



GROUP ASSIGNMENT COVERSHEET

Subject Code & Name: ICT726 Web Development T224

Lecturer's/Tutor's name: Mubashir Hussain

Assignment Title: Dynamic Website

Declaration

(This declaration must be completed by all students in the group or the assignment will not be marked.)

We, the undersigned, certify the following:

- We have read and understood the *Student Academic Misconduct Policy*
- This assignment is our own work based on our personal study and or research.
- We have acknowledged all material and sources used in the preparation of this assignment including any material generated in the course of our employment.
- **The assignment has not previously been submitted for assessment in this or any other unit.**
- We have not copied in part or in whole or otherwise plagiarised the work of other students.
- We have read and understand the criteria used for assessment.
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Assignment Receipt

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Overview

The "Paws and Claws Rescue" website is purposed to help the procedure of pet adoption, inform users about the services of this organization, and give support to people worried about animal rescue by means of this multifunctional web application. It offers a big database of the pets for adoption, each having an individual profile. It should be one-stop for all those who would like to view the pets available, read about success stories, and learn about the rescue organization or subscribe for future adoptions. This project had required an undisturbed experience both on the frontend and backend, keeping simplicity and efficiency in mind while addressing security, accessibility, and reliability.

The present project broadly covers two major areas: the frontend, responsible for presenting information and the user interface, and the backend system responsible for general server-side operations including data processing, handling of user interactions, and form submissions. This platform aims to combine state-of-the-art design principles with powerful backend functionality that can enhance the complete experience of pet adoption and raise awareness for the rescue organization.

The highlight sections of this platform are Home, About, Adopt, and Contact-all these developed in cooperation with members to develop a responsive, interactive, resourceful website.

Introduction

Paws and Claws Rescue is an animal welfare organization committed to the rescue of abandoned, mistreated, and homeless animals and finding them loving and permanent homes. This brought along the need within the organization to develop a central online platform that would give room for the prospecting pet owners to explore the available pets, learn about the adoption process, and find out more about services offered by the rescue. Paws and Claws Rescue is a website that is developed, keeping all those needs in mind, further facilitating the adoption process by making it easier for users to find the right pet for home.

The site informs and functions as a gateway that communicates the organization for its values of compassion, responsibility, and welfare about pets. Along with presenting animals available for adoption, it contains testimonials of previous adopters, serving both to encourage and reassure prospective adopters. Furthermore, one can sign up for the organization's newsletter to receive the latest news on new arrivals and upcoming events.

Web development needed this delicate balance between form and function, which, more often than not, was a trade-off between aesthetic appeal and the urge to offer experiences which would be friendly yet effective in its operations. The front-facing elements of the website needed to have designs that emphasize clean, modern design that made intuitive navigation engaging. The back-end architecture comprised secure and reliable systems, in which user data processing, such as form submissions, was safeguarded and processed in an efficient manner. It was a group project, managed by three members, where each contributed differently to the development aspects of the platform.

Functional Requirements

These are the major features and interactions-including user interactions, listings of pets, and contact forms, among others-that will be realized on the website Paws and Claws Rescue in achieving its objectives.

- 1) Easy to Use: It contains a responsive nav bar that will show and hide, depending on display size. The nav links to Home, About, Adopt, and Contact. Clear signposting is done in order for the users to get what they want from it.

- 2) Pet Listing: On the Adopt page, the user will see all the available pets. Each pet will include their photo, a short description regarding its behavior, and other information about the pet. Each listing can be filtered by various attributes that enable the user to view the pet that matches what he or she is looking for in age, breed, and size.
- 3) Search and Filter Options: Search for pets through filters like species-dog, cat, etc.-breed, and personality traits, making it very easy for any adopter to find a perfect match with their preference.
- 4) Contact Form: The contact form provided on the contact page is functional and validated. This contact form enables the users of the application to send their inquiries to the organization. Before submission, all the required fields that are filled will get checked by the form. If the submission happens successfully, it provides feedback or alerts to the users.
- 5) Subscription for Updates: Visitors will subscribe by typing their email in the subscription form so the viewer may update themselves about newly adoptable pets and events. This aspect is important to retain user engagement by way of keeping this community updated with the latest developments concerning future adoption opportunities.
- 6) Responsive Design: It is optimized for everything from desktop to smartphone. The full functionality of the website should remain within the reach of every user irrespective of the device being used.
- 7) Customer Testimonials and Media Integration: The website illustrates customer testimonials that display real-life stories of previous adopters that could potentially drive new users to join the adoption process. With this, embedded videos will allow adopters to visually see into the personalities of the animals, furthering their choices of selection.

Non-Functional Requirements

Nonfunctional requirements are about the quality attributes that define behind-the-scenes functionality to make sure the platform is secure, reliable, and scalable.

- 1) Security: All data of the users, particularly sensitive ones, like contact information and email addresses, are well-secured in handling and storage. Security measures on the backend keep threats of common security vulnerabilities from executing successfully, such as SQL injection and cross-site scripting attacks. This is important in retaining user trust and ensuring that data protection regulations are adhered to.
- 2) Scalability: The website should be able to scale with growth in the rescue organization, traffic, and data. The backend architecture ensures that over time, this site will scale smoothly for even larger user bases with big listings of pets without degradation in performance.
- 3) Performance This site has been optimized for quick page loads to ensure a good user experience. Pages with more than a few images - like the Adopt page have been optimized for quick loading by compressing images and following other best practices.
- 4) Accessibility: The web application is readable by screen readers, has sufficient color contrast, and provides easily navigable layouts for all users, including those with disabilities.
- 5) Reliability: Highly available systems are designed; strong error handling and fallback mechanisms are included. Reduces downtimes and allows the website to stay always available for the users.
- 6) Maintainability: The code structure will be laid out in such a way that any update in the future or addition of features will be rather straightforward. It will allow for easy adjustment using modular coding practices without disturbing the remaining systems.

Features

- 1) Responsive Navigation Bar: Responsive navigation bar allows easy access for visitors to go through different sections of the website.
- 2) Pet Listings: Lists all available pets. It can be filtered and allows detailed information on the animals.

- 3) Contact and Subscription Forms: These allow visitors to contact and ask for information with regards to updates. The forms are validated at both the client and server side to ensure integrity of the information.
- 4) Embedded Media and Testimonials: This greatly enhances the user's experience through adoption stories and videos of the pets in action.

Task Distribution

1) Aniket Sah (Frontend Development):

Responsibility: Full Frontend development is to be done by Aniket, which means the whole UI design and its elements.

Key Activities:

Development of HTML/CSS/JavaScript: He has focused on how to make pages responsive, interactive, and gorgeous. Layout of the Home, About, Adopt, and Contact pages was built with the view of ensuring ease in navigation, with the visual appearance.

Form Validation: He implemented client-side form validation to enhance user experience whereby, when the form is not full, users can be warned before form submission.

Responsive Design: The website was made fully responsive by Aniket for changing screen sizes of various devices. He used CSS media queries to adjust layouts for mobile, tablet, and desktop views.

2) Anil Karki (Backend Development):

Responsibility: Anil contributed to server-side logic and data processing or storage management.

Key Activities:

PHP and DB Management: Anil took to the core PHP logics and designed a database to store information regarding pets, inquiries of the users, and testimonials. CRUD operations for pet listings were performed.

Form Processing and Validations: He ensured data from forms in the Contact and Subscription forms were processed and secured in the backend database.

On successful form submissions, notifications by email were passed on to the admin.

Security: Anil ensured that all user input from the forms had been sanitized to avoid malicious injections. He further implemented security to protect the data.

3) Cheerag Bishokarma (Project Coordination and Integration):

Responsibilities: Cheerag was to oversee smooth integration between the frontend and backend in handling the project management.

Key Activities:

Integration: Cheerag has successfully integrated the frontend created by Aniket with the backend system created by Anil. He checked that the data on the backend displays correctly in the front, especially in the Adopt section with dynamically generated pet listings.

Testing and Debugging: The author of the book had tested his platform against different browsers and devices to make them act accordingly. He fixed the bugs that came out during the integration phase.

Deployment and Maintenance: Cheerag uploaded the website to a live server and made sure everything worked as it was supposed to in production.

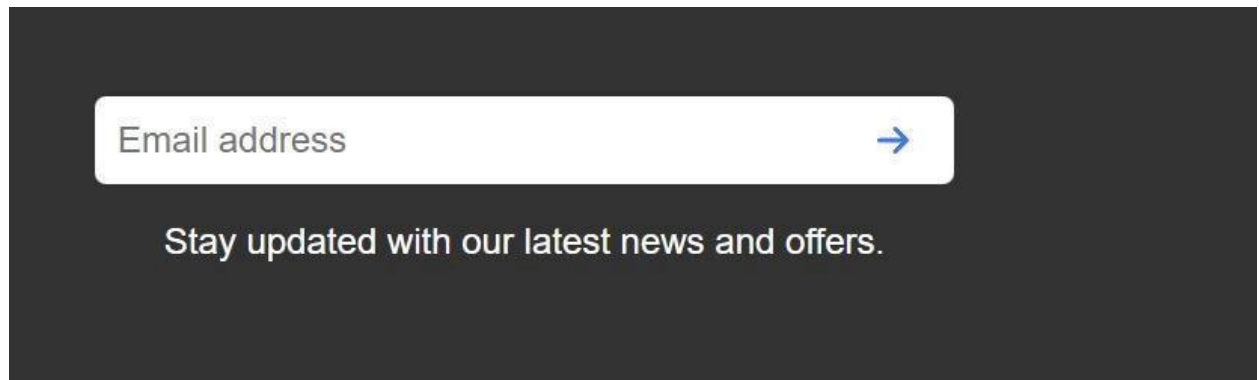
Conclusion

The Paws and Claws Rescue Website is a great example of how a web platform can streamline and improve the pet adoption process. In collaboration, a user-friendly, secure, and scalable platform was developed for both the rescue organization and its adopters. Aniket has utilized the balance of the pleasant and smooth UX for the frontend interface, while the security and efficiency on the backend are taken care of by Anil. Cheerag oversaw its integration and deployment to make sure that everything falls in place on time and within scope.

The project represents the capability for collaborative work in merging technical expertise with effective project management in order to produce an outcome that will meet and hopefully exceed client expectations. The website is now live and ready to come into service within the community by serving countless animals in finding their homes.

Appendix 1

Screenshots of the website



Pet Adoption System Pet Faq Lead Company Adoption Logout				
Leads				
ID	Name	Email	Phone	Message
1	Daryl Soto	rybeniv@mailinator.com	+1 (269) 221-2166	Proident inventore
2	Perry Richard	xepogo@mailinator.com	+1 (393) 272-4905	Fuga Rerum recusand

Fig:1

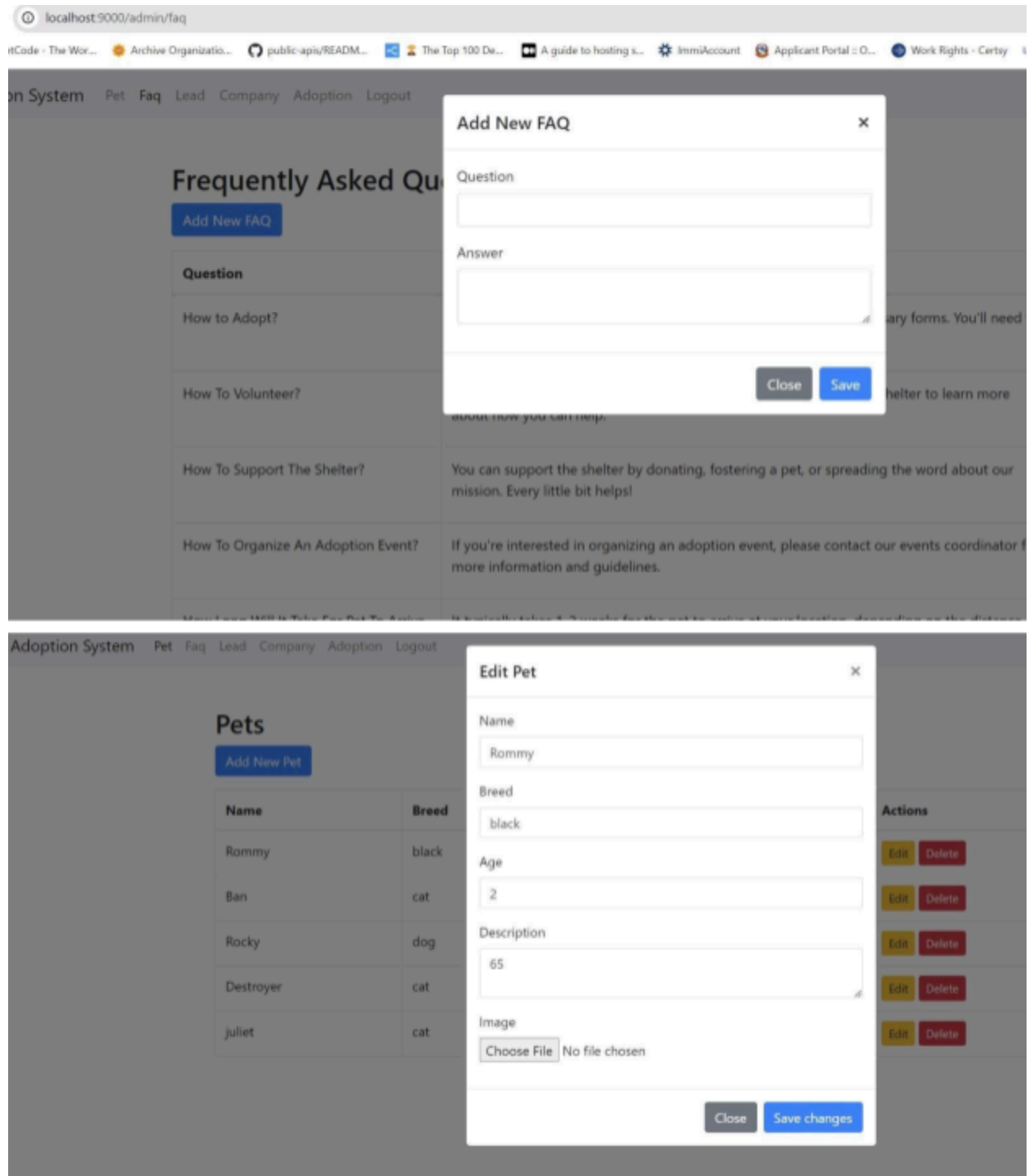


Fig:2

Home About Contact Adopt

Adopt a Pet

Your Name:

Your Email:

Your Phone (optional):

Submit Request

fluffy rocvkd

Pet Adoption System Pet Faq Lead Company Adoption Logout

Frequently Asked Questions

[Add New FAQ](#)

Question	Answer	Actions
How to Adopt?	To adopt a pet, please visit our adoption center and fill out the necessary forms. You'll need to provide identification and a proof of residence.	Edit Delete
How To Volunteer?	We welcome volunteers! You can sign up on our website or visit our shelter to learn more about how you can help.	Edit Delete
How To Support The Shelter?	You can support the shelter by donating, fostering a pet, or spreading the word about our mission. Every little bit helps!	Edit Delete
How To Organize An Adoption Event?	If you're interested in organizing an adoption event, please contact our events coordinator for more information and guidelines.	Edit Delete
How Long Will It Take For Pet To Arrive At The Location?	It typically takes 1-2 weeks for the pet to arrive at your location, depending on the distance and transportation arrangements.	Edit Delete

Fig:3

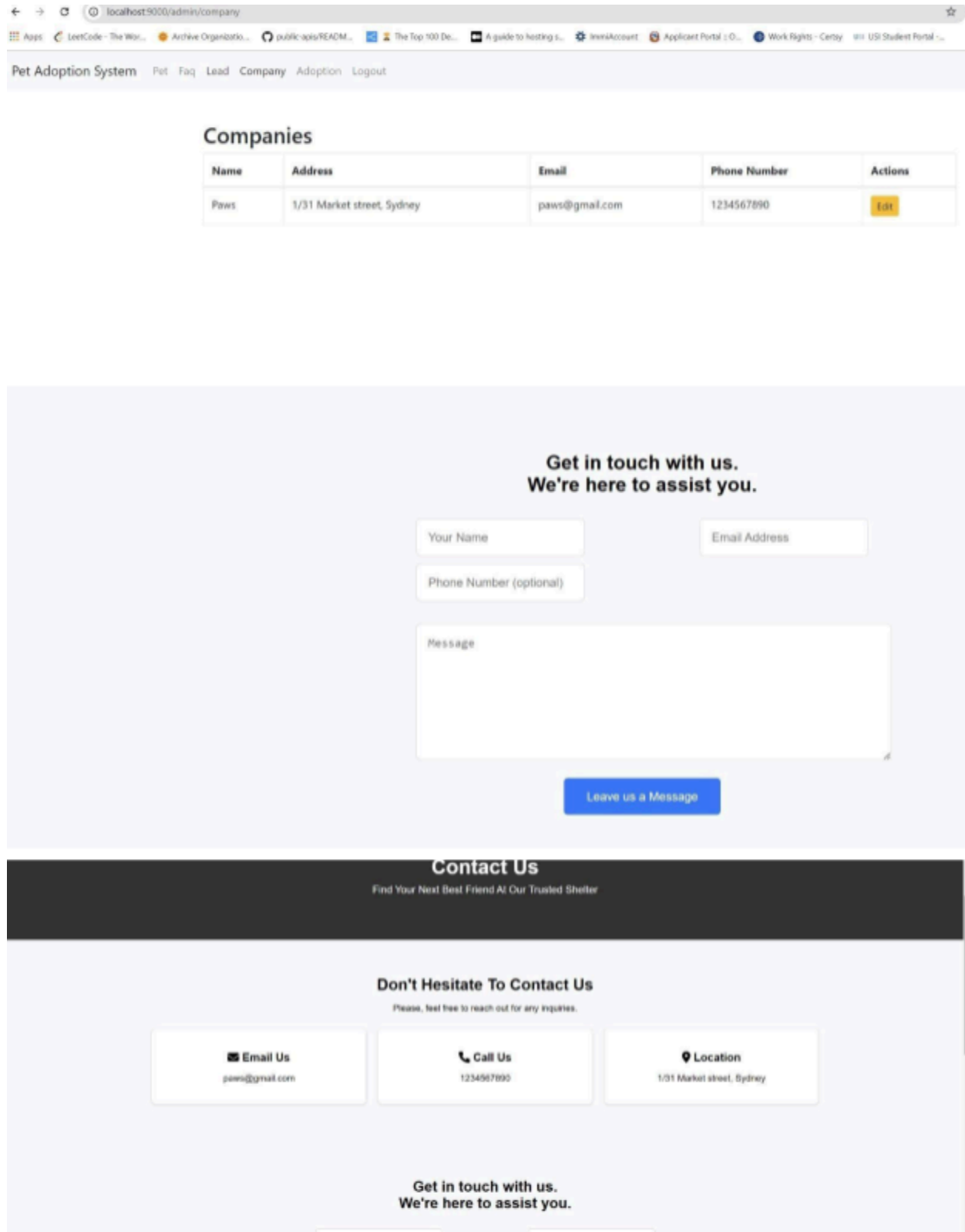


Fig:4

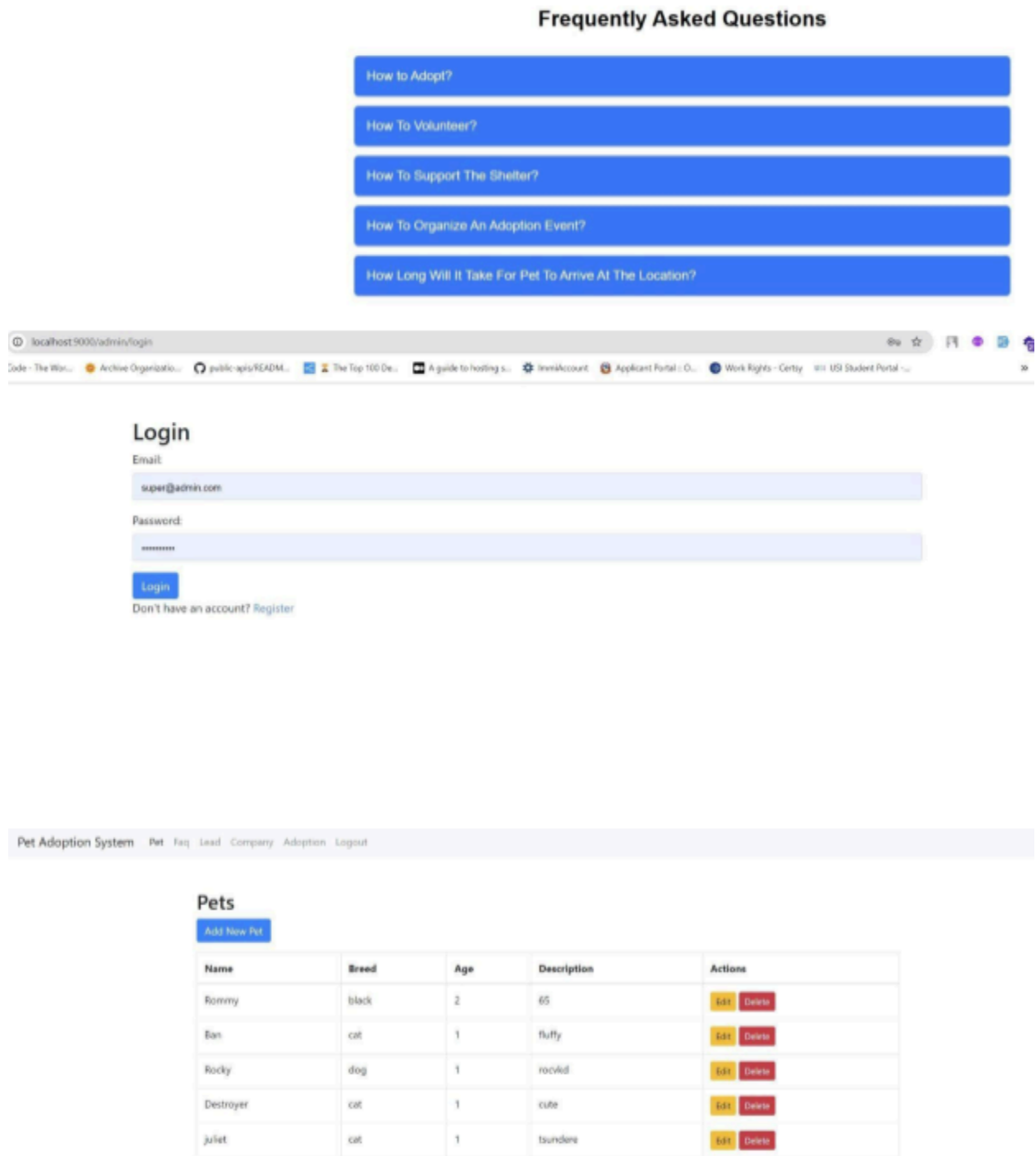



Fig:5



How to Adopt?

To adopt a pet, please visit our adoption center and fill out the necessary forms. You'll need to provide identification and a proof of residence.

How To Volunteer?

We welcome volunteers! You can sign up on our website or visit our shelter to learn more about how you can help.

How To Support The Shelter?

You can support the shelter by donating, fostering a pet, or spreading the word about our mission. Every little bit helps!

How To Organize An Adoption Event?

If you're interested in organizing an adoption event, please contact our events coordinator for more information and guidelines.

How Long Will It Take For Pet To Arrive At The Location?

It typically takes 1-2 weeks for the pet to arrive at your location, depending on the distance and transportation arrangements.

Pet Adoption System
Pet
Faq
Lead
Company
Adoption
Logout

Pets

Add New Pet

Name	Breed
Rommy	black
Ben	cat
Rocky	dog
Destroyer	cat
Juliet	cat

Add New Pet

Name

Breed

Age

Description

Image

Choose File

No file chosen

Close

Save

Actions

<div>Edit</div>	<div>Delete</div>
<div>Edit</div>	<div>Delete</div>
<div>Edit</div>	<div>Delete</div>
<div>Edit</div>	<div>Delete</div>
<div>Edit</div>	<div>Delete</div>

localhost:9000/admin/adoption

Apps
LeetCode - The Wor...
Archive Organizatio...
public-apis/README...
The Top 100 De...
A guide to hosting s...
InniskAccount
Applicant Portal : O...
Work Rights - Centy
US Student Portal ...

Pet Adoption System
Pet
Faq
Lead
Company
Adoption
Logout

ID	Pet Name	Client Name	Client Email	Client Phone	Status	Requested At
1	Rommy	AS	fifedo@mailinator.com		pending	2024-09-14 09:56:49
2	Juliet	s	s@sd.com		pending	2024-09-14 10:00:19
3	Juliet	er	fifedo@mailinator.com		pending	2024-09-14 10:01:00
5	Juliet	Lydia Workman	lywiraguty@mailinator.com	+1 (821) 365-9316	pending	2024-09-14 17:23:18

Fig:6

localroot										
website	160.0 KiB	adoption_requ...	4	32.0 KiB	2024-09-13 23:54:...		InnoDB		Table	
adoption_reque...	32.0 KiB	company	0	16.0 KiB	2024-09-13 23:54:...		InnoDB		Table	
company	16.0 KiB	faq	6	16.0 KiB	2024-09-13 23:53:...		InnoDB		Table	
faq	16.0 KiB	leads	2	16.0 KiB	2024-09-13 23:53:...		InnoDB		Table	
leads	16.0 KiB	pets	6	32.0 KiB	2024-09-14 06:20:...		InnoDB		Table	
pets	32.0 KiB	subscription	2	16.0 KiB	2024-09-13 23:54:...		InnoDB		Table	
subscription	16.0 KiB	users	2	32.0 KiB	2024-09-14 01:43:...		InnoDB		Table	
users	32.0 KiB									

Fig:7

company	16.0 KiB	Comment:	
faq	16.0 KiB		
leads	16.0 KiB		
pets	32.0 KiB		
subscription	16.0 KiB		
users	32.0 KiB		

#	Name	Datatype	Length/Set	Unsigned	Allow NU...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	id	INT	11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AUTO_INCREME...				
2	name	VARCHAR	255	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default		utf8mb4_uca1400_ai_ci		
3	email	VARCHAR	100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default		utf8mb4_uca1400_ai_ci		
4	phone	VARCHAR	20	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_uca1400_ai_ci		
5	address	VARCHAR	255	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_uca1400_ai_ci		
6	created_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	current_timestamp()				

Fig:8

users		32.0 KiB		Columns: ADD Remove Up Down							
#	Name	Datatype	Length/Set	Unsigned	Allow NU...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	id	INT	11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AUTO_INCRE...				
2	name	VARCHAR	50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default		utf8mb4_uca1400_ai_ci		
3	email	VARCHAR	100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default		utf8mb4_uca1400_ai_ci		
4	password	VARCHAR	255	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default		utf8mb4_uca1400_ai_ci		
5	role	ENUM	'admin','user'...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	'admin'		utf8mb4_uca1400_ai_ci		
6	created_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	current_timestamp()				

Fig:9

pets	32.0 KiB
subscription	16.0 KiB
users	32.0 KiB

#	Name	Datatype	Length/Set	Unsigned	Allow NU...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	id	INT	11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AUTO_INCREMENT...				
2	name	VARCHAR	100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default		utf8mb4_uca1400_ai_ci		
3	breed	VARCHAR	100	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_uca1400_ai_ci		
4	age	INT	11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL				
5	description	TEXT		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_uca1400_ai_ci		
6	created_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	current_timestamp()				
7	updated_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	current_timestamp...				
8	image	TEXT		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_uca1400_ai_ci		

Fig:10

leads	16.0 KiB
pets	32.0 KiB
subscription	16.0 KiB
users	32.0 KiB

#	Name	Datatype	Length/Set	Unsigned	Allow NU...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	id	INT	11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AUTO_INCREMENT...				
2	name	VARCHAR	100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default		utf8mb4_uca1400_ai_ci		
3	email	VARCHAR	100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default		utf8mb4_uca1400_ai_ci		
4	phone	VARCHAR	20	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_uca1400_ai_ci		
5	message	TEXT		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL		utf8mb4_uca1400_ai_ci		
6	created_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	current_timestamp()				

Fig:11

subscription	16.0 KiB
users	32.0 KiB

#	Name	Datatype	Length/Set	Unsigned	Allow NU...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	id	INT	11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AUTO_INCREMENT...				
2	email	VARCHAR	100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default		utf8mb4_uca1400_ai_ci		
3	subscribed_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	current_timestamp()				
4	unsubscribed_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NULL				

Fig:12

faq	16.0 KiB
leads	16.0 KiB
pets	32.0 KiB
subscription	16.0 KiB
users	32.0 KiB

#	Name	Datatype	Length/Set	Unsigned	Allow NU...	Zerofill	Default	Comment	Collation	Expression	Virtuality
1	id	INT	11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AUTO_INCREMENT...				
2	question	VARCHAR	255	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default		utf8mb4_uca1400_ai_ci		
3	answer	TEXT		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No default		utf8mb4_uca1400_ai_ci		
4	created_at	TIMESTAMP		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	current_timestamp()				

Fig:13