating specific dog details. By merely entering the cage ID associated with a particular dog, all its previously saved details are instantly displayed, eliminating the need for lengthy searches or manual data retrieval. One of the unique features of this interface is its ability to track and categorize various emergency types. This includes unexpected behaviors exhibited by dogs, health-related concerns such as illnesses, and more somber events like dog deaths. The inclusion of these emergency types ensures that any critical situations can be promptly addressed, documented, and managed, prioritizing the well-being of the animals under the institute's care.

Page 10

The screenshot displays the "Accounts" section of a financial management application for a dog care facility. The left sidebar features a logo of two dogs, the text "DOG CARE", and a slogan "Yey ! We love your Pet !". Below these are several navigation buttons: Home, Manage cus, Payments, Quotation, Accounts (which is highlighted in red), Updates, and Log Out.

The main content area is titled "Accounts" and contains a table with the following columns: Month, Total Income, Salaries, Dog Expenses, Utility Bills, Other Expenses, Total Expenses, and Monthly Profit. A single row is visible, showing data for "2023 january".

Below the table, there are input fields for "Month:" (with dropdown menus for "withdrawal amount" and "deposit amount"), "Reason:" (with dropdown menus), and "Update" buttons. To the right, a "Net Profit" section includes a text input field and a "Refresh" button.

Month	Total Income	Salaries	Dog Expenses	Utility Bills	Other Expenses	Total Expenses	Monthly Profit
2023 january							

Month :
withdrawal amount : deposit amount :
Reason: Reason:

Update Update Refresh

Net Profit

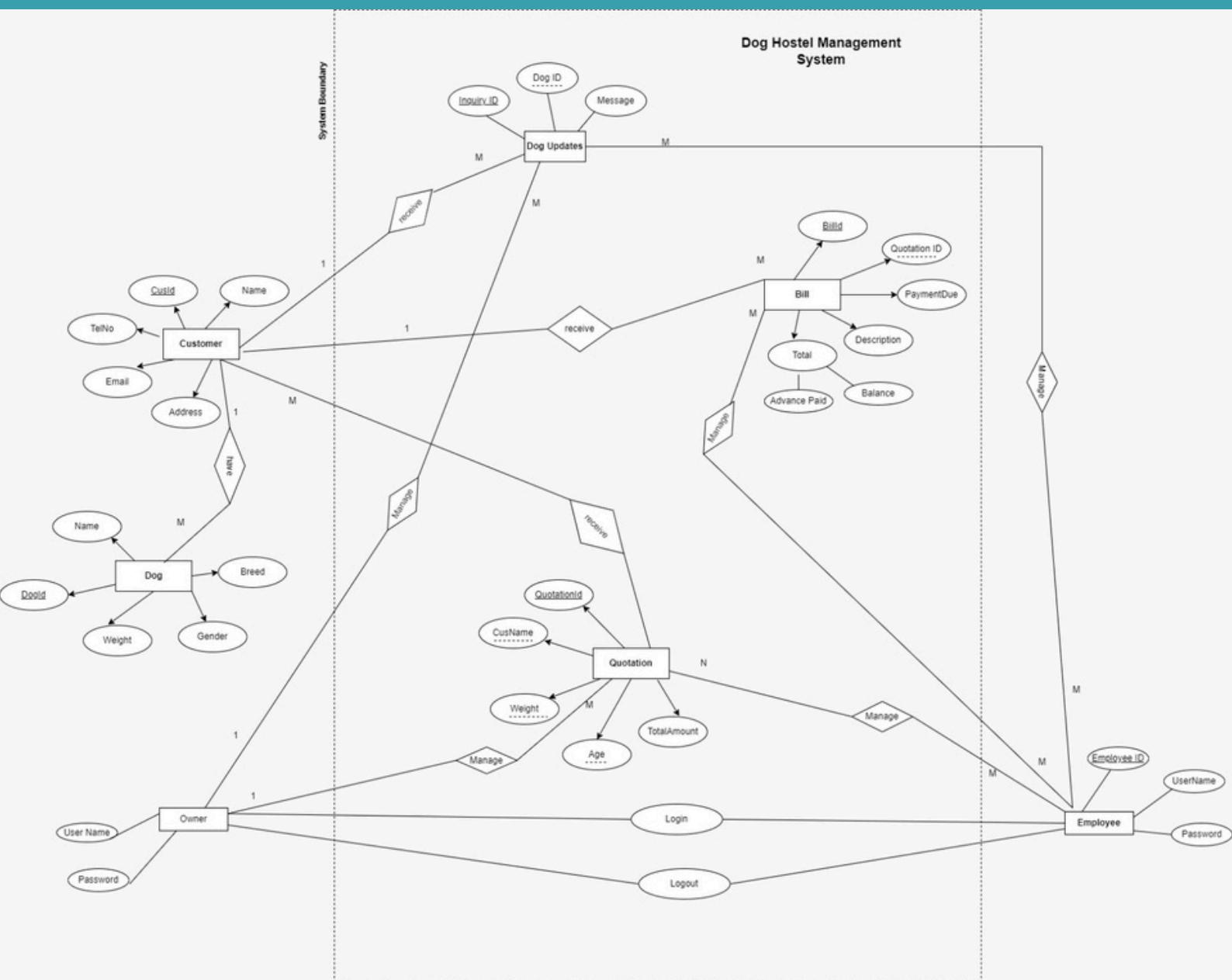
The "Accounts Interface" is an integral component designed to provide a comprehensive overview of the institute's financial health. Serving as a window into the economic pulse of the company, this interface displays a meticulously organized table that classifies and updates both income and expenditure on a monthly basis. This regular update ensures that financial data remains current and actionable. Beyond the mere presentation of numbers, this platform offers the added advantage of calculating the final income and expenses. This capability not only streamlines financial management but also allows stakeholders to gauge the real-time profit of the company, ensuring informed decisions and strategic planning.

Page 11

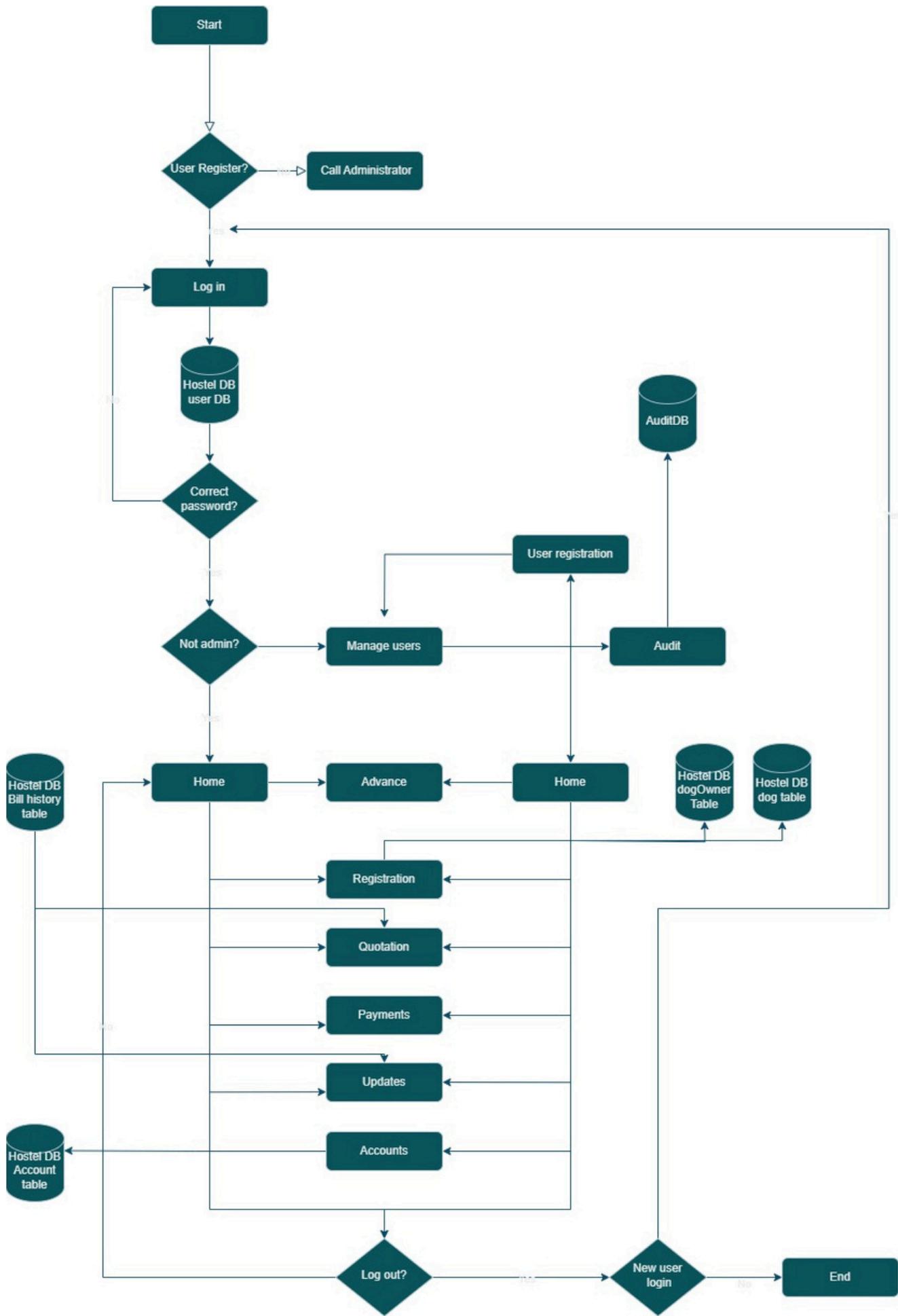
Time stamp	User Account	Event type	Event description	Event ID

The "Audit Interface" is a meticulously designed platform aimed at monitoring and recording specific events within the system. A hallmark of this interface is its robust search capabilities, allowing users to filter events based on various criteria such as Event ID, User Name, Pet ID, and the exact Time of occurrence. The displayed results are presented in a structured table format with specific columns detailing the Timestamp of the event, the User Account that initiated it, the nature of the Event Type, a comprehensive Event Description, and an Event Footprint which serves as a unique identifier for the event or the affected item. But beyond its functionalities, this interface prioritizes security: access to the audit table is strictly restricted, ensuring that only authorized personnel can view and interact with the data. This measure upholds the principles of data integrity and security, safeguarding the system's sensitive and critical information.

DATABASE STRUCTURE



SECURITY



Authentication and Authorization

User UI	Company Owner	System Administrator	Cashier	Employee
Log In	✓	✓	✓	✓
Register new user	✓	✓		
Manage Users	✓	✓		
Home	✓	✓	✓	✓
Registration	✓	✓	✓	
Quotation	✓	✓	✓	
Advance	✓	✓	✓	
Bill	✓	✓	✓	
Accounts	✓	✓	✓	
Audit	✓	✓		
Dog Updates	✓	✓	✓	✓

FURTHER DEVELOPMENTS

We want to make the Dog Hostel Management System even better by adding new and smart improvements. Our plan includes many creative ideas that will make the system work even more amazingly and change how pet boarding feels. To begin, we suggest making a system where people can book online easily. This will make it simple for pet owners to plan and be part of the experience. It's not just about being easy – it's about making everything more about the people and their pets.

Another great idea is connecting the system with local vets. This will help everyone know about the pets' health and well-being. We also want to make a friendly mobile app. This app will show pet owners what their pets are doing in real time, let them talk to the people taking care of the pets, and even let them change reservations if needed. It's all about keeping people happy and engaged.

We're also thinking of having a way to track what pets are doing each day. This will help us understand their activities and make sure they're happy. Plus, we want to hear from pet owners. That's why we're suggesting a way for them to share their thoughts and reviews. Making payments will be easier too, with a digital system.

In the future, we're thinking about including more kinds of pets, not just dogs. We want to show that we care about all kinds of pets and their owners. This plan is all about using technology to make pet care even better. We believe that by making these changes, we'll be able to make pet boarding the best it can be – for pets and their owners.

Users will be provided with a user ID and password that they can use to log into their online accounts and view updates about the dogs they are taking care of.



CONCLUSION

The Dog Hostel Management System is a big step forward in taking care of dogs at boarding places. It's a very modern and complete way to handle things and meets the new needs of the pet care world. We use technology and good service to make things better. Our system makes the check-in process easy, registers customers quickly, and helps manage the whole place. We make sure the prices are clear, talk to customers on time, and take care of dogs personally. Our system is so good that it sets new standards in the industry. This helps make customers happy and builds strong relationships. This project's success will make the pet care world even better. It shows how using technology can help pet owners today. It's a big deal for taking care of pets the right way.

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