UNIVERSITI MALAYSIA TERENGGANU

FACULTY OF COMPUTER SCIENCE AND MATHEMATICS

CSF3133
WEB-BASED USER INTERFACE DESIGN

PET ADOPTION WEBSITE

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1. INTRODUCTION

1.1. Purpose of Website

The purpose of this Pet Adoption System is to connect animal shelters and pet lovers, offering users an easy and emotional experience to browse, view detailed profiles and photos, and adopt pets online. This system promotes finding loving homes for pets in need, while concurrently strengthening shelter connections by providing accessible information and resources. By assisting pets in finding new furry friends, the system ultimately seeks to improve animal wellbeing in society, encourage ethical pet ownership, and ease the adoption process.

1.2. Goal of the Website

The Pet Adoption System is designed to offer an easy and emotionally appealing online platform where users can easily view and adopt pets. This system will allow them to gain access to the database of animals for adoption, showing their names, ages, breeds, health conditions, and area to pick up. The main goal of this system is the welfare of the animals, reducing the number of stray animals by ensuring that these animals find their safe and loving families. In general, this system acts as bridge gaps between animal shelters and potential adopters by making the adoption of animals more organized, time-saving and humane.

1.3. Intended Audience

The Pet Adoption Website is created to provide resources for individuals and organizations that are involved in pet adoption and animal care. The main goal of this website is to make the adoption process easier and to promote awareness about responsible pet ownership. The main target audiences are as follows:

1. People Who Want to Adopt Pets

   This group includes individuals or families who are interested in adopting a pet. The website helps them view available pets, see details such as age and breed, and send their adoption applications online easily.

2. Animal Shelters and Rescue Centers

   Shelters can use the website to post information about pets that are ready for adoption. They can also manage adoption requests and connect with more people who want to adopt them. This helps shelters find homes for more animals.

3. Volunteers and Pet Lovers

   People who love animals and want to help can register as volunteers. They can join programs such as pet care, fostering, or donation campaigns. The website encourages the community to take part in helping animals in different ways.

4. General   Public

   The website also welcomes visitors who are not actively adopting pets but wish to learn more about pet care and the adoption process. They may use the website to read articles, guides, and general information related to animal welfare and pet adoption.

1.4. Opportunity/ Problems/ Issues

Currently, many people face difficulties finding reliable sources for pet adoption due to limited access to verified shelters or lack of updated information online (Eliana Takbir Ahmad & Haliyana Khalid, 2025). At the same time, Eliana & Haliyana (2025) also stated that shelters struggle to reach wider audiences to promote their animals. The system addresses that problem by centralizing pet listings, improving visibility for shelter, and ensuring adopters can easily search and apply online. It also reduces paperwork and miscommunication between shelters and adopters.

1.5. Type of Content

The Pet Adoption Website uses a combination of visual and interactive media content to create an interesting and user-friendly experience. The types of content include:

A) Images and Graphics – High-quality photos of pets are used to attract users and help them emotionally connect with the animals. Simple icons are used for navigation buttons and features.

B) Color Scheme – Soft and friendly colors such as light purple, pastel green, and gentle yellow are used to create a calm, cheerful, and welcoming atmosphere, perfectly suited for animal related content.

C) Typography – Clean and readable fonts such as sans-serif fonts are used to ensure clarity and accessibility for all users.

D) Text Content – Short descriptions, headings, and simple paragraphs are used to explain pet details, adoption procedures, and pet care tips.

E) Interactive Elements – Buttons, forms, and navigation menus allow users to browse pets, register accounts, and submit adoption requests easily.

1.6. Related Websites

These are the links for several websites that we were inspired by for our website.

1. https://www.petfinder.my/listings.htm

Our 'Adopt a Pet' page design and user interface were inspired by this website. We took inspiration from the grid-style pet listings to create a user-friendly interface that allows customers to browse pet details and navigate between pages without hassle.

2. https://www.paws.org.my/
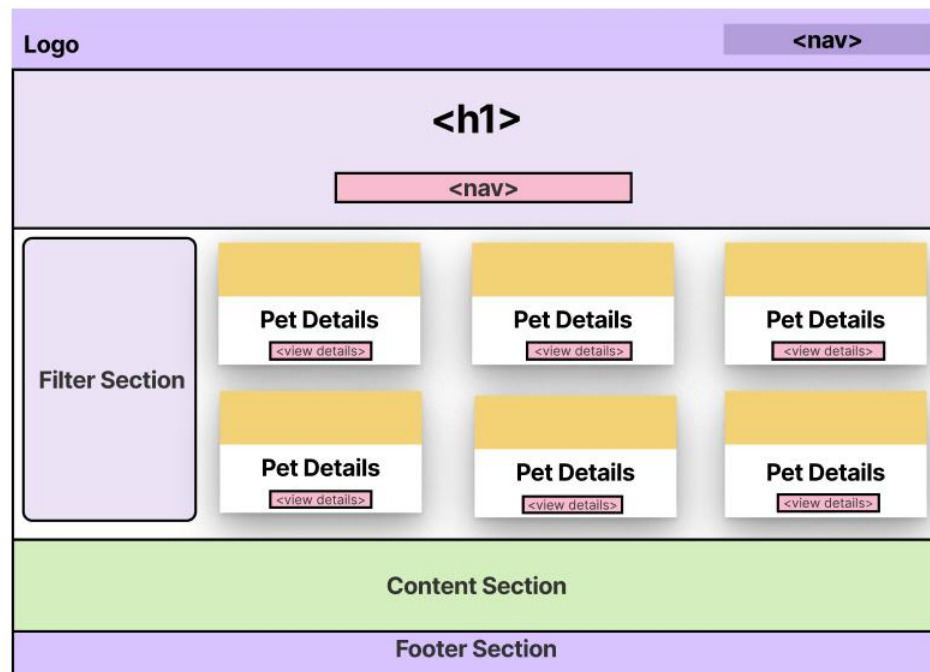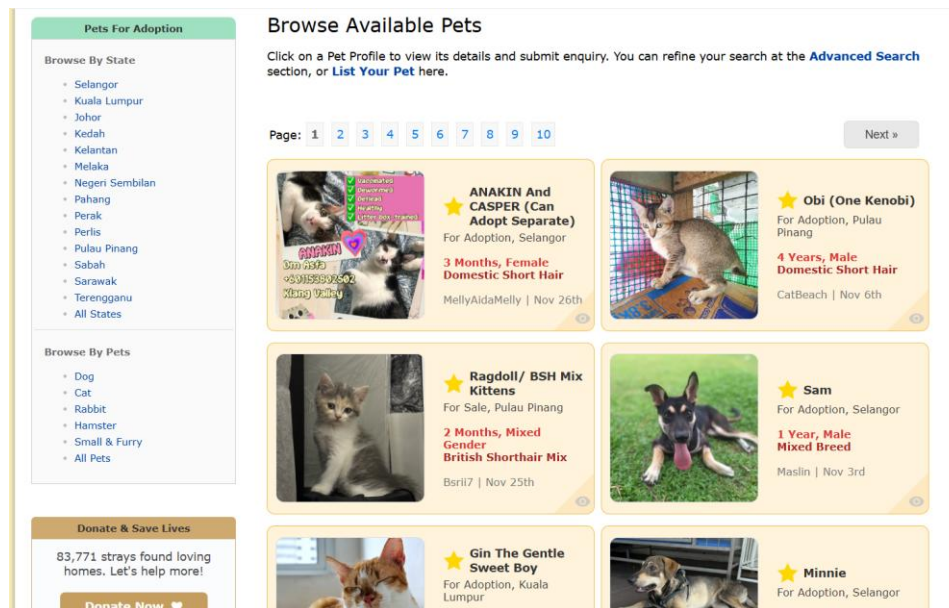
To better understand how animal shelters handle pet adoption, we consulted this webpage. It inspired characteristics like simplified adoption procedures and useful content for potential adopters.

Table of Comparisons
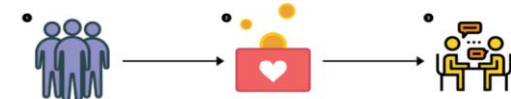
Functionality	Propose Project (Pet Adoption)	Petfinder Malaysia	PAWS Malaysia
Navigation	Simple menu with clear categories	Grid based navigation	Menu based navigation
Pet Listing	Centralized pet list with details	Detailed listings with filters	Limited listing information
Adoption Process	Online application system	Contact-based adoption	Manual process
User Interface	Simple and beginner-friendly	Professional and modern	Informational layout
Target Users	Adopters, shelters, volunteers	Adopters	Adopters and donors

2. WEB DESIGN

2.1. Page Titles

A) The Pet Adoption Website consists of six main pages that help users explore the website easily and find the information they need.

B) The Home Page serves as the main introduction to the website. It displays an overview of the platform's purpose, highlights featured pets available for adoption and provides quick links to other important pages for easy navigation.

C) The About Us Page introduces the background of the website, including its mission, vision, and team members. It also shares stories and partnerships that support the effort to find loving homes for pets.

D) The Adopt a Pet Page allows users to view all available pets ready for adoption. Each pet listing includes details such as name, age, breed, and a short description to help users choose the right companion.

E) The Register/Login Page enables new users and animal shelters to register their accounts, while returning users can log in to manage their profiles or adoption activities.

F) The Resources Page provides helpful information such as the adoption process guide, frequently asked questions (FAQs), and tips for new pet owners.

G) Lastly, the Contact Us Page gives users a simple way to reach out to the admin team through a contact form or social media links for inquiries, feedback, or support.

2.2. List of Sources

The design and ideas for the Pet Adoption Website are based on real websites and learning resources about pet adoption and web development.

| No.	Source Name	Link of Source	Type of Source	Purpose / Description
1	SPCA Malaysia	https://www.spca.org.my/	Website	Used as a reference for adoption and animal care information.
2	PAWS Animal Welfare Society	https://www.paws.org.my/	Website	Source of ideas for how shelters manage pet adoption.
3	Petfinder.my	https://www.petfinder.my/	Website	Inspiration for pet listing design and website features.
4	W3Schools	https://www.w3schools.com/	Educational Website	Used to learn and apply HTML, CSS, and JavaScript for building the website.
5	Canva	https://www.canva.com/	Design Tool	Used to design simple layouts and create the website wireframes.

2.3. Site Map
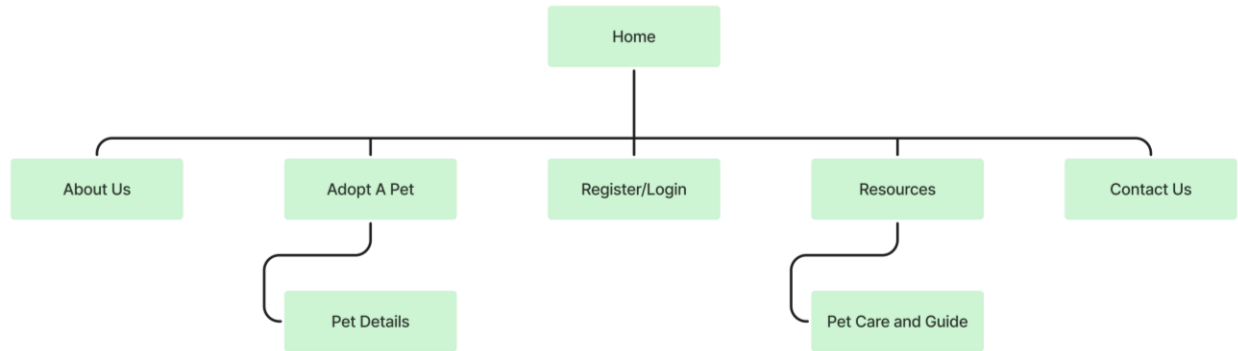
Figure 1: Site Map of Pet Adoption Website

1. Home page - The main page of the website.
2. About Us page - A single page containing all company information that is mission and vision, our team, our stories and partnerships as sections.
3. Adopt A Pet page - The main listing page that allows users to filter and view summary profiles of all available pets.
   3.1 Pet Details page – Page that displays detailed profiles of individual pets that are available for adoption.
4. Register/Login page - The form page for new user registration and existing user login.
5. Resources page – A page that contains a lot of helpful information for new pet owners.
   5.1 Pet Care and Guide - Any article, guide, or video chosen from the main Resources page will be displayed in the full version in this page.
6. Contact Us page – A page that includes contact information, contact form and social media links.
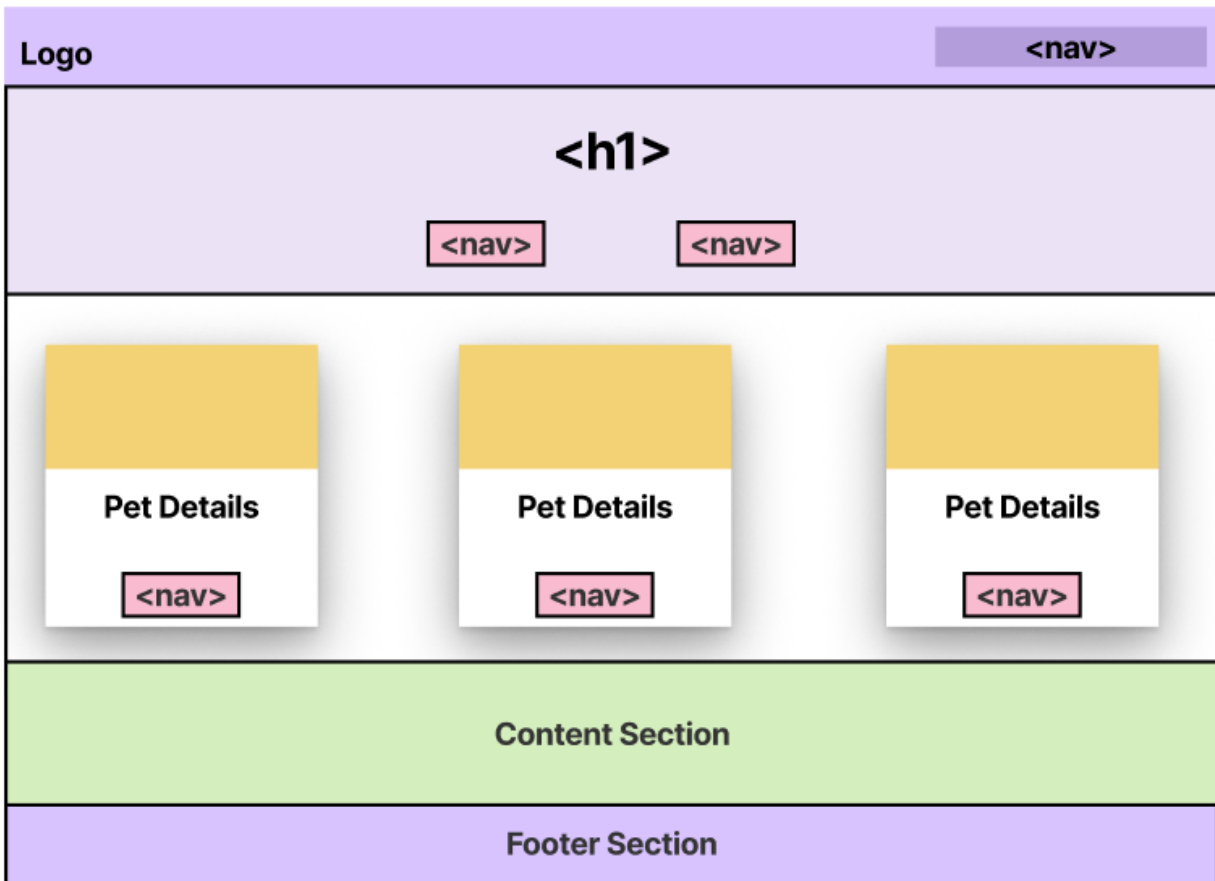
2.4. Wireframe

Figure 2: Wireframe for Home page

Figure 3: Wireframe for About Us page
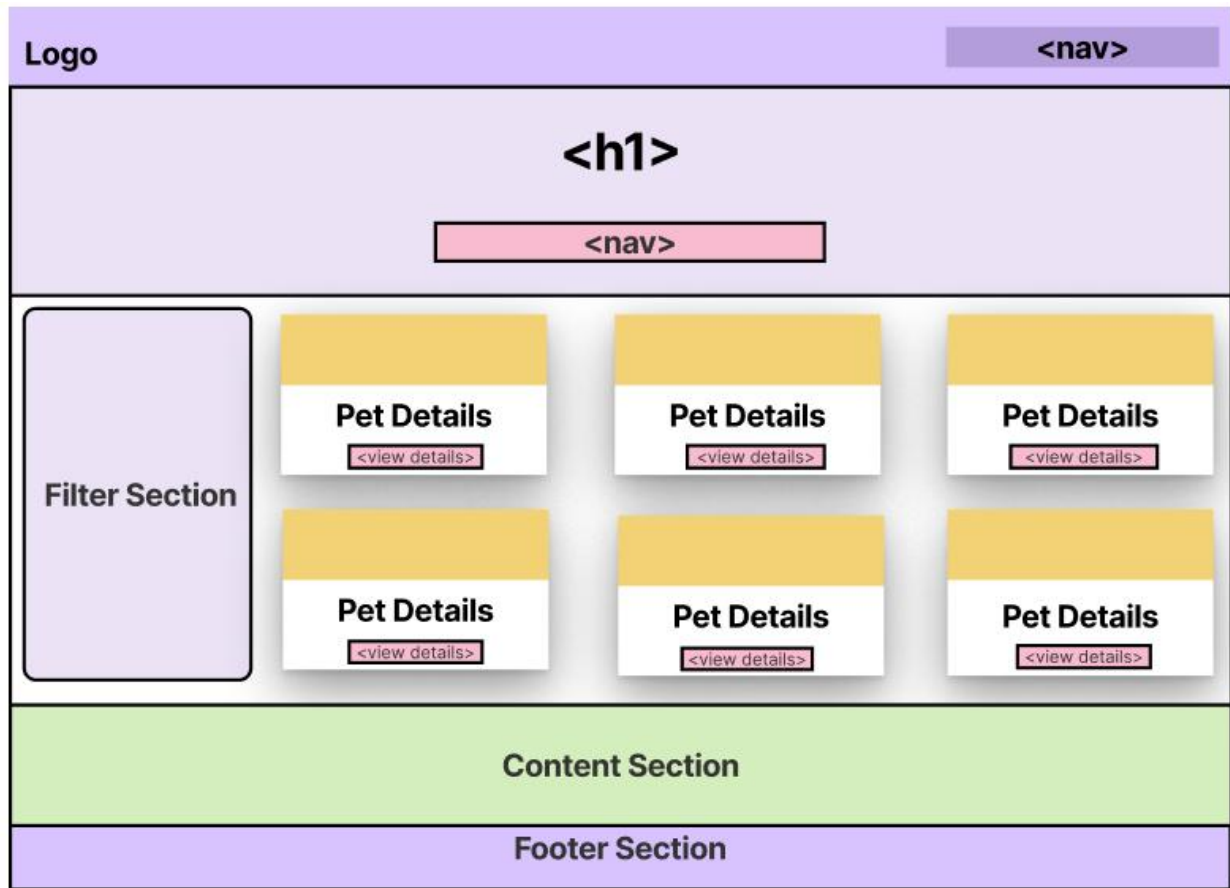
Figure 4: Wireframe for Adopt A Pet page

Figure 5: Wireframe for Register/Login page

Logo   <nav>

Resources

Article	Guide	Video
Article: Pet Care Tips for New Owners	**How to Adopt a Rescue Animal**	**Pet Responsible Pet Ownership**
<nav>	<nav>	<nav>

Search: [   ]   <Search>

Footer Section

Figure 6: Wireframe for Resources page

Figure 7: Wireframe for Contact Us page

3. USER INTERFACE DESIGN
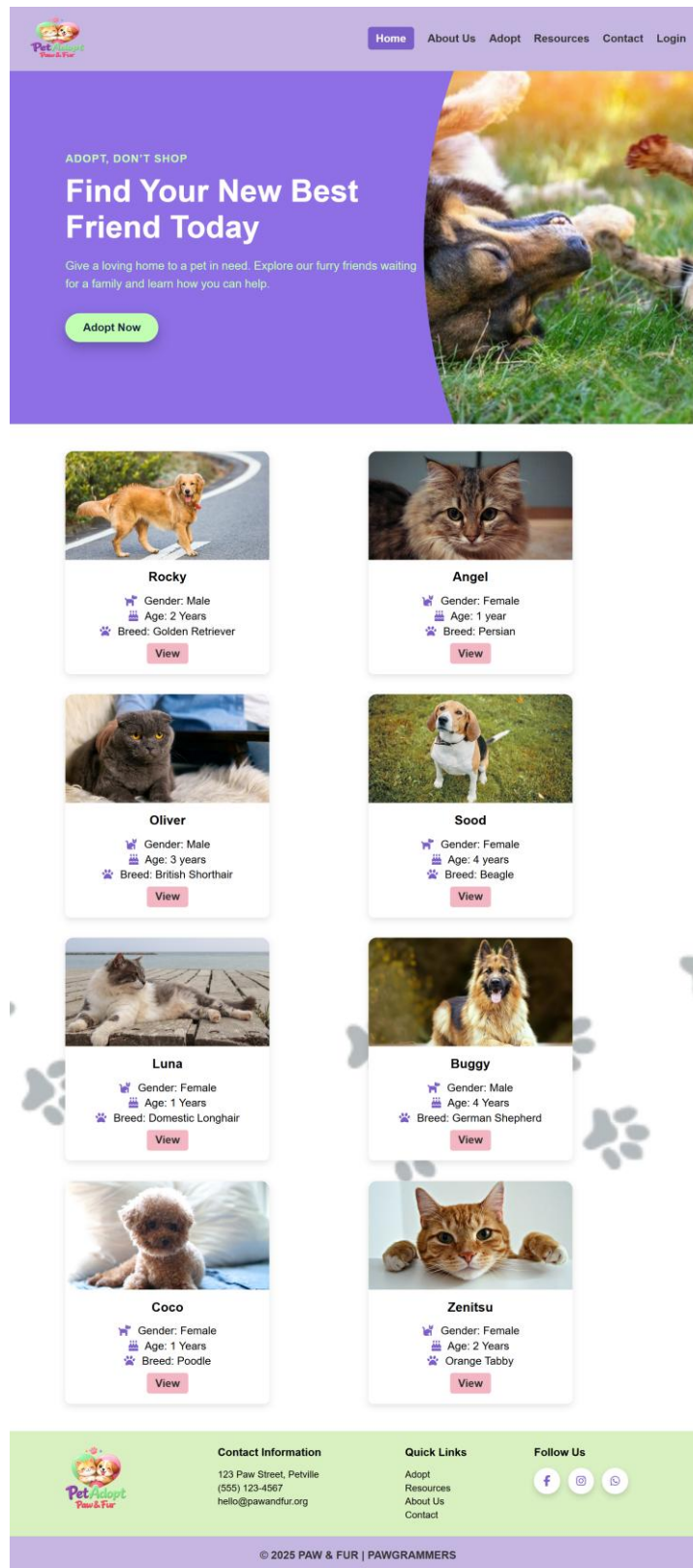
Figure 8: User Interface of Home Page
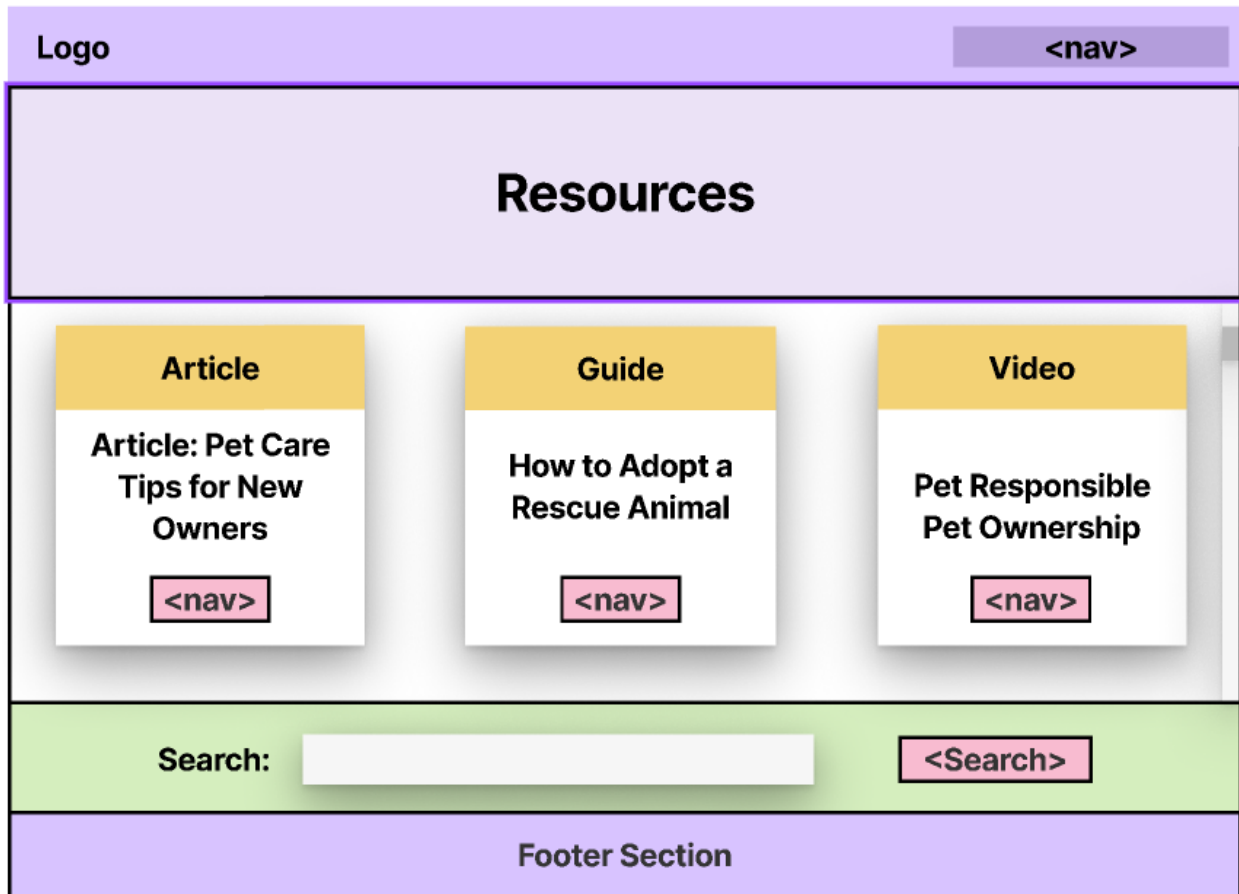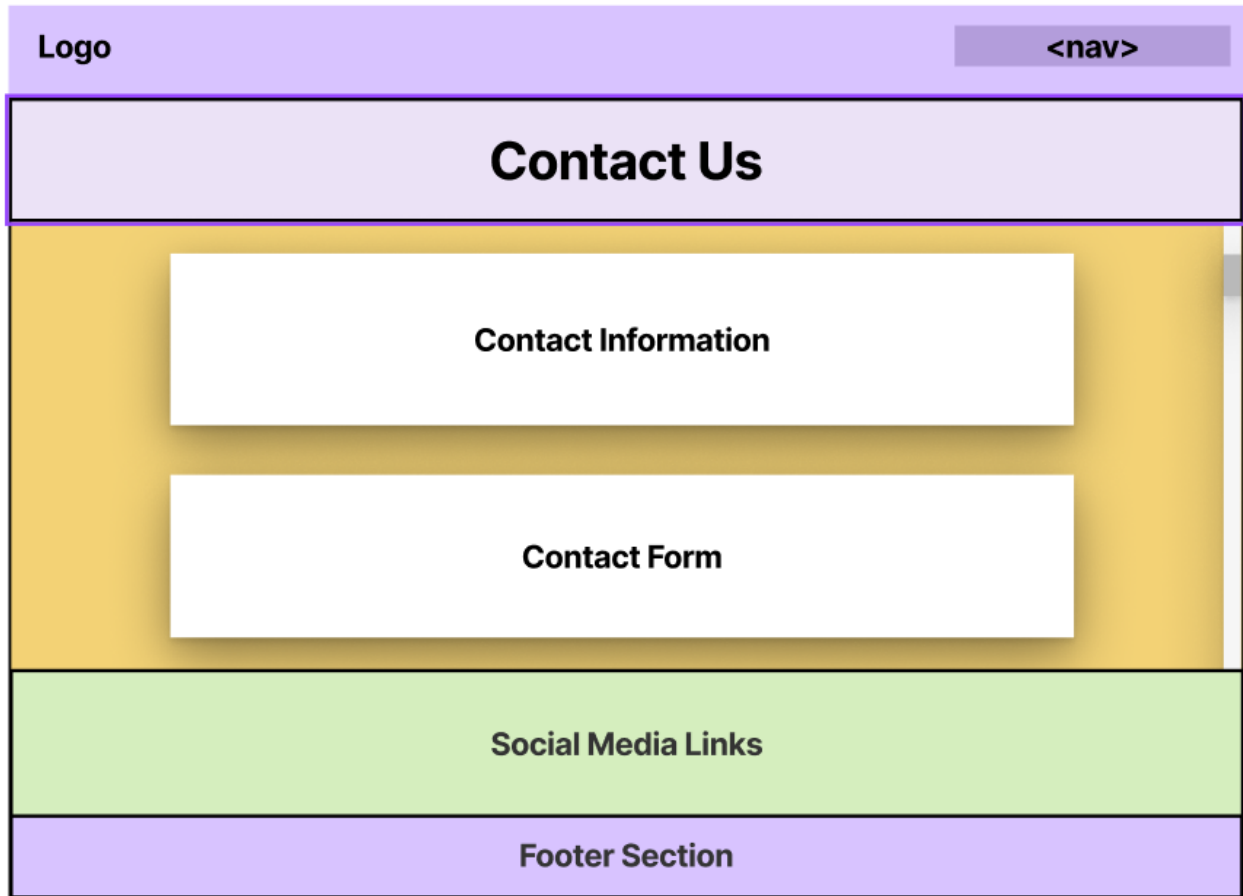
The homepage page provides a welcoming introduction to the shelter.

a) The hero section includes a large, touching image of a dog and cat playing, as well as a bold call-to-action button labeled "Adopt Now."

b) Pet Gallery: A grid layout that features "New Best Friends" such as Rocky, Angel, and Oliver. Each card features a high-quality photo, gender, age, breed, and a "View" button.

c) Footer: Contact information, fast links, and social media icons such as Facebook, Instagram, and WhatsApp are displayed against a pastel green background.
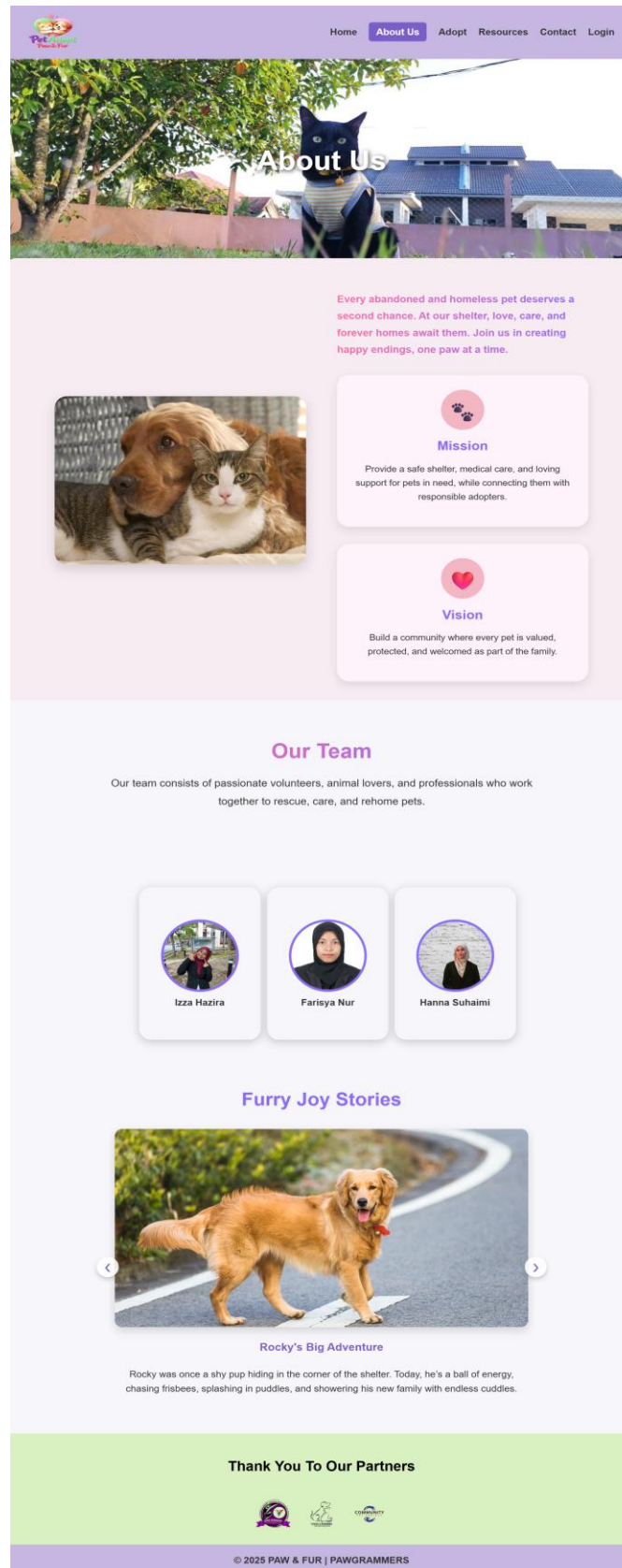
Figure 9: User Interface of About Us Page

This page focuses on the mission and the people who are part of the organization.

a) Mission & Vision: Two different cards with icons, a paw for mission and a heart for vision.

b) Our Team: A special section featuring the founding team members through circular profile images.

c) Furry Joy stories: a slideshow or testimonial area with success short stories such as "Rocky's Big Adventure" that encourage emotional connection.
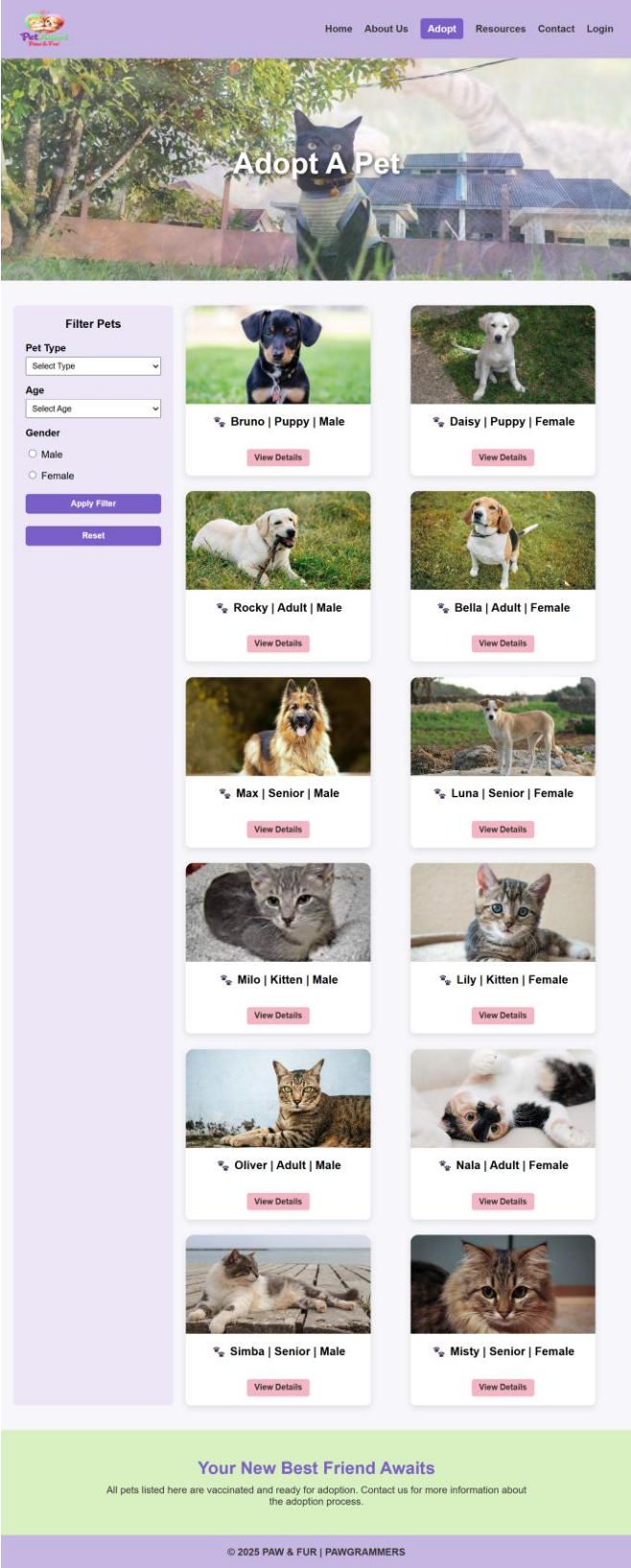
Figure 10: User Interface of Adopt a Pet Page

The website's functional core, where users can browse available animals.

a) Filter Sidebar: A light purple-colored sidebar on the left allows users to filter pets based on pet type, age, and gender.

b) Comprehensive Grid: A wider collection of pets than the front page, organized by age group which is puppy/kitten, adult and senior.

c) Consistency: Each pet card has the same design language as the home page, ensuring a smooth user experience.
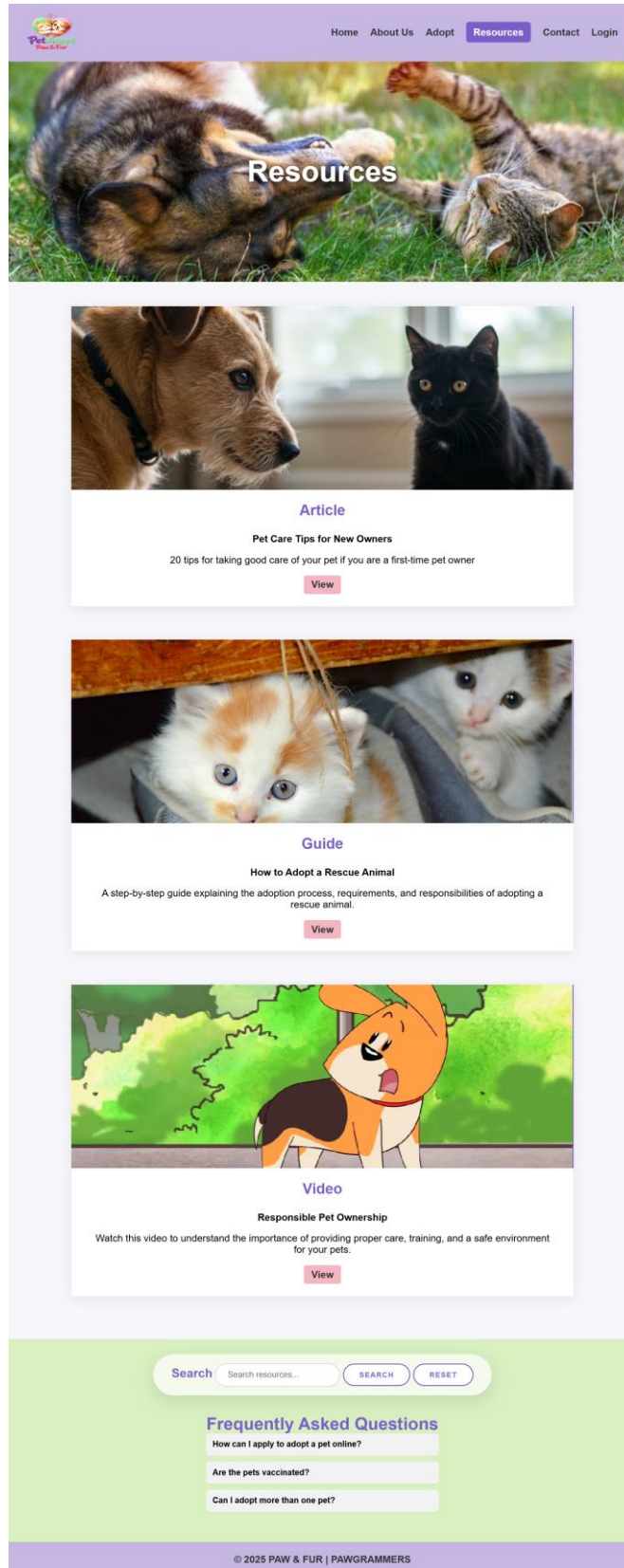
Figure 11: User Interface of Resources Page

Resource Page acts as an instructional resource for pet owners.

a) Content Cards: Uses large, clear cards to organize content into articles. For example, pet care tips, guides on how to adopt and videos.

b) Search and FAQ: There is a search bar for finding certain topics, as well as a "Frequently Asked Questions" section with a minimalist, collapsed layout.

Figure 12: User Interface of Contact Us Page

Contact Us Page is designed to improve communication between the shelter and the public. It has:

a) Contact Form: A "Send us a Message" card that has fields for Name, Email, and Message.

b) Visual branding: The "Pet Adopt Paw & Fur" 3D logo appears on the left side of the contact card.

c) Social Connectivity: Repeats the "Stay Connected" statement with social media links at the bottom.

Figure 13: User Interface of Register/Login Page

Register/Login page as shown above is a straightforward, focused interface for user authentication.

a) Login Box: A centralized white card with the greeting "Hello Buddy!"

b) Clean input fields for username/email and password.

c) Dual CTA: Two separate pink buttons labeled "Register" and "Login," offering an appealing option for returning or new users.

4. USER TESTING

For the Pet Adoption Website, usability testing was conducted with two users from the general public, and both provided positive feedback. One user was able to use the system without any instructions, felt comfortable with the overall design, and found the interface clear and easy to navigate. This indicates that the system design supports a positive user experience in terms of confidence, comfort, and engagement.

However, the second user pointed out an issue with the search filter on the adoption page. The search function only highlighted the animal being searched for but did not automatically navigate the user to its location on the page. As a result, the user still needed to manually scroll to find the selected animal. Based on this feedback, improvements were made so that when a user performs a search, the system now automatically directs the user to the specific animal they are looking for.

5. CONCLUSION

In conclusion, the Pet Adoption System is proposed to help connect animal shelters with people who want to adopt pets. The website provides an easy and friendly platform where users can view pet details, see photos, and apply for pet adoption. This makes adoption faster, organized, and easier for both adopters and shelters.

The system also helps solve problems such as limited access to reliable adoption of information and poor communication between shelters and adopters. By collecting all pet information in one place, the website helps more animals find safe and loving homes. Overall, the pet Adoption System supports animal welfare, encourages responsible pet ownership, and helps reduce the number of stray animals in society.

6. APPENDIX

6.1. HTML5 Source Code

For the HTML, the Pet Adoption System uses external HTML files. The total number of HTML files used are 6 which are index.html, about.html, contact.html, login.html, resources.html and adopt.html.

Snippet 1: Active Navigation Menu

```
19        <nav class="top-nav">
20            <a href="index.html">Home</a>
21            <a href="about.html" class="active">About Us</a>
22            <a href="adopt.html">Adopt</a>
23            <a href="resources.html">Resources</a>
24            <a href="contact.html">Contact</a>
25            <a href="login.html" id="loginLink">Login</a>
26            <span id="welcomeUser" style="display:none; font-weight:bold;"></span>
27        </nav>
28    </header>
29
```

Figure 14: Snippet code of Active Navigation Menu

The navigation menu is identical across all pages, allowing users to effortlessly navigate between sections of the website.

Snippet 2: Pet Card Structure

```html
130        <div class="pet-card" data-type="dog" data-age="puppy" data-gender="female">
131            <div class="pet-img"><img src="Assets/daisy.jpg" alt="Daisy"></div>
132            <h3>🐾 Daisy | Puppy | Female</h3><br>
133            <button class="card-btn toggle-details">View Details</button>
134            <div class="pet-details">
135                <table class="details-table">
136                    <tr>
137                        <th>Name</th>
138                        <td>Daisy</td>
139                    </tr>
140                    <tr>
141                        <th>Age</th>
142                        <td>4 months</td>
143                    </tr>
144                    <tr>
145                        <th>Breed</th>
146                        <td>Golden Retriever Mix</td>
147                    </tr>
148                    <tr>
```

Figure 15: Snippet code of Pet Card Structure

This structure shows a pet available for adoption.

Snippet 3: Contact Form

```html
69        <form class="contact-form" id="contactForm" style="text-align: left; max-width: 450px; margin: 0 auto;"
70            <label>Full Name</label>
71            <input type="text" placeholder="Enter your name" required>
72
73            <label>Email Address</label>
74            <input type="email" placeholder="Enter your email" required>
75
76            <label>Message</label>
77            <textarea rows="4" placeholder="How can we help?" required></textarea>
78
79            <div class="contact-btns">
80                <button type="submit">Send Message</button>
81                <button type="reset" id="resetBtn" class="card-btn">Reset</button>
82            </div>
83        </form>
84    'div>
```

Figure 16: Snippet code of Contact Form

This form allows users to submit inquiries or feedback. To ensure that all fields are filled out before submission, HTML form validation uses the necessary property.

6.2. CSS Source Code

Snippet 1: Active Navigation Highlights

```css
16    /* Active page */
17    .top-nav a.active {
18        background-color: #7b5fc9;
19        /* highlight color */
20        color: white;
21        border-radius: 5px;
22        padding: 8px 12px;
23        /* match spacing with hover effect */
24    }
```

Figure 17: Snippet code of Active Navigation Highlights

This style highlights the active page in the navigation bar, making it easier for users to find the site they're on.

Snippet 2: Pet Card Design

```css
251    .pet-card {
252        background-color: white;
253        /* Increased from 220px to 280px or 300px */
254        width: 300px;
255        border-radius: 8px;
256        box-shadow: 0 4px 10px rgba(0, 0, 0, 0.1);
257        text-align: center;
258        padding-bottom: 15px;
259    }
```

Figure 18: Snippet code of Pet Card Design

The element enhances the visual hierarchy of the Adopt page's pet cards by styling them with rounded corners and shadows.

Snippet 3: Collapsible Pet Details

```css
306    /* Pet Details Collapsible */
307    /* Container styling */
308    .pet-details {
309        max-height: 0;
310        overflow: hidden;
311        transition: all 0.5s cubic-bezier(0.4, 0, 0.2, 1);
312        /* Smoother expansion */
313        padding: 0 20px;
314        background-color: ■#fcfaff;
315        /* Very light purple tint */
316        border-bottom-left-radius: 8px;
317        border-bottom-right-radius: 8px;
318    }
319
320    .pet-details.active {
321        max-height: 1000px;
322        padding: 20px;
323        /* Internal spacing when expanded */
324        margin-top: 10px;
325        border-top: 2px dashed ■#dcd1f0;
326        /* Interesting divider line */
327    }
328
```

Figure 19: Snippet code of Collapsible Pet Details

       This CSS allows for a seamless expand and collapse animation when viewing or hiding pet details on the Adopt page.

6.3. Java Script Source Code

Snippet 1: Adoption Confirmation

```
GROUP PROJECT_PAWGRAMMERS > js > JS script.js > ...
  1    function applyAdoption(petName) {
  2        alert("Your adoption request for " + petName + " has been submitted!");
  3    }
  4
```

Figure 20: Snippet code of Adoption Confirmation

When a user clicks the "Adopt Me" button, this function shows a confirmation message for immediate feedback.

Snippet 2: Pet Filtering

```
27        filterForm.addEventListener("submit", function(e) {
28            e.preventDefault();
29
30            // Get filter values
31            const type = document.getElementById("type").value;
32            const age = document.getElementById("age").value;
33            const gender = filterForm.gender.value;
34
35            let firstVisibleCard = null;
36
37            petCards.forEach(card => {
38                card.classList.remove("highlight"); // remove previous highlight
39
40                const matchType = !type || card.dataset.type === type;
41                const matchAge = !age || card.dataset.age === age;
42                const matchGender = !gender || card.dataset.gender === gender;
43
44                if (matchType && matchAge && matchGender) {
45                    card.style.display = "block";
46                    if (!firstVisibleCard) firstVisibleCard = card;
47                } else {
48                    card.style.display = "none";
49                }
50            });
```

Figure 21: Snippet code of Pet Filtering

This script improves search performance and usability by filtering pets chosen by users, including type, age, and gender.

Snippet 3: Contact Form Progress Bar

```javascript
inputs.forEach(input => {
    input.addEventListener("input", () => {
        let filled = 0;

        inputs.forEach(i => {
            if (i.value.trim() !== "") filled++;
        });

        let progress = (filled / inputs.length) * 100;

        // ✅ THIS IS THE PLACE
        progressBar.style.width = progress + "%";
        progressPercent.textContent = Math.round(progress) + "%";
    });
});
```

Figure 22: Snippet code of Contact Form Progress Bar

This feature visually displays form completion status, encouraging users to finish the contact form.

The complete source code is available in the submitted GitHub repository: https://github.com/S74414/PET-ADOPTION-WEBSITE_PAWGRAMMERS.git

This is the published website link: https://s74414.github.io/PET-ADOPTION-WEBSITE_PAWGRAMMERS/

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ROLES & RESPONSIBILTIES

Student ID	Name	Roles
S76025	Noor Izza Hazira binti Norddin	I. Purpose of Website II. Related Websites III. Site Map IV. Wireframe (Home Page, Adopt a Pet)
S75838	Nurhanna Binti Abdullah Suhaimi	I. Goal of the Website II. Opportunity/Problems/Issues III. Type of Content IV. Wireframe (About Us, Contact Us) V. Conclusion
S74414	Farisya Nur binti Ahmad Faris	I. Intended Audience II. Page Titles III. List of Sources IV. Wireframe (Register/Login, Resources)