A

PROJECT REPORT

ON

PETWellnessHub

Submitted in partial fulfilment for the award of

(PG-DAC) from

Institute of Emerging Technologies

Authorized Training Centre



Under the Guidance of Mrs. Sampada Tarare

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Certificate

This is to certify that the project report entitled PetWellnessHub: The web based platform for all pet related services is a bonfire work carried out by 1. Khedkar Sonali Pandurang, 2. Shahane Abhishek Dhiraj, 3. Jangale Shubham Rajendra, 4. Malsane Bhushan Shanataram, 5. Killedar Shreyash Satish submitted in partial fullfilment of the requirement for the C-DAC ACTS, DAC course in the Institute of Emerging Technology in the batch of sept 2023.

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External Examinar

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This project PetWellnessHub: The Web-based Platform for all Pet related services was a great learning experience for us and we are submitting this work to Advanced Computing Training School (CDAC).

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Our most heart full thanks goes to *Mr. Sangram Patil* (Director ,IET) who gave all the required support and kind coordination to provide all the necessities like required hardware, internet facility and extra lab hours to complete the project and throughout the course up to the last day here in C-DAC ACTS, Pune.

Sign of Student

Name of student

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ABSTRACT

The web-based PetWellnessHub project is an attempt to provide all in one platform to the pet owners. It aspires to provide the pet owners a multitude of products and services for their pets. The designed platform enables the pet owners to do the following things such as search for pet related services such as trainers, grooming, veterinary and food which they are looking for there pets on a specified date. They can select the services which they are looking for there pets and can book an appointment for particular time. The system provides a facility to a pet related service providers to register on the website and post the advertisement of there services on the portal. We have also included an admin section who is going to verify and manage the profiles of the service providers andpet owners.

In order to develop an pet care website, a number of Technologies must be studied and understood. These include multi-tiered architecture, server and client side scripting techniques, implementation technologies such as Spring MVC, programming language (such as Core Java, Advance Java), relational databases (such as MySQL).

This is a project with the objective to develop a basic website where a consumer is provided with a multiple products and services on a single platforms.

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1.INTRODUCTION

This platform is a comprehensive hub designed to connect pet enthusiasts with a wide range of products and services essential for their pets' well-being. Whether you're a petowner, a service provider, or someone passionate about the welfare of animals, this project offers a dynamic and supportive ecosystem.

1.1 Purpose

This PetWellnessHub Software Requirement Specification (SRS) main objective is to provide a base for the foundation of the project. It gives a comprehensive view of how the system is supposed to work and what is to be expected by the end users. Client's expectation and requirements are analyzed to produce specific unambiguous functional and non-functional requirements, so they can be used by development team with clear understanding to build a system as per end user needs.

This SRS for PetWellnessHub can also be used for future as basis for detailed understanding on how project was started. It provides a blueprint to upcoming new developers and maintenance teams to assist in maintaining and modifying this project as per required changeability.

1.2 Need Of PetWellnessHub

Integrating online selling and purchasing of pets, pet products, veterinary services and many more into a pet wellness hub enhances convenience, accessibility, transparency, and the overall customer experience. It extends the reach of the hub, caters to diverse needs, and fosters a stronger connection between pet owners and the hub's offerings.

1.3 Overview

The remaining sections of this documentations describes the overall descriptions which includes product perspective and functions, characteristics of users. It also consists of Assumptions, and Constraints. Overall description is listed in section 2. Section 3 includes Specific Requirements which consists of Functional and Non- functional requirements, External Interface Requirements, Software System Attributes, Performance Requirements, Capacity Requirements, Availability Requirements, Safety Requirements and Requirement Traceability Matrix.

2. Problem Defination and scope

2.1 Problem statement and Scope of the Project

Handle the technical issues you might face in your project:

Data Modelling and Database Design:

Invest time in planning your database schema. Consider using an Object-Relational Mapping (ORM) tool like Hibernate in Spring Boot to simplify database interactions and reduce complexity. Regularly review and refine your schema as your project evolves.

User Authentication and Authorization:

Utilize established authentication libraries (e.g., Spring Security) to handle user authentication and authorization. Follow best practices, such as using hashed passwords, implementing secure password reset workflows, and applying role-based access control.

Concurrency and Data Consistency:

Use database transactions effectively to manage data consistency and handle concurrent updates. Understand isolation levels and optimistic/pessimistic locking strategies to prevent conflicts and maintain data integrity.

Search and Filtering:

Consider using search engines like Elasticsearch for efficient and fast search capabilities. Implement pagination and apply indexing to improve search performance. Cache frequently used search results to reduce database load.

2.2 Goals and Objective

Our project's primary goal is to create a bridge between pet owners and the services they need while promoting responsible pet selling-purchasing and more services. We envision a community where the well-being of animals is prioritized, and users have access to trusted resources and interactions.

2.3 Product Functions

Our Product General functions are:

- User, Provider and Admin Login
- Add Products

- Buy Product
- Payment
- Add Veterinary in Service
- Book appointment
- Edit Products
- Edit Services

2.4 <u>User Characteristics</u>

There are 3 user Levels in our PetWellnessHub Project:

- A. User
- B. Provider
- C. Admin Support system

User They can create accounts, explore listings, interact with service providers, and post reviews based on their experiences.

Provider Service providers can showcase their offerings, manage their listings, interact with customers, and ensure the highest level of service.

Admin Behind the scenes, our admin dashboard empowers administrators to maintain the integrity of the platform. Admins can manage user accounts, verify providers, review listings, and ensure a safe and reliable environment for all users.

2.5 Major Constraints and Outcomes

Major Constraints in our Project

- 1.**Scalability:** The system needs to be able to handle a large number of Users and bookings, as well as handle spikes in traffic during peak seasons.
- 2. **Security:** The system must ensure the security of user data, including personal information, payment details, and booking history.
- 3.**Reliability:** The system must be available and responsive at all times to ensure that users can make bookings and access their information without interruption.
- 4. User experience: The system must be easy to use and navigate for both Users and staff.

- 5. Accessibility: The system must be accessible for differently abled users and comply with web accessibility standards.
- 6.Cost: The system must be cost-effective and provide a good return on investment.
- 7. **Maintenance:** The system must be easy to maintain and update to ensure that it stays up-to date with the latest technologies and features.

3. Software Regirement Specification

3.1 Proposed System and Scope:

The scope of the Platform is to provide a user-friendly application that is easy to navigate and provides products and services. Two potential groups of viewers exist:

- 1. Providers: Service providers can showcase their offerings, manage their listings, interact with customers, and ensure the highest level of service.
- 2. Users (Customers): They can create accounts, explore listings, interact with service providers, and post reviews based on their experiences.

4. System Modules

- 1. **Booking Management:** This module allows users to make bookings, view their bookings.
- 2. User Management: This module manages all user-related activities such as registration, login.
- 3. **Product Management:** This module allows the provider as well as admin to add, edit, and delete products
- 4. **Payment Management:** This module handles all financial transactions such as accepting payments, refunds, and generating invoices.
- 5. **Service Management:** This module allows the provider as well as admin to add, edit, and delete services.
- 6. **Security Module:** This module ensures the security of the system and user data by implementing various security measures such as encryption and authentication.

5. Performance Requirements

Performance requirements in a PETWellnessHub platform typically include fast loading times, reliable and secure data storage, and the ability to handle a high volume of simultaneous users and bookings. Other important factors may include user- friendly navigation and booking interface, mobile compatibility. Additionally, a good PETWellnessHub platform should also have robust reporting and analytics capabilities to help the products and services management track occupancy, revenue, and other important performance metrics.

5.1 Hardware And Software Requirements

External Interface Requirements

User Interfaces

The user interface for system shall be compatible to any type of web browser such as Mozilla Firefox, Google Chrome, and Microsoft EDGE, Opera, BING.

Software Interfaces

	FRONT END	BACKEND	DATABASE
1	React JS	Java EE	MySQL
	REACT JS	J2EE	MySQL

Hardware Interfaces

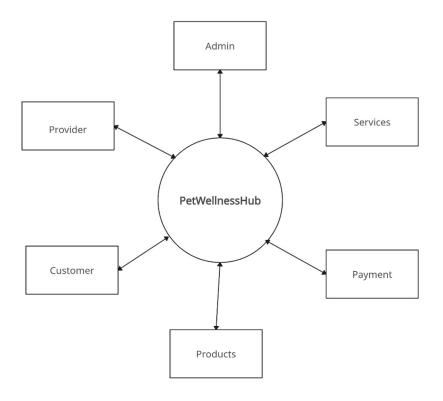
Server Side	

Monitor Processor		RAM	Disk Space
Resolution: 1024x768	Intel or AMD 2GHZ OR HIGHER	4GB	10GB
	Clie	nt Side	
Monitor	Processor	RAM	Disk Space

6. <u>UML DIAGRAMS</u>

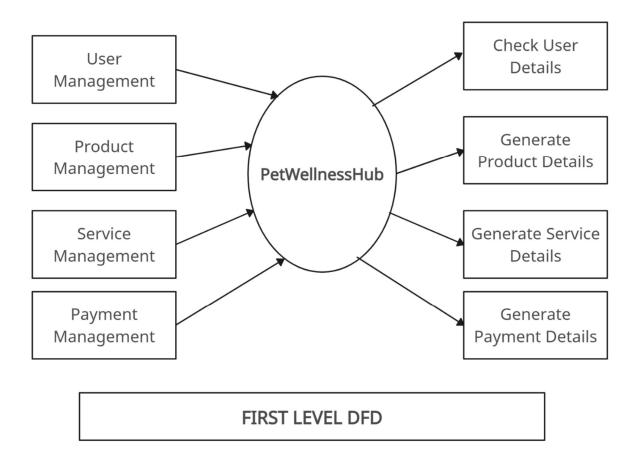
6.1 Data Flow Diagram

6.1.1 Zero Level Data Flow Diagram

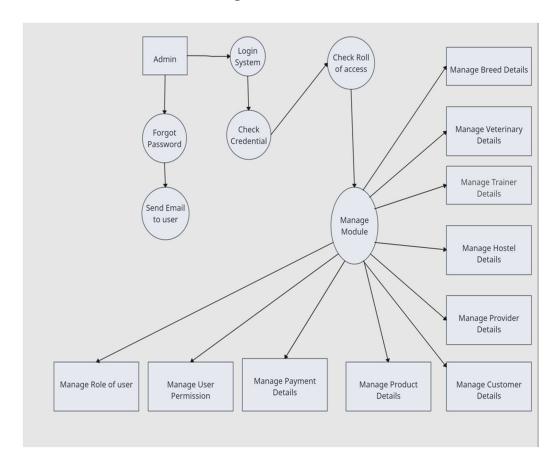


ZERO LEVEL DFD

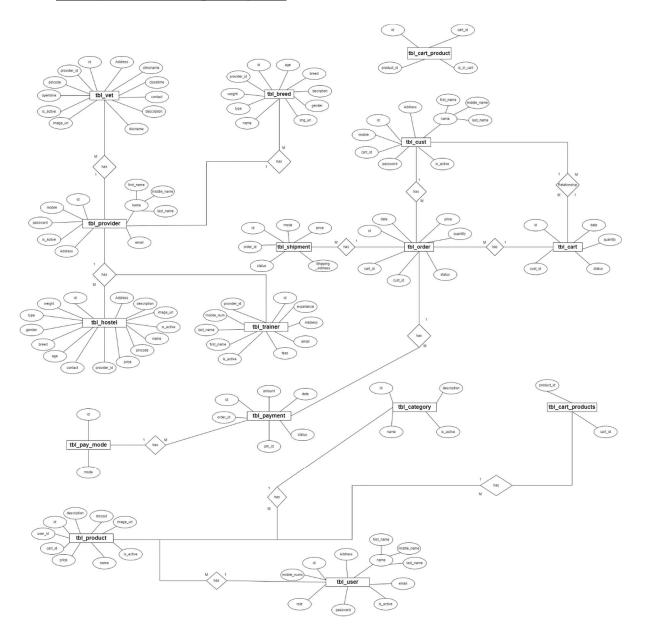
6.1.2 First Level Data Flow Diagram



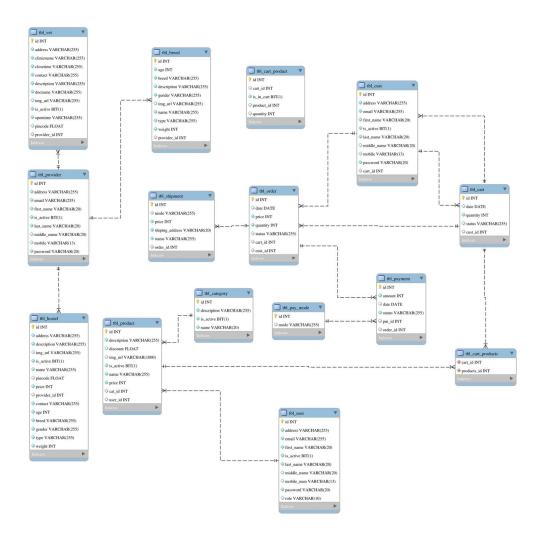
6.1.3 Second Level Data Flow Diagram



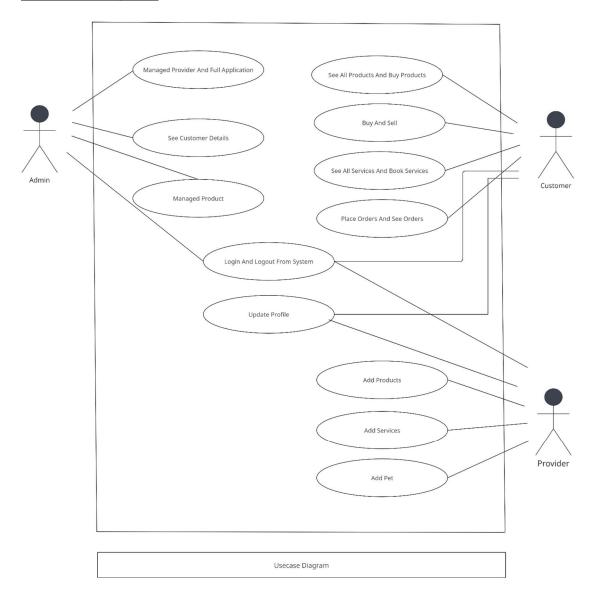
6.2 Entity Relationship Diagram



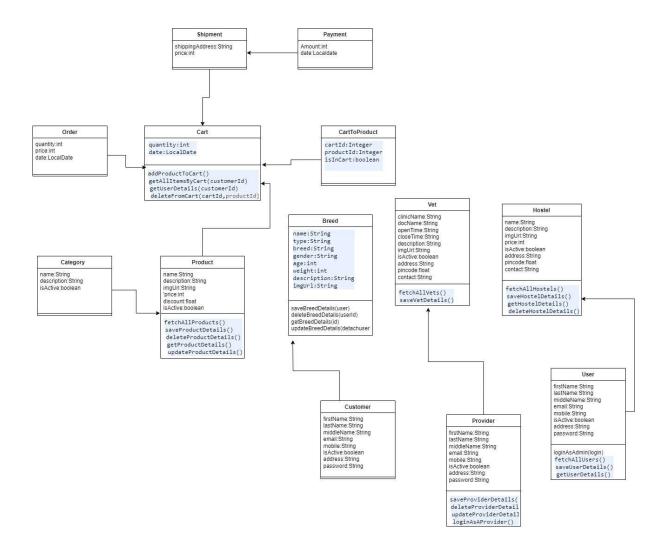
6.2.2 Entity Relationship Diagram



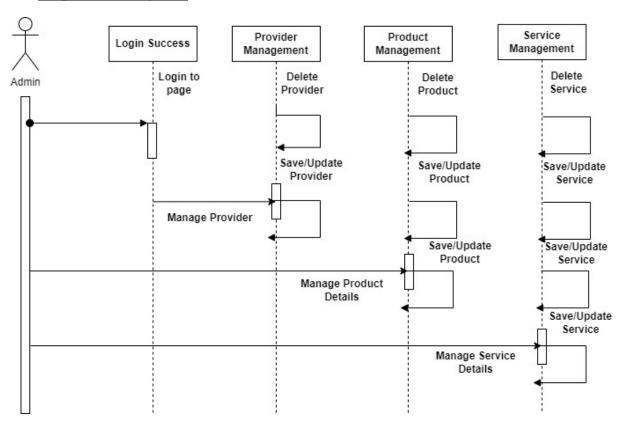
6.3 <u>Usecase Diagram</u>



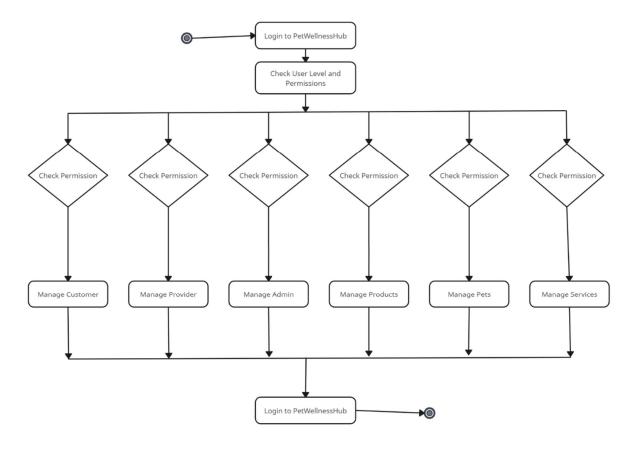
6.4 Class Diagram



6.5 Sequence Diagram



6.6 Activity Diagram



7. Test Case

Test Case ID	Test Case	Test Case I/P	Actual Result	Expected Result	Test case criteria(P/F)
001	Admin enterthe correct username orpassword click on submit button	Username or password	Accept	Accept	P
001	Admin enterthe wrong username orpassword click on submit button	Username or password	Error come	Accept	P
002	Customer enter the correct username orpassword click on submit button	Username or password	Accept	Accept	P
002	Customer enter the wrong username orpassword click on submit button	Username or password	Error come	Accept	P
003	Provider enter the correct username or password click on submit button	Username or password	Accept	Accept	P

003	Provider enter	Username or	Error come	Accept	P
	the wrong	password			
	username or				
	password				
	click on				
	submit button				

Login Test Case and Registration Test Case

Test Case	Test Case	Test Case I/P	Actual	Expecte	Test case
ID			Result	d	criteria(P/F
				Result) `
001	Enter the	Number	Error	Error	P
	number in		Comes	Should	
	username,			Comes	
	middle				
	name,last				
	name				
	field				
001	Enter the	Character	Accept	Accept	p
	character in				
	username,				
	middle				
	name,last				
	name				
	field				_
002	Enter the	ppgmail,com	Error comes	Error	P
	invalid			Should	
	emailid			Comes	
	format in				
	email id				
	field				
002	Enter the	pp@gmail.co	Accept	Accept	P
	valid email	m			
	idformat in				
	email id				
	field				

003	Enter the	99999	Error comes	Error	P
	invalid			Should	
	digitno in			Comes	
	phoneno				
	field				

003	Enter the 10digit no in phone no field	9999999999	Accept	Accept	P
006	Enter the 8 digit password	4444444	Accept	Accept	P

System Test Cases

Test Case ID	Test Case	Test Case I/P	Actual Result	Expecte d Result	Test case criteria(P/F
001	Customer logininto the platform	Username or password	Accept	Accept	P
001	Search for Product as wellas Services	Display all Products and Services	Accept	Accept	P
001	Customer will Buy or Book Service	Booking redirect to payment page	Accept	Accept	P
001	Payment Page	COD Payment	Accept	Accept	Р
001	Provider loginto the platform	Username or password	Accept	Accept	Р

001	Provider will list his Products and Services on platform	Product Details	Accept	Accept	P
001	Provider will list his Services on platform	Service Details	Accept	Accept	P
001	Admin login into system	Username or password	Accept	Accept	P
002	Admin Dashboard	Dashboard	Accept	Accept	P
002	Admin can see Customers table	tbl_cust table	Accept	Accept	P
003	Admin can see Providers lists	tbl_provider Table	Accept	Accept	P
003	Admin can see Products and Services table	All product and Service related Tables	Accept	Accept	P

Logout Test Cases

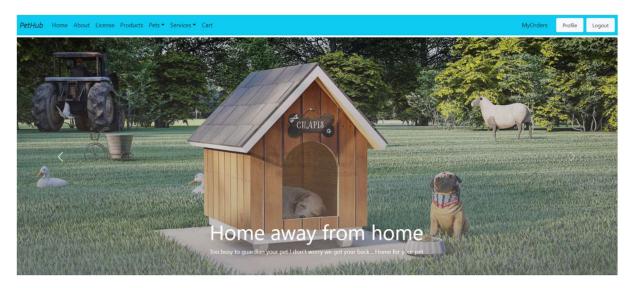
Test case ID	Test case	Test case I/P	Actual	Expected	Test cases
			Result	Result	criteria(P/F)
001	Logout	User exit	Session exit	Logout successfull	P

GUI Testing

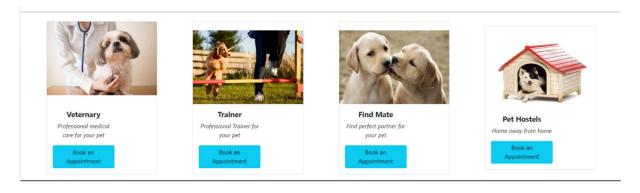
Test case	Login Screen-	
	Sign up	

Test Case	Login Screen-Sign up	
Objective	Click on sign up button then check all required/ mandatory fields withleaving all fields blank	
Expected Result	All required/ mandatory fields should display with symbol "*".Instruction line "* field(s) are mandatory" should be displayed	
Test case	Create a Password >>Text BoxConfirm Password >>Text Box	
Objective	Check the validation message for Password and Confirm Password field	
Expected Result	Correct validation message should be displayed accordingly or "Passwordand confirm password should be same" in place of "Password mismatch".	

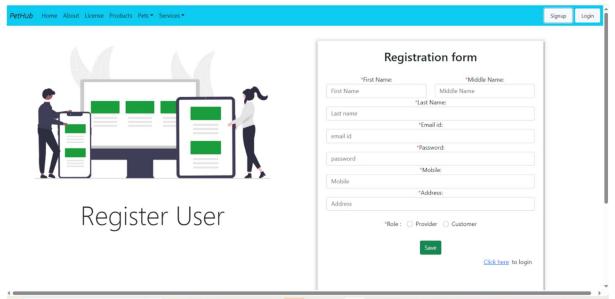
8. Screenshots



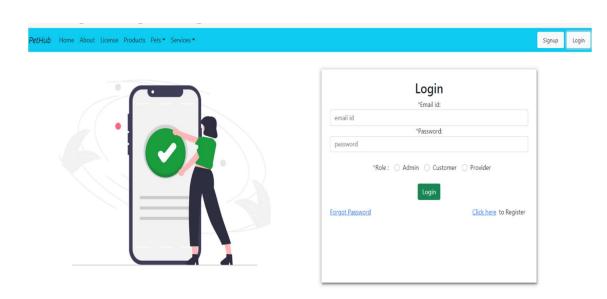
Home Page-1



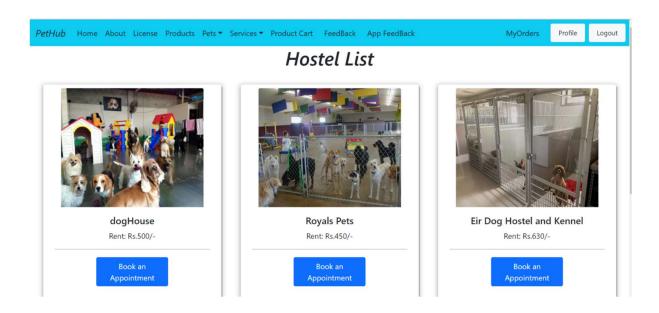
Home Page-2



Sign-Up

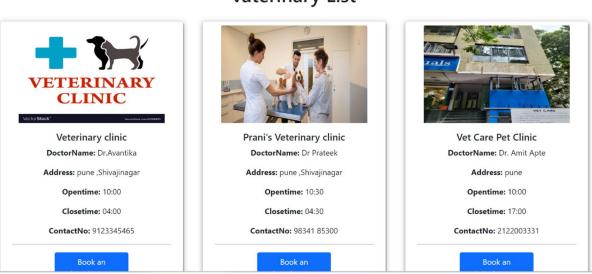


Sign-In

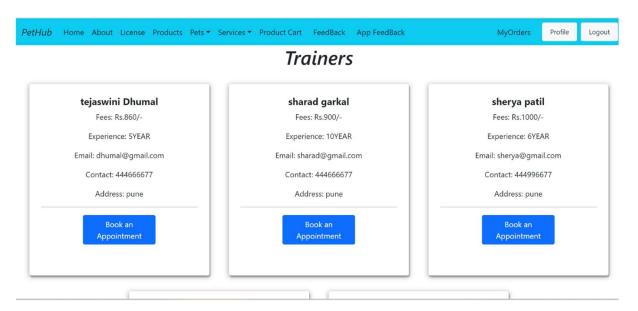


Hostel List

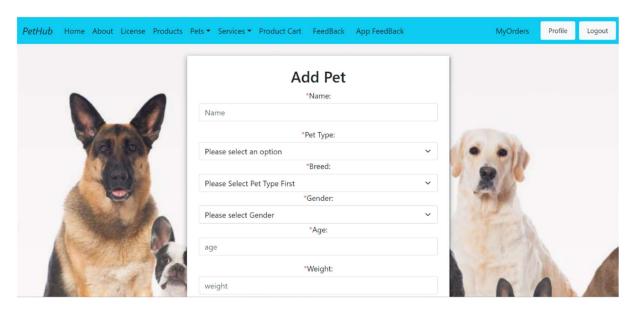




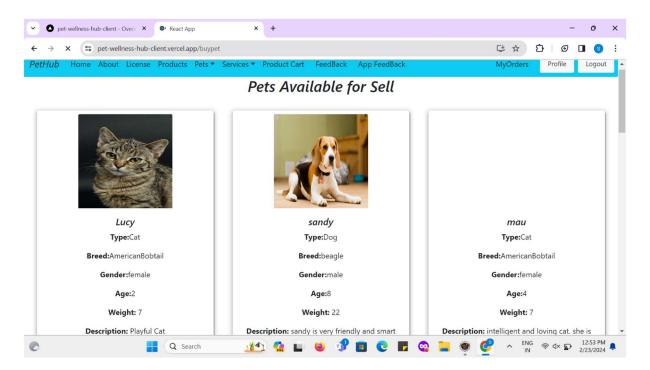
Veterinary List



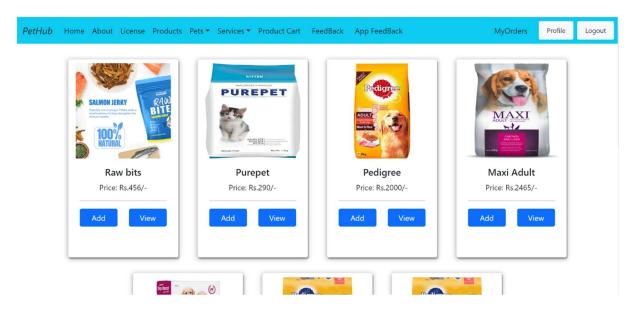
Trainers List



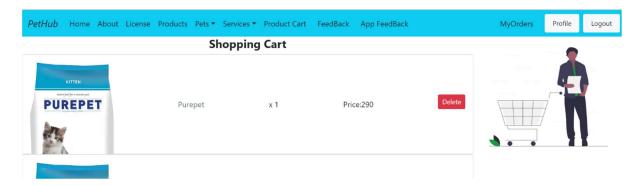
Add Pet



Pets Available For Sell



Products Available



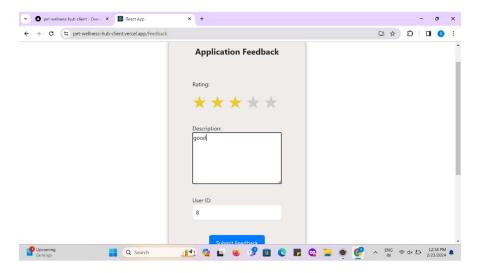
Shopping Cart



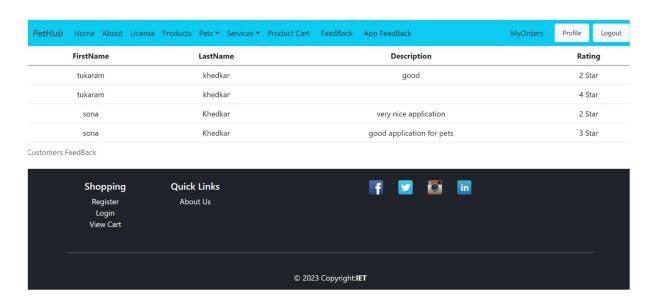
Here is why I feel it's important to register your pet.

It is a mandatory directive by Pune Municipal Corporation, a notice will be issued to pet parents if they refuse to adhere to the order. Residential association bodies and local authorities can solicit registration proof for the safety of the residents. A pet registration document could be to your advantage in case of incidences or circumstances related to pets that require local body involvement. Pet registration will help minimise the illegal animal breeding industry. A Pet

Dog License Information



Application Feedback



Customer Feedback

9. References

- [1] YouTube ref https://youtu.be/hXXLvYnu7eg?si=oeAY9r7gFR34X84y
- [2] Need of the project ref https://www.behance.net/search/projects?search=pet+care
- [3] ER Diagram Tutorial: https://www.lucidchart.com/pages/examples/er-diagram-tool
- [4] Pet Wellness Hub: https://www.scribd.com/doc/50176808/Petcare