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Pet Connect

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Abstract:
Pet Connect is a dedicated platform designed to streamline the adoption process and reduce the need for manual efforts in finding homes for pets, while also uniting pet lovers, organizations, and enthusiasts. This innovative solution integrates a comprehensive pet listing system, secure donation portals, and interactive forums within a single, user-friendly environment. By consolidating these essential features, Pet Connect simplifies the process of finding loving homes for pets, supporting animal welfare initiatives, and fostering meaningful connections within the pet-loving community. Users can explore detailed pet profiles, contribute to causes through hassle-free donations, and engage with others through community-driven discussions and events. With its focus on creating a positive impact, Pet Connect aims to serve as a holistic hub for promoting pet welfare, empowering users to make a difference, and building a supportive network for pets and their caretakers.

Introduction

In today's world, pet adoption plays a pivotal role in providing loving homes to animals in need while enriching the lives of adopters. Traditional pet adoption platforms are fragmented, requiring users to navigate multiple systems for different pet-related services and support. This fragmentation often leads to inefficiencies and missed opportunities to connect pets with suitable adopters. A unified platform can streamline adoption processes, integrate support services, and foster a more compassionate pet adoption ecosystem.

Scope

The project aims to streamline the pet adoption process by creating a unified platform that connects potential adopters with available pets through a user-friendly interface. It provides essential features for pet listing, adoption applications, and donation. Additionally, Pet Connect extends its scope by integrating veterinary appointment scheduling , making it a comprehensive solution for both adoption and ongoing pet care needs.

Existing System

In the existing system, users often face significant challenges when selecting a suitable pet that matches their lifestyle and preferences. This can lead to difficulties once the pet is adopted. Additionally, if issues arise after adoption, users are forced to contact separate organizations for rescue or assistance, resulting in a fragmented and inefficient support experience.

Proposed System

The proposed system offers a comprehensive and user-friendly platform for streamlining the pet adoption process while catering to various pet-related needs. Built using HTML, CSS, JavaScript, and PHP, it ensures a secure and intuitive experience for users. The platform integrates features like detailed pet profiles, vet appointment bookings, and adoption application management, providing a centralized solution for adopters and administrators. By securely storing application data

in a robust database, it facilitates efficient verification and processing by the admin. This unified system eliminates the hassle of navigating multiple platforms, offering a seamless and supportive environment for pet adoption and care.

Design

Architecture

Project architecture represents number of components we are using as a part of our project and the flow of request processing i.e. what components in processing the request and in which order. An architecture description is a formal description and representation of a system organized in a way that supports reasoning about the structure of the system. Architecture is of two types. They are

1. Software Architecture
2. Technical Architecture

Software Architecture :

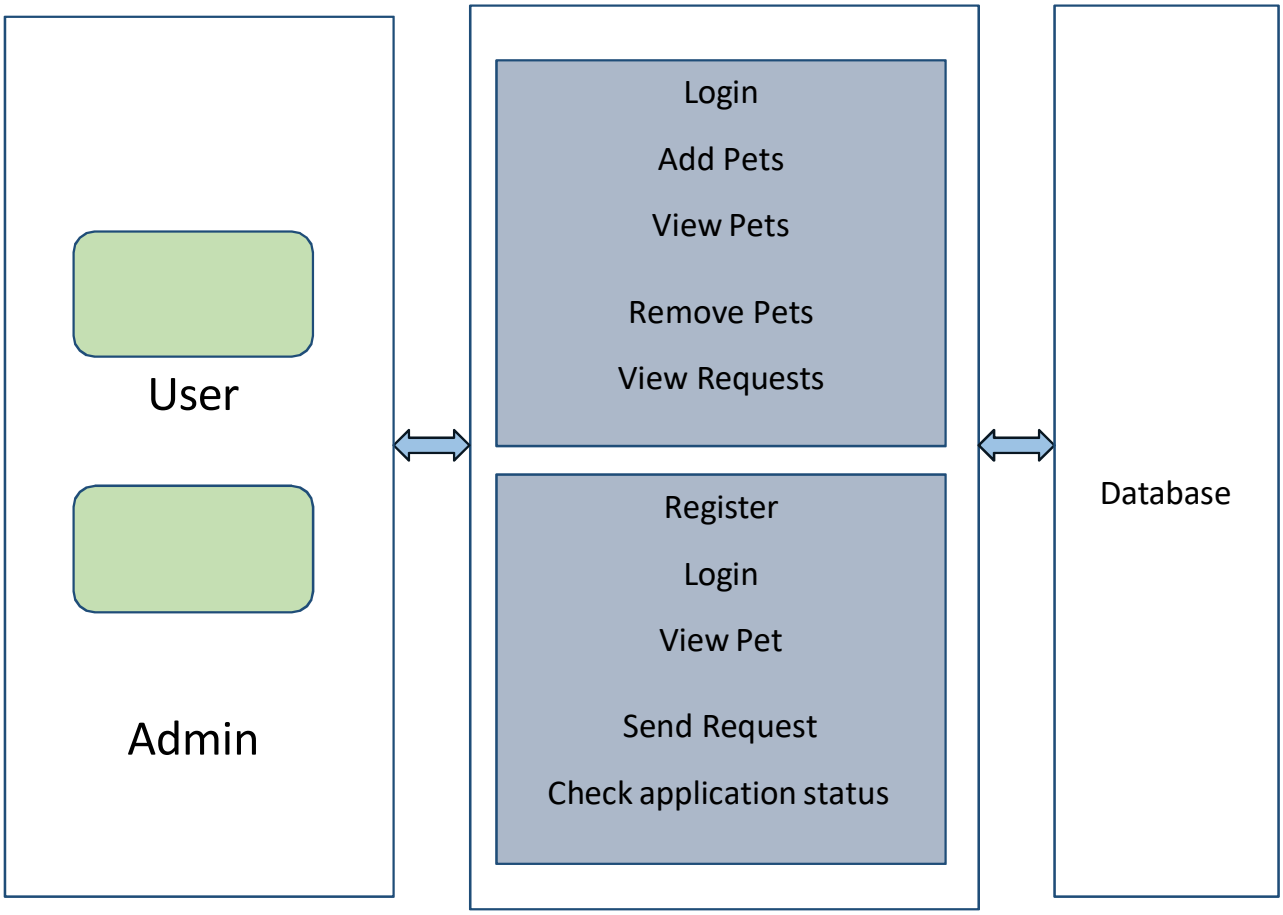


Fig 1 Software Architecture

Technical Architecture :

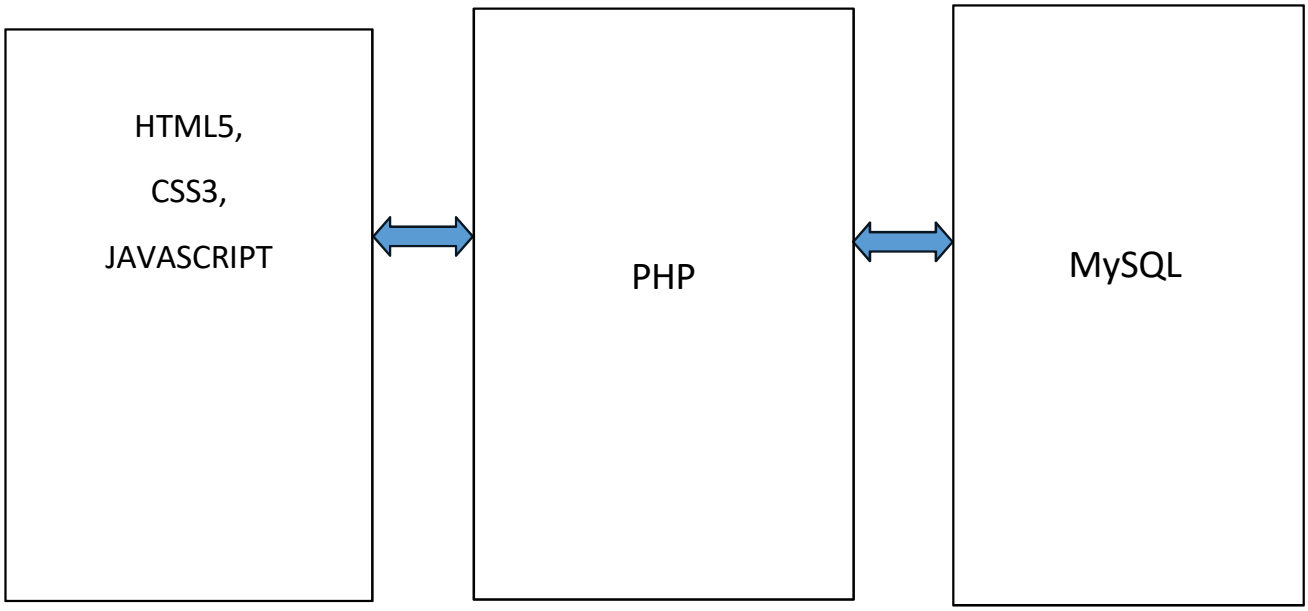


Fig 2 Technical Architecture

Implementation

Technologies

This system is developed using PHP programming language in XAMPP server.

PHP

PHP is a widely-used open-source server-side scripting language designed specifically for web development. The language's primary goal is to simplify the creation of dynamic and interactive web pages. PHP is embedded directly into HTML, making it easy to use for creating forms, handling databases, and managing user sessions. In this system, PHP is used to handle backend functionalities such as processing user requests, interacting with the database, and managing sessions. When users perform actions like submitting forms or retrieving data, PHP scripts communicate with the MySQL database to store, retrieve, or modify data. Additionally, PHP is used to validate

input data on the server side, ensuring security and data integrity. PHP's ability to generate dynamic web content allows the system to deliver a seamless user experience by tailoring pages based on user input or actions.

Features of PHP

Server-Side Scripting**:** PHP executes scripts on the server and delivers dynamic content to the client.

Cross-Platform Compatibility**:** PHP runs on various operating systems, including Windows, Linux, and macOS.

Database Integration**:** PHP supports numerous databases like MySQL, PostgreSQL, and SQLite,making it ideal for web applications.

Easy to Learn**:** PHP's syntax is simple and easy to understand, making it a beginner-friendly language for web development.

Pseudo Code

Pseudocode is a detailed yet readable description of what a computer program or algorithm must do, expressed in a formally-styled natural language rather than in a programming language. It allows designers to express the design in great detail and provides programmers a detailed template for the next step of writing code in a specific programming language. Because pseudocode is detailed yet readable, it can be inspected by the team of designers and programmers as a way to ensure that actual programming is likely to match design specifications. Catching errors at the pseudocode stage is less costly than catching them later in the development process. Once the pseudocode is accepted, it is rewritten using the vocabulary and syntax of a programming language.

Testing

Overview

Software testing is a process, to evaluate the functionality of a software application with an intent to find whether the developed software met the specified requirements or not and to identify the defects to ensure that the product is defect free in order to produce the quality product. As per the current trend, due to constant change and development in digitization, our lives are improving in all areas. The way we work is also changed. We access our bank online, we do shop online; we order food online and many more. We rely on software's and systems. What if these systems turnout to be defective? We all know that one small bug shows huge impact on business in terms of financial loss and goodwill. To deliver a quality product, we need to have Software Testing in the Software Development Process. Some of the reasons why software testing becomes very significant and integral part in the field of information technology are as follows.

1. Cost effectiveness
2. Customer Satisfaction
3. Security
4. Product Quality

Dimensions of Testing

There are many different dimensions to consider:
Layers of the application (database, APIs, UI) Scale of testing (unit, module, integration, scenario) Type of testing (functional, performance, security, etc.) Methodology (exploratory, scripted manual, automated)

Test Cases

Table 1 Admin Test Cases

S.No	Test Case	Input	Expected Output	Actual Output	Result
1	Login	Username, Password	Redirects to dashboard	Redirects to dashboard	Successful
2	View Pet List	Click on Pet List	Pet details should be displayed	Pet details should be displayed	Successful
3	Add Pet	Click on Add Pet	Pet List should be updated	Pet List should be updated	Successful
4	Delete Pet	Click on Delete Pet	Pet List should be updated	Pet List should be updated	Successful
5	View Request List	Click on View Adoption List	Adoption applications should be displayed	Adoption applications should be displayed	Successful

6	Update Application	Approve/Reject the application	Application status should be updated	Application status should be updated	Successful
7	Add Slot	Click on Add Slot	Slot added successfully	Slot added successfully	Successful
8	View Donations	Click on View Donations	Donation data should be displayed	Donation data should be displayed	Successful

Table 2 User Test Cases

S.No	Test Case	Input	Expected Output	Actual Output	Result
1	Registration	Name, User name, Password,Mobile, Email address, Address.	Registration successful and get the success message	Registration successful and get the success message	Successful
2	Login	Username, Password	Redirects to dashboard	Redirects to dashboard	Successful

3	View Pet List	Click on Pet List	Pet details should be displayed	Pet details should be displayed	Successful
4	Send Request for Adoption	Click on Send Request	Form should be displayed	Form should be displayed	Successful
5	Check Application Status	Click on My Requests	Application status should be updated as either accepted or rejected	Application status should be updated as either accepted or rejected	Successful
6	Book Slot	Click on Slot Slot	Slot booked successfully	Slot booked successfully	Successful
7	Donate Money	Click on Donate	It should redirect to payment page and payment should be done.	It should redirect to payment page and payment should be done.	Successful

Results

Screenshots

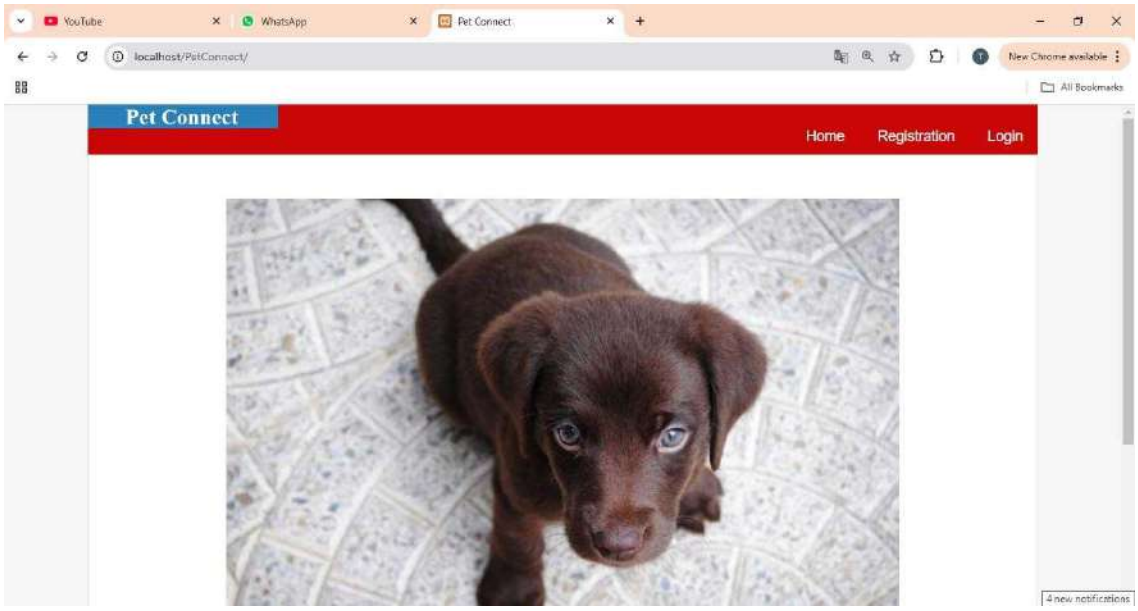


Fig 3 Home Page

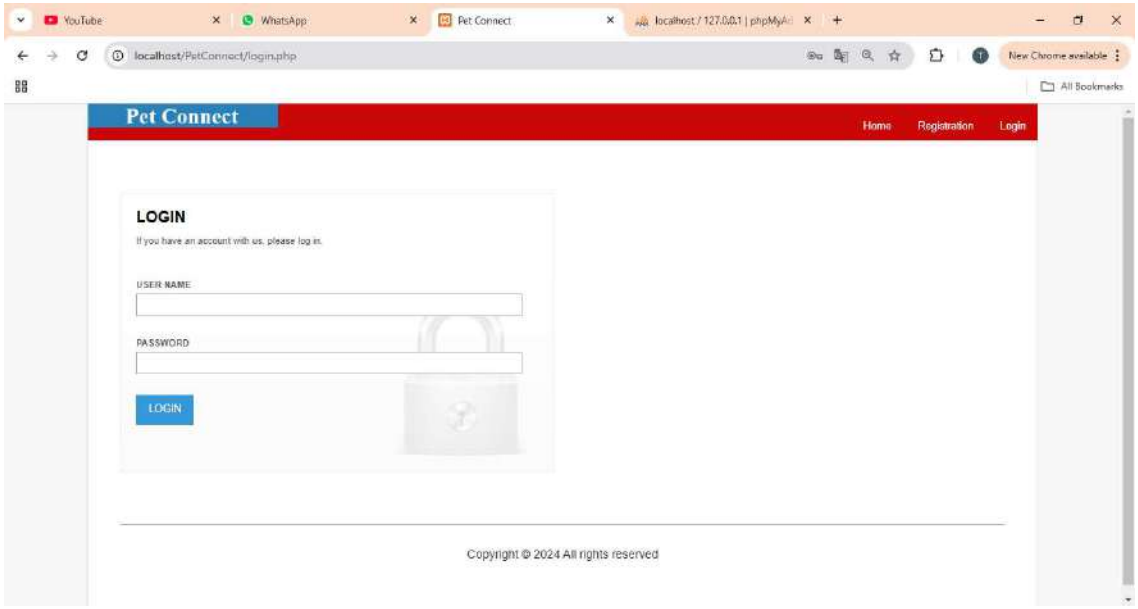


Fig 4 Login Page

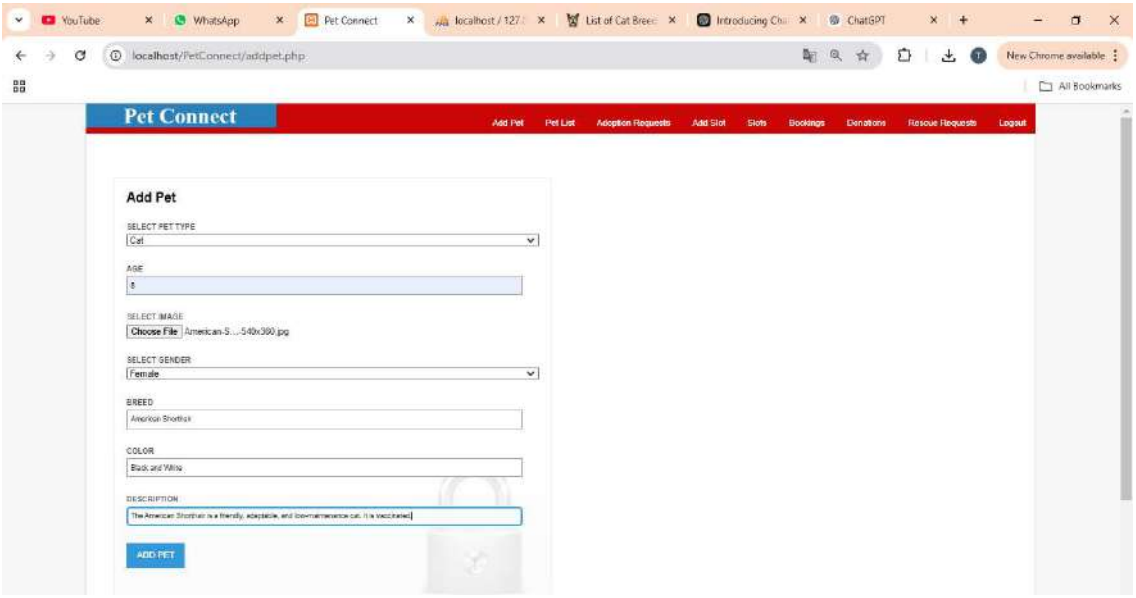


Fig 5 Add Pet

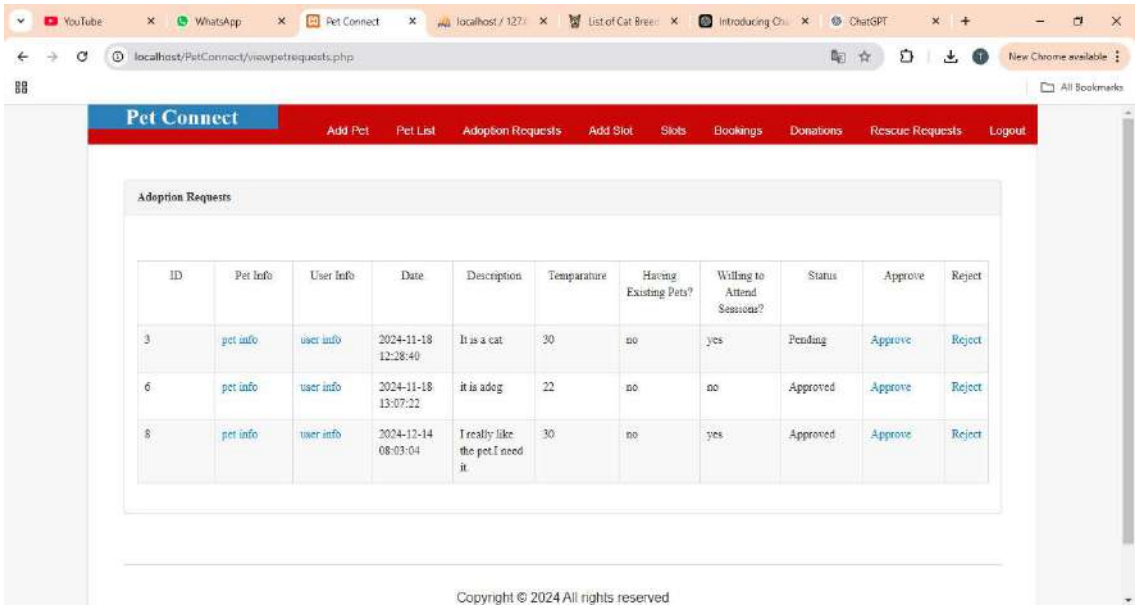


Fig 6 Adoption Requests

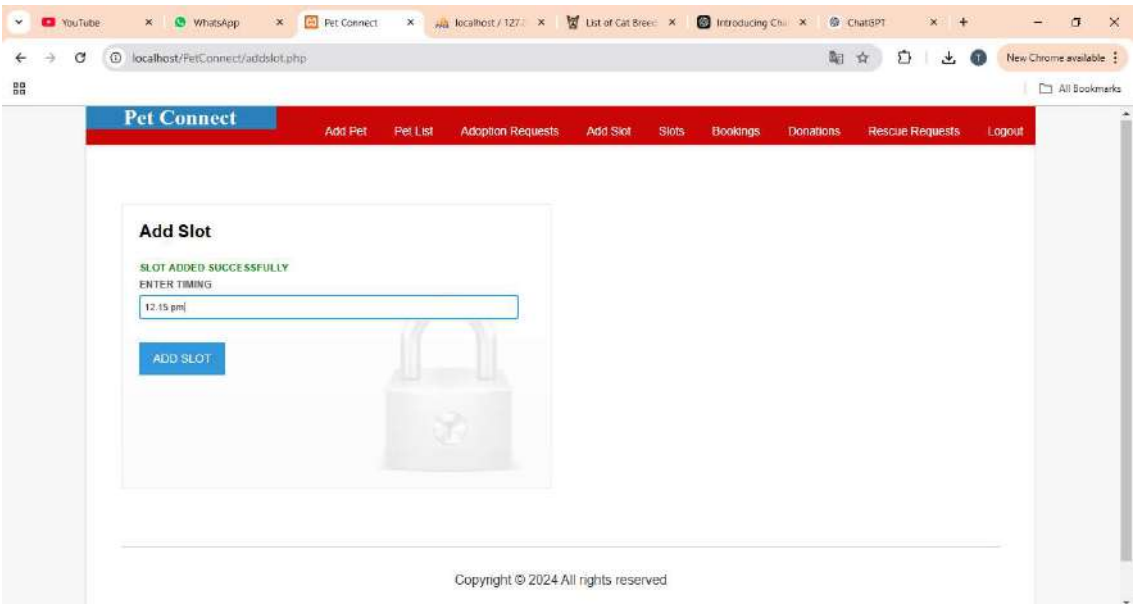


Fig 7 Add Slots

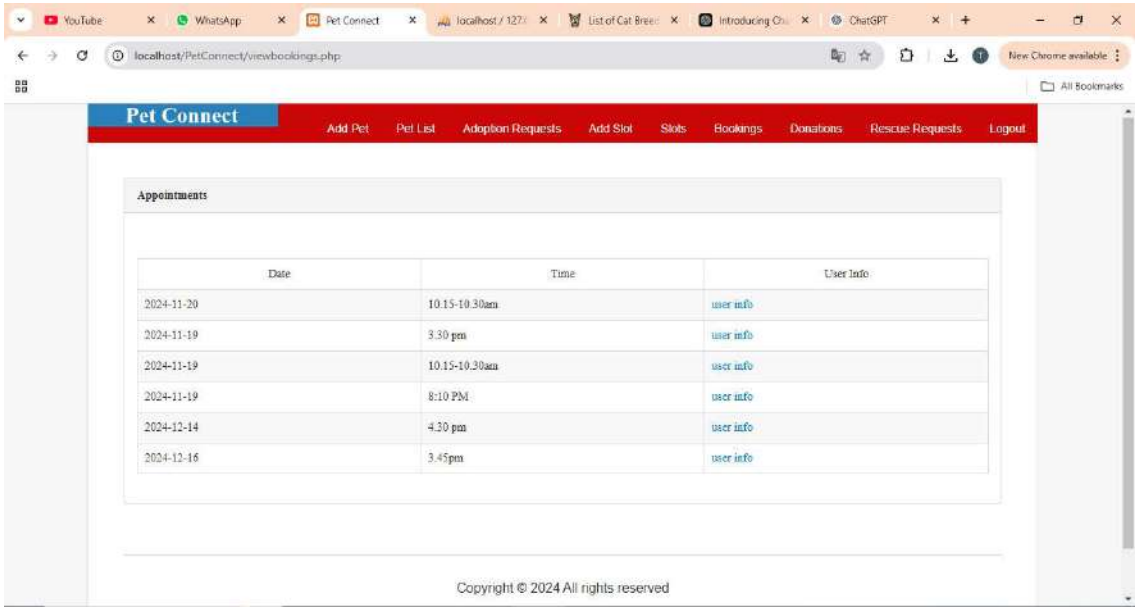


Fig 8 Appointments

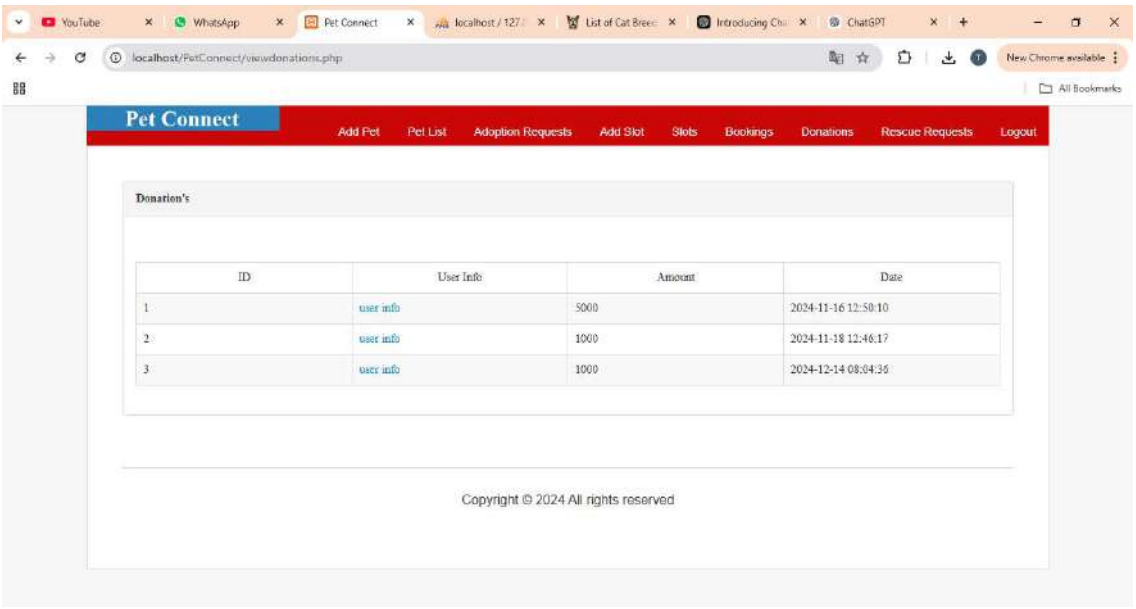
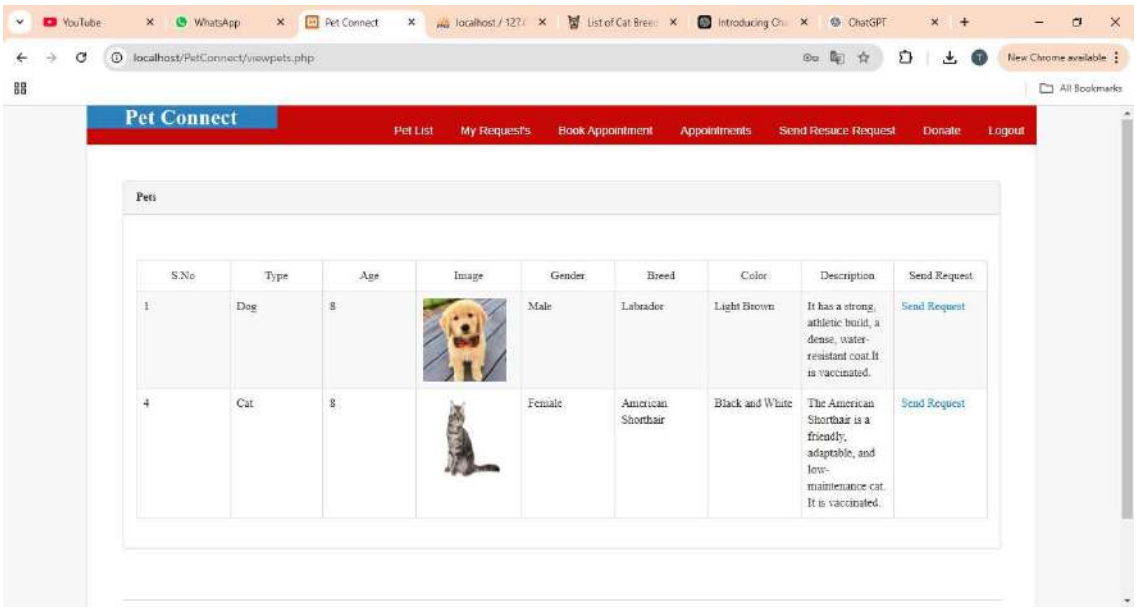


Fig 9 Donations



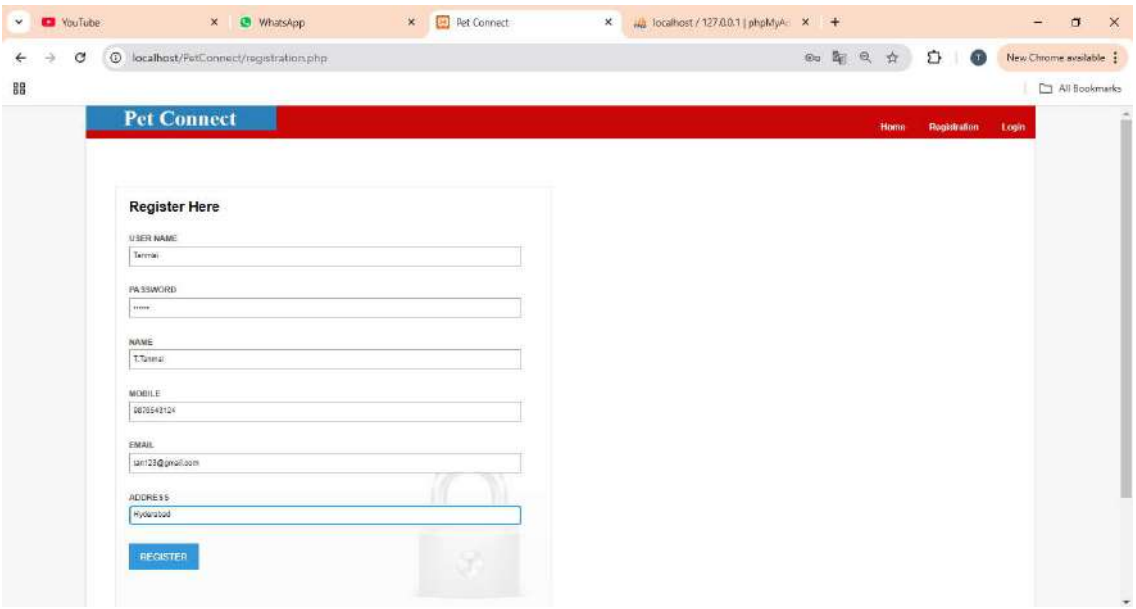


Fig 11 User Registration

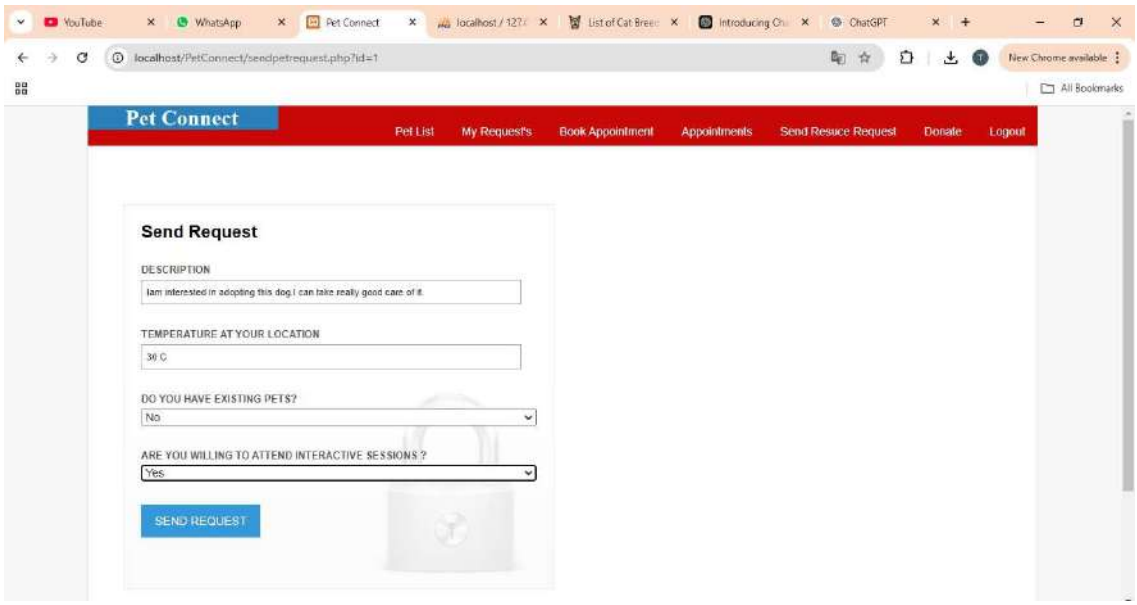


Fig 12 Send Request

Fig 13 Pet List

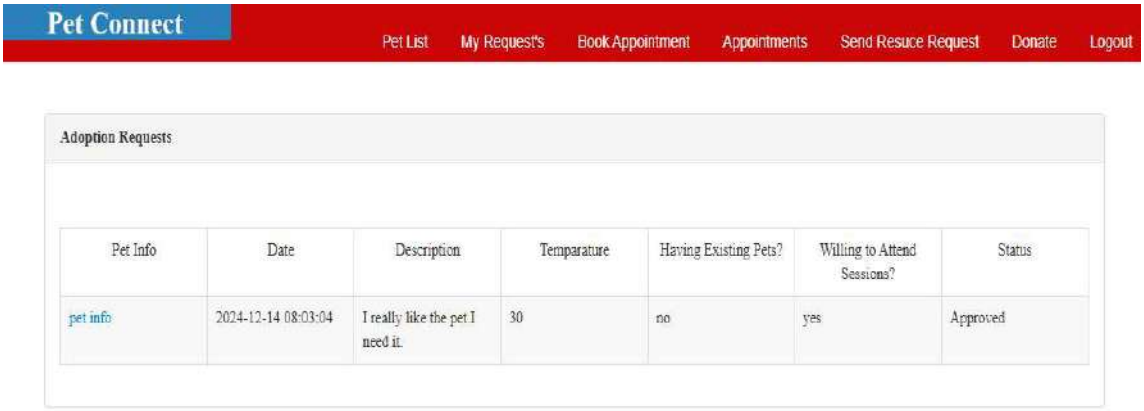


Fig 14 Application Status

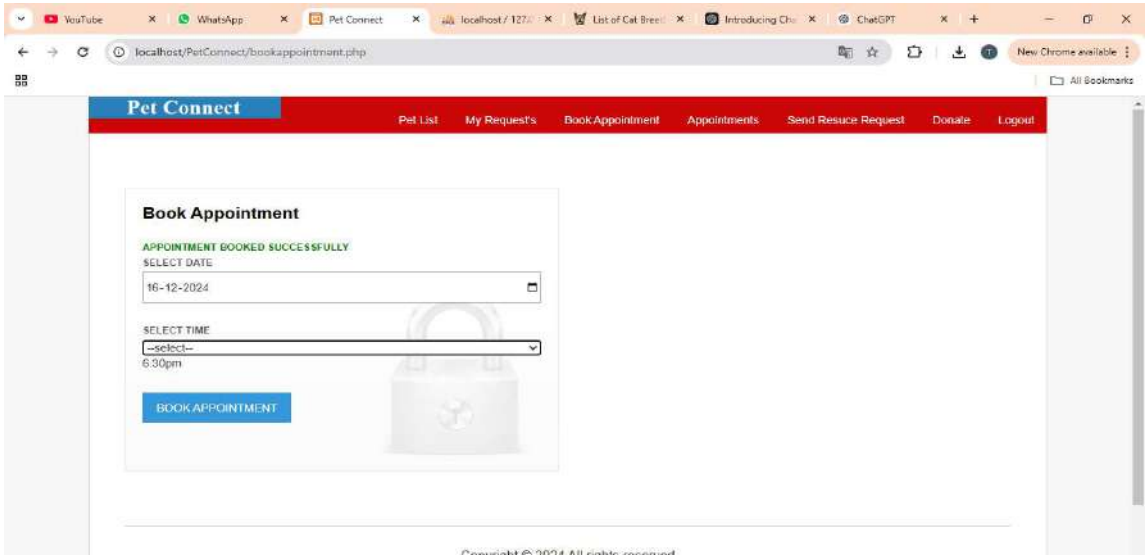


Fig 15 Slot Booking

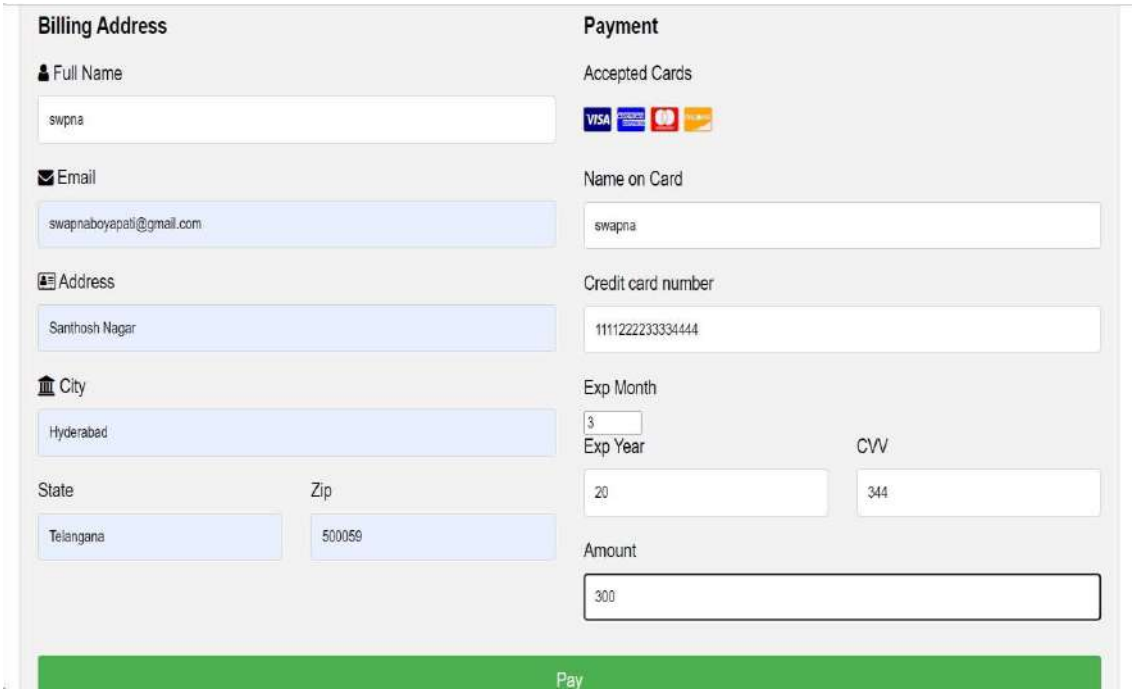


Fig 16 Payment Page

Conclusion and Future Scope

Conclusion

The Pet Connect system represents a significant advancement in simplifying the process of pet adoption and care management. Unlike traditional platforms that often lack comprehensive features , Pet Connect is designed to offer a seamless and user-friendly experience, from browsing available pets to submitting adoption requests and tracking their status. This holistic approach addresses the limitations of existing systems, making it easier for users to find their ideal pets and for organizations to manage their operations efficiently. By fostering a deeper connection between pet seekers and adoption centers, Pet Connect not only promotes responsible pet ownership but also sets a new benchmark for integrating technology into the realm of animal welfare.

Future Scope

The system can be further enhanced by incorporating additional services and features tailored to user needs. Introducing forums or social features would enable users to connect, share experiences, and raise awareness about pet adoption. Additionally, developing the platform as a mobile application would improve accessibility and convenience, reaching a broader audience and promoting responsible pet ownership.

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