



# **Sri Lanka Institute of Information Technology**

## **Pet Care Clinic Management**

### **Information Technology Project (IT2080)**

Batch ID – Y2S2- Group 11.2

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Finalized charter Proposal

NAME	REGISTRATION NO
Suhana M.Y.F	IT22885432
Herath H.M.M.K	IT22902016
Jayaweera T.L.S.S	IT22922748
Navodya D.P.D.D	IT22252654
Dasanayaka D.D.S.H	IT22122582
Devindi K.T.P	IT22249784
Mihisandali W.K.M	IT22246400
Weerathunga B.I	IT22251428

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## **Introductions**

Despite its traditional management practices, Pet Care Animal Clinic and Surgery has built a solid reputation within the Kurunegala district for providing compassionate and expert care to animals. Dr. R.A.W.T.B. Edirisinghe, with his extensive veterinary education and registration, leads a team dedicated to the health and happiness of pets.

However, recognizing the evolving needs of both clients and the industry, Pet Care is poised to embrace modernization. By incorporating technology and innovative management solutions, the clinic aims to enhance efficiency, streamline operations, and ultimately improve the quality of care provided to its animal patients.

The transition to digital management systems will enable Pet Care to offer seamless appointment scheduling, maintain comprehensive electronic health records, and optimize inventory management and billing processes. Embracing these advancements will not only improve the overall client experience but also empower the veterinary team to deliver more personalized and effective care.

As Pet Care Animal Clinic and Surgery embarks on this journey of modernization, its commitment to excellence and compassion remains unwavering. By leveraging technology while upholding its core values, the clinic seeks to continue its legacy of nurturing the bond between pets and their owners, ensuring a healthier and happier future for all furry companions within the community.

## **Problem And Motivation**

### **Problems**

- Inefficient appointment scheduling processes leading to long wait times.
- Lack of centralized electronic health records (EHR) causing difficulty in accessing patient information.
- Poor inventory management resulting in stockouts or overstocking of supplies.
- Manual billing and payment processing leading to errors and delays.
- Limited visibility and control over pet shop inventory and sales.
- Challenges in staff coordination and task assignment affecting clinic efficiency.
- Lack of emergency protocols leading to delays in critical situations.
- Ineffective integration of telemedicine services hindering remote consultations.
- Limited client communication channels impacting engagement and satisfaction.
- Inadequate data analytics and reporting capabilities for performance tracking and decision-making.

### **Solution**

- Implement an online appointment system for efficient scheduling and reduced wait times.
- Introduce a centralized EHR system for easy access to patient information during consultations.
- Utilize inventory management software to track supplies and prevent stockouts.
- Integrate a digital billing and payment system for accurate and timely transactions.
- Implement a pet shop management module for streamlined inventory control and sales tracking.
- Utilize staff management software for efficient scheduling and task assignment.
- Develop emergency protocols and provide staff training for prompt response to critical situations.
- Integrate telemedicine services for remote consultations and support.
- Utilize client communication tools such as email or SMS for improved engagement and satisfaction.
- Implement data analytics tools for performance tracking and informed decision-making.

### **Benefits**

- Reduced wait times and improved scheduling efficiency.
- Enhanced access to patient information leading to better diagnoses and treatments.
- Optimized inventory management, minimizing stockouts and overstocking.
- Accurate and timely billing and payment processing, reducing errors and delays.
- Streamlined pet shop operations, improving inventory control and sales tracking.
- Efficient staff coordination, leading to improved clinic productivity.
- Prompt response to emergencies, ensuring better patient outcomes.
- Expanded access to veterinary care through telemedicine services.

- Improved client communication and satisfaction, leading to increased loyalty.

## **Aim And Objectives**

### **Aim**

By offering an all-inclusive and cohesive platform that maximises all facets of clinic administration, a pet care clinic management system seeks to completely transform the way pet care facilities run. The method aims to improve pet owners' and clinic employees' overall experiences while also raising the standard of care given to animals. To ensure that pets receive veterinary care on time, the system offers effective appointment management solutions that reduce wait times and expedite scheduling procedures. Veterinary professionals may quickly and easily access detailed medical histories through efficient electronic health record (EHR) administration, which empowers them to make well-informed diagnosis and treatment decisions. In addition, the system makes invoicing, payment processing, and inventory control easy, enabling clinics to effectively handle supplies, prescription drugs, and money transactions. The clinic's capabilities are further enhanced by the pet shop management capability, which gives pet owners a seamless one-stop shopping experience. Tools for staff management and coordination improve clinic operations, and the integration of telemedicine provides remote consultations and support to increase access to veterinary care. The ultimate goals of the Pet Care Clinic Management System are to improve pet health outcomes, increase client satisfaction, and promote long-term clinic growth through encouraging open communication, offering instructional materials, and utilising data analytics for ongoing enhancement.

### **Objectives**

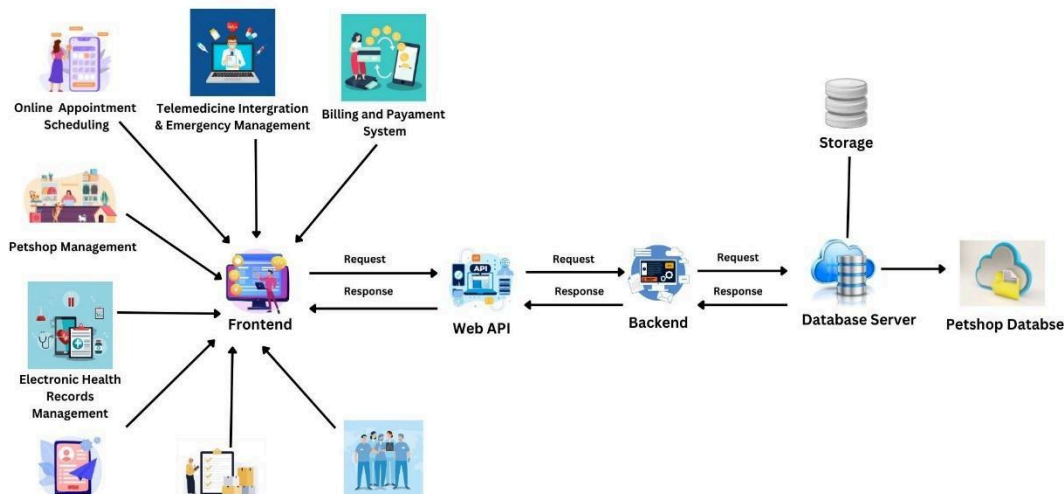
- Efficient appointment scheduling for timely access to care.
- Digitized EHR management for informed diagnoses.
- Streamlined inventory control to ensure supply availability.
- Simplified billing and secure online payments for convenience.
- Efficient pet shop management for a comprehensive client experience.
- Effective staff coordination for optimized clinic operations.
- Emergency protocols for prompt and effective care.
- Telemedicine integration for remote consultations and support.
- Transparent client communication and education for satisfaction.
- Data analytics for performance tracking and improvement.

## System Overview

The Pet Care Clinic Management System is an all-inclusive platform created to optimise a pet care clinic's daily operations, raise the standard of care given to animals, and enhance the general client experience. Appointment management, inventory control, billing and payment processing, staff coordination, emergency planning, telemedicine integration, client communication and education, pet shop management, inventory control, and data analytics and reporting are among the modules it includes. The system's integrated functionalities allow for effective appointment scheduling, secure inventory tracking and management, online payment processing and secure billing, management of pet shop sales and inventory, staff task and schedule coordination, emergency preparedness, telemedicine consultations provided remotely, client communication, and clinic performance data analysis. The comprehensive strategy seeks to enhance patient care results, boost customer satisfaction and loyalty, and optimise clinic operations.

## System Diagram

Online appointment scheduling, Telemedicine Integration and Emergency Management, Billing and Payment System, Pet Shop Management, Electronic Health Records (EHR) Management, Patient Registration, Inventory Management, and Staff Management are the eight components (or subsystems) that make up our system. The system's front end is connected to each of the aforementioned parts. Express JS and Rest API will be used to develop the web API. The Web API serves as the link between the system's front and back ends. Backend of the system is going to be implemented using Node JS. The process of backend is going to be implemented using the data collected by Json objects which are retrieved from MongoDB. MongoDB is the database server of the system. All the records and data of the system are going to be stored in the Pet Shop database. The system is going to be hosted in an external storage.



## **Functional Requirements**

### **1. Online Appointment Scheduling**

Online appointment scheduling in a pet care clinic management system must meet a number of functional requirements, all of which are crucial for smooth and effective booking procedures. To begin with, pet owners should be able to quickly browse the system and access functions related to arranging appointments thanks to its user-friendly layout. Users should be able to select desired appointment times based on convenience, examine the real-time availability of veterinarians and services, and enter the essential pet information, like breed, species, and reason for appointment. Pet owners may lower their no-show rates and stay informed about their appointments with the aid of automated confirmation alerts and reminders. Additionally, the system must be flexible enough to let pet owners reschedule or cancel visits as needed. In general, the Pet Care Clinic Management System's functional requirements for online appointment scheduling are designed to improve user experience, expedite the booking procedure, and maximize clinic operations.

### **2. Telemedicine Integration and Emergency Management**

In order to improve the responsiveness and accessibility of veterinary treatment, a pet care clinic management system must meet the functional criteria for emergency management and telemedicine integration. Secure video conversations and chat features are necessary for telemedicine integration to enable remote consultations between veterinarians and pet owners. By extending access to veterinary services for pet owners in remote places or who are unable to physically attend the clinic, these functions allow veterinarians to examine pets' illnesses, offer advice, and prescribe drugs remotely. Furthermore, pre-established guidelines and processes for managing emergency scenarios are included in the system's emergency management module. Clinic workers can quickly assess patients, plan emergency responses, and provide excellent treatment in urgent situations with the help of this programme. Features that prioritize emergencies, notify staff, and grant access to necessary resources and protocols are examples of functional needs. The Pet Care Clinic Management System enhances patient outcomes and clinic efficiency by combining emergency management and telemedicine features to guarantee timely and efficient pet care.

### **3. Billing and Payment System**

To ensure accuracy and transparency and to facilitate seamless financial transactions between the clinic and its clients, the Billing and Payment System's functional needs in a Pet Care Clinic Management System are essential. Invoices for veterinary care, prescription drugs, and pet supplies should be easily created by the system and customized to meet the individual requirements of each client. To ensure

prompt revenue collection for the clinic and to suit a variety of client preferences, it should provide a variety of payment choices, such as digital wallets, credit/debit cards, and internet banking. For the purpose of precisely documenting and monitoring the services performed during consultations, as well as to guarantee that bills accurately represent the therapy given, integration with the clinic's Electronic Health Records (EHR) system is essential. Furthermore, for financial transactions to remain transparent and accountable, the system needs to produce receipts for customers. The procedure can be streamlined with the aid of automated invoicing and payment reminders, which helps lessen late payments and clinic staff administrative workloads. The Billing and Payment System enhances customer pleasure, maximises clinic efficiency, and supports the Pet Care Clinic Management System as a whole by meeting certain functional needs.

#### **4. Pet Shop Management**

In order to effectively manage the sales and operations of the pet store integrated into the clinic, a number of crucial characteristics are included in the functional requirements of pet shop management within a pet care clinic management system. First and foremost, the system needs to have a thorough inventory management module that allows tracking and monitoring of pets, together with their food, accessories, and prescriptions, that are going up for sale. To guarantee sufficient supply availability, this module should enable features like product classification, stock level monitoring, and automated reordering. In order to improve the customer shopping experience, the system should also enable smooth sales transactions with features like several payment choices. To analyze sales performance, spot patterns, and make wise inventory management decisions, the Pet Shop Management system should also have analytics and reporting features. The Pet Shop Management system increases client satisfaction, streamlines operations, and boosts the overall effectiveness of the Pet Care Clinic Management System by meeting these functional needs. Additionally, customers should be able to see and purchase pets using the pet shop management system, which enables pet owners who have registered with the pet care clinic management system to publish, edit, and remove advertisements about pet sales.

#### **5. Electronic Health Records (EHR) Management**

Efficient storage, organization, and retrieval of complete medical information about pets are contingent upon the functional needs of Electronic Health Records (EHR) Management in a Pet Care Clinic Management System. In order to facilitate the input, updating, and retrieval of pet health records by veterinarians and clinic personnel, the system must, first and foremost, offer an intuitive user interface. Demographics about the pet, medical history, immunization history, and medication schedules are among the crucial data that must be recorded. Test results and imaging data can be seamlessly integrated into the EHR through integration with diagnostic instruments and laboratory systems, giving a comprehensive picture of the pet's health. In order to guarantee accurate and current medical records, the system should also have tools for recording symptoms, diagnosis, treatments, and prescriptions during consultations. The EHR's depth and breadth are further enhanced by advanced features including appointment history keeping, vital sign monitoring, and allergy tracking. Data encryption and role-based access control are two crucial security techniques that protect the integrity and confidentiality of pet health information. The



EHR Management System maintains regulatory compliance in the Pet Care Clinic Management System, improves patient care outcomes, and increases clinic efficiency by fulfilling these functional requirements.

## **6. Patient Registration**

The characteristics necessary to collect and organize detailed data about pets and their owners are included in the functional requirements of patient registration in a pet care clinic management system. First and foremost, the system must offer pet owners an easy-to-use interface for registering both themselves and their animals. This will enable the entry of fundamental data such as the owner's name, contact information, and pet demographics like species, breed, and age. Furthermore, the system ought to facilitate the mapping of links between owners and pets in order to guarantee precise pet identification and matching with their respective owners. The smooth transmission of registration data made possible by integration with the clinic's Electronic Health Records (EHR) system guarantees that pet health records are correctly linked to their respective owners. In order to empower veterinarians to make knowledgeable judgements during consultations, the system should also have features for gathering and archiving comprehensive medical histories, including prior diseases, immunisations, and treatments. The registration procedure is made more comprehensive and useful by adding other features like insurance information, appointment preferences, and emergency contact details. The Patient Registration system increases clinic productivity, patient treatment results, and the overall client experience in the Pet treatment Clinic Management System by meeting certain functional objectives.

## **7. Inventory Management**

A pet care clinic management system's inventory management functional needs include essential capabilities for effectively tracking, monitoring, and managing the inventory of supplies, prescription drugs, and pet care items. First and foremost, the system ought to offer clinic employees an easy-to-use interface so they can enter, amend, and retrieve inventory data with ease. This comprises features for inventory management, product classification, and reorder threshold setting to guarantee sufficient supply availability. Automated inventory replenishment reduces stockouts and maximizes inventory levels thanks to integration with distributors and suppliers. Furthermore, to enable precise product identification and traceability, the system must incorporate barcode scanning and batch tracking features. Inventory control and regulatory compliance are improved by sophisticated features including shelf-life management, product recalls, and expiration date tracking. The system should also have analytics and reporting features so that users can monitor inventory turnover, see patterns, and make well-informed purchases. The Inventory Management system improves clinic operations, lowers expenses, and guarantees prompt access to necessary supplies by fulfilling these functional criteria. As a result, patient care outcomes in the Pet Care Clinic Management System are eventually improved.

## **8. Staff Management**

Staff management functional requirements in a pet care clinic management system include capabilities that are necessary to effectively schedule, organize, and coordinate clinic staff. Clinic administrators should be able to input, amend, and retrieve staff information with ease using the system's user-friendly interface. This provides features for documenting the roles assigned to employees inside the clinic, their contact information, and their demographics. By generating staff schedules based on variables including availability, abilities, and workload, integration with scheduling technologies ensures that clinic operations are adequately covered. To assign duties and monitor staff members' performance of tasks, the system should also have task assignment features. Clinic staff may communicate and collaborate in real-time by using features like communication tools and notifications, which improves coordination and teamwork. Staff management procedures are further optimised and regulatory standards are met with the help of sophisticated features like payroll management, training monitoring, and performance evaluation. The Pet Care Clinic Management System's Staff Management system increases staff productivity, boosts clinic efficiency, and promotes a positive work environment by fulfilling certain functional needs.

### **Non-Functional Requirements**

Certainly! Here are the non-functional requirements for a Pet Care Clinic Management System listed in point form:

#### **1. Performance**

- The system should be able to handle a large number of concurrent users and transactions efficiently.
- Response times for key functions such as appointment scheduling and accessing electronic health records should be minimal.

#### **2. Reliability**

- The system should be reliable and available whenever needed.
- Measures should be in place to prevent data loss or corruption and ensure continuous availability of critical functions.

#### **3. Scalability**

- The system should be scalable, able to accommodate growth in users, clinics, and data volumes without compromising performance.
- It should handle increased load without requiring significant changes to its architecture.

#### **4. Usability**

- The system should have a user-friendly interface that is easy to navigate and understand.
- Training requirements for clinic staff should be minimal, and pet owners should find the system intuitive to use.

#### **5. Security**

- The system should adhere to industry-standard security practices to protect sensitive information.

- Measures such as encryption, access controls, and regular security audits should be in place to safeguard pet health records and financial data.

#### 6. Compatibility

- The system should be compatible with a wide range of devices and operating systems.
- It should integrate seamlessly with other software systems commonly used in veterinary clinics.

#### 7. Maintainability

- The system should be easy to maintain and update, with well-documented code and clear separation of concerns.
- Future enhancements and bug fixes should be implementable quickly and efficiently.

#### 8. Compliance

- The system should comply with relevant regulations and standards governing the handling of pet health information, financial transactions, and clinic operations.
- It should meet requirements such as HIPAA compliance for protecting patient data.

## **Technical requirements**

### Hardware:

The system should have hardware components that meet the required specifications, such as processing power, memory, and storage capacity.

### Operating System:

The system should be designed to work with a specific operating system, such as Windows, MacOS, or Linux.

### Database:

The system should have a database to store and manage data efficiently.

### User Interface:

The system should have an easy-to-use interface that allows users to interact with the system and perform necessary tasks.

### Data Security:

The system should have appropriate security measures in place to protect data from unauthorized access, such as encryption and user authentication.

### Networking:

The system should be able to connect to a network to enable data transfer and communication with other devices.

### Performance:

The system should be designed to perform efficiently and effectively to meet the needs of the users.

Compatibility:

The system should be compatible with other hardware and software components that are required for its operation.

Scalability:

The system should be scalable and able to handle increasing amounts of data and users as the system grows.

Maintenance:

The system should be easy to maintain, update, and troubleshoot to ensure its continued operation and optimal performance.

## **Literature Review**

The implementation of a comprehensive Pet Care Clinic Management System offers numerous benefits for veterinary clinics and their clients. Research indicates that adopting such systems results in reduced wait times and improved scheduling efficiency, leading to enhanced patient satisfaction. Centralized electronic health records (EHR) streamline access to patient information during consultations, facilitating more accurate diagnoses and treatment decisions. Efficient inventory management through software solutions minimizes stockouts and overstocking of supplies, optimizing clinic operations and reducing costs. Digital billing and payment systems not only ensure timely transactions but also reduce errors and administrative burden. Additionally, integrating pet shop management modules enables clinics to track sales and inventory more effectively, providing a seamless client experience. Improved staff coordination and emergency protocols further contribute to clinic efficiency and patient care. Telemedicine integration expands access to veterinary services, particularly in remote areas, enhancing overall service accessibility and client satisfaction. These findings underscore the significant advantages of adopting Pet Care Clinic Management Systems in veterinary practice, promoting better patient outcomes and client experiences.

## **Methodology**

[1]In this section, we discuss the methodology employed to investigate the benefits of implementing a comprehensive Pet Care Clinic Management System. The methodology involved a multi-faceted approach, starting with a thorough review of existing literature, including academic journals, conference proceedings, and industry reports, to gather insights into the various components and functionalities of such systems. Additionally, we conducted interviews and surveys with veterinary professionals, clinic staff, and pet owners to gather firsthand perspectives on the challenges faced in clinic management and the potential benefits of implementing a management system. Data analysis techniques such as qualitative thematic analysis and quantitative statistical analysis were employed to identify common themes, patterns, and correlations within the collected data. Furthermore, case studies of veterinary clinics that have implemented management systems were examined to provide real-world examples of the benefits and challenges associated with adoption. By employing a diverse range of research methods, this study aims to provide a comprehensive understanding of the benefits of Pet Care Clinic Management Systems and inform recommendations for implementation in veterinary practice. In which they fall into, software model, Requirement gathering and analyzing, system's design, system's implementations, as well as testing. [5]Agile approach also allowed the team to obtain constant customer feedback, which aided in implementing the best possible solution. Usage of agile technique and tools as the methodology enabled the team to work in a timely manner as well.

### **Agile Software Engineering Methodology**

Agile methodology is an iterative and incremental approach to software development that emphasizes flexibility, collaboration, and rapid delivery of working software. The Agile Manifesto, a set of guiding principles for Agile methodology, values:

- Individuals and interactions over processes and tools: This principle emphasizes the importance of communication and collaboration among team members, rather than relying solely on processes and tools.
- Working software over comprehensive documentation: Agile teams prioritize working software over detailed documentation, as they believe that software is the most important deliverable.
- Customer collaboration over contract negotiation: Agile teams prioritize collaboration with customers to ensure that the software they are developing meets their needs and requirements.
- Responding to change over following a plan: Agile teams recognize that software development is an iterative process, and that requirements may change over time. They prioritize flexibility and adaptability in responding to these changes.

Agile methodology is often used in software development because it allows teams to be more responsive to changing requirements and priorities. Instead of following a rigid plan, Agile teams work in short iterations or sprints, typically lasting one to four weeks, during which they prioritize and complete a set of tasks or user stories. Each sprint involves planning, executing, and reviewing a set of development tasks, and aims to deliver a working software increment that can be tested and validated by customers.

Agile teams also emphasize frequent communication and collaboration between team members, including the customer or end user, to ensure that everyone is working towards the same goals and that the product meets the customer's needs.

Some popular agile methodologies include Scrum, Kanban, and Extreme Programming (XP). Each of these approaches has its own unique set of practices and tools, but all share a commitment to flexibility, collaboration, and iterative development. In this project we use Kanban as our development methodology.

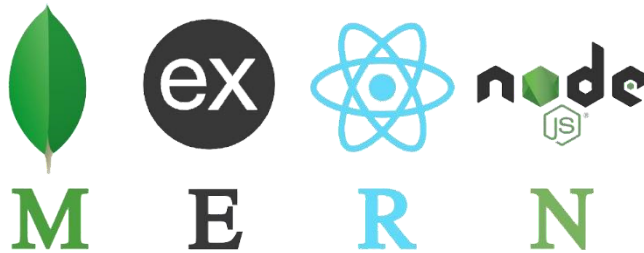
#### **Reasons for selecting Agile Methodology**

- Customer satisfaction: Agile methodology focuses on delivering value to the customer quickly and continuously. This helps to ensure that the product meets the customer's needs and is delivered on time.
- Flexibility: Agile methodology is highly adaptable to changing requirements and priorities. This allows teams to respond quickly to changes in the project scope or market conditions.
- Collaboration: Agile methodology emphasizes teamwork, communication, and collaboration between team members. This helps to promote a sense of shared ownership and accountability and can lead to better solutions.
- Transparency: Agile methodology encourages open communication and transparency throughout the development process. This helps to build trust between team members and stakeholders, and ensures that everyone is working towards the same goals.
- Continuous improvement: Agile methodology emphasizes continuous learning and improvement. This helps to ensure that the team is constantly refining its processes and practices, and is always striving to deliver better results.

## Development Tools and Technologies

### We are choosing MERN Stack technology?

- MERN stack is a web development framework. It consists of MongoDB, ExpressJS, ReactJS, and NodeJS as its working components.



Front-end frameworks:

- **React App** It is used to build UI components that create the user interface of the single page web application.

Back-end languages:

- **Express.js:** The JavaScript runtime environment. It is used to run JavaScript on a machine rather than in a browser.
- **NodeJS:** framework layered on top of NodeJS, used to build the backend of a site using NodeJS functions and structures.

Database tool:

- **MongoDB** is A document-oriented, No-SQL database used to store the application data.

Backend testing tools: **Postman API** is an API development and testing platform that offers a variety of features.

Project management tool: **GitHub** is a streamlined code editor with support for development operations like debugging, task running and version control

IDE: **Visual studio code** is a code hosting platform for version control and collaboration. It lets us to work together on projects from anywhere.



### Project Plan (Gantt Chart)

ID	Task	Weeks															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Requirements Gathering																
2	Proposal																
3	Interface Designing																
4	Database Design																
5	Coding & Developing the pages																
6	Testing the pages																
7	Deploy to development server																



8	Integration														
9	System Testing														
10	Final Report Writing														
11	Final Presentation														

### Work Breakdown Structure (Work Distribution)

Student ID and Name with initials	Tasks
Suhana M.Y.F IT22885432	<ul style="list-style-type: none"> <li>Implementing online appointment scheduling section (Provide functions for customers to make online appointments with doctors for their pets).</li> <li>Completed Company background part in Background section, motivation section and Non-functional requirements part in system overview section of proposal report.</li> </ul>
Herath H.M.M.K IT22902016	<ul style="list-style-type: none"> <li>Implementing Telemedicine Integration and Emergency management section (Provide functions for customers and doctors to communicate about critical conditions of pets and make function for customer to book transportation according to customer's location).</li> <li>Completed Tools and Technologies in Methodology section of proposal report.</li> </ul>
Jayaweera T.L.S.S IT22922748	<ul style="list-style-type: none"> <li>Implementing Billing and Payment System section (Provide function for calculate payment and functions to make payments for the services).</li> <li>Completed System Diagram with its description in System overview section of proposal report.</li> </ul>
Navodya D.P.D.D IT22252654	<ul style="list-style-type: none"> <li>Implementing Pet Shop Management section (Provide function for customers to buy and sell pets).</li> <li>Completed Technical Requirements part in System Overview section and Agile Software Engineering Methodology in Methodology section of proposal report</li> </ul>
Dasanayaka D.D.S.H IT22122582	<ul style="list-style-type: none"> <li>Implementing Electronic Health Records (EHR) Management section (Provide function for store specific data such as pet information, medical history).</li> <li>Completed Problems part in Problems and Motivations section of proposal report.</li> </ul>

	Devindi K.T.P IT22249784	<ul style="list-style-type: none"> <li>● Implementing Patient Registration Section (Provide function for register pet owners and add their pets' information to their profile).</li> <li>● Completed Our Web Application part in Background section and Aims and Objective section of proposal report.</li> </ul>
	Mihisandali W.K.M IT22246400	<ul style="list-style-type: none"> <li>● Implementing Inventory Management Section (Provide function for keep track of all inventory items and purchase orders).</li> <li>● Completed Literature Review section of proposal report.</li> </ul>
	Weerathunga B.I IT22251428	<ul style="list-style-type: none"> <li>● Implementing Staff Management Section (Provide function for manage all employees related tasks in the system easily).</li> <li>● Completed Project Plan (Gantt Chart) in Methodology section of proposal report.</li> </ul>

## References

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## Appendix

- **Figure 1 - System Diagram**  
A graphical representation of a system, showing the various components and their relationships. The system diagram typically includes various components, such as inputs, processes, outputs, feedback, and control mechanisms. Inputs are the data or materials that are fed into the system, and outputs are the results or products that are produced by the system.
- **Table 1 - Literature Review**  
An essential component of research or project that provides a comprehensive analysis of existing knowledge on a given topic.
- **Figure 2 - Gantt Chart**  
Tool for project management that provides a visual representation of a project schedule and helps to ensure that the project is completed on time.
- **Figure 3 - Agile Methodology**  
Agile software engineering methodology is an iterative and incremental approach to software development that emphasizes flexibility, collaboration, and customer satisfaction.

