Iteration 1

CIS 320-01

Team: Ladybirds

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System Request: Pets4Life

Pets4Life needs an interactive website that will provide a Customer Service Hub, Volunteer Management System, and Clinic Management System, while integrating an automated database and a secure payment/donation system. The main goal for this website is to create an efficient, user-friendly platform that centralizes resources for pet-related services, making it easy for volunteers, donors, and pet owners to access information and participate. Key sections will include Live Chat, Volunteer Registration, Event Calendar, Donation Management, Pet Information, and an integrated Payment System.

Project Sponsor: Project Lead and Point of Contact

- Dr. Zara Hatami: Zahra.Hatami@louisville.edu, 502-852-4679

Business Need: Project Reasoning

- New platform for managing volunteers, donations, & pet services.
- Need for a centralized website to streamline processes.
- User-friendly design for volunteers, donors, & pet owners.

Business Requirement: Capabilities for the Website

- Live chat for inquiries and frequently asked questions (FAQs).
- Volunteer registration and event management system.
- Secure payment and donation system.
- Centralized pet information and event calendar.

Business Value: How Will This Enhance the Organization?

- Increases donation efficiency with a secure system.
- Improves accessibility and customer experience.
- Simplifies volunteer coordination.
- Reduces administrative burden.

Special Issues/Constraints: Issues Relating to Implementation and Design

- Non-profit budget
- Deadline: 04/21/2025

Narrative

Pets4Life is dedicated to promoting pet retention by offering affordable veterinary care and essential resources to underserved communities. However, the organization's current operational framework is fragmented, relying on disparate tools such as Google Sheets, Airtable, Zapier, and WordPress. This lack of integration leads to excessive manual work in scheduling, volunteer management, donation tracking, and customer support. Additionally, donations are processed through multiple platforms, including Venmo, PayPal, and Facebook, complicating financial tracking and increasing the potential for errors.

Communication inefficiencies further exacerbate these challenges. Assistance requests arrive via emails, phone calls, text messages, and social media, making it difficult for staff to manage and prioritize responses effectively. Volunteers currently register through Sign-Up Genius, a platform that includes advertisements and lacks robust tracking features. Moreover, volunteer hours are manually logged in Google Sheets, adding to the administrative burden and reducing overall efficiency.

To overcome these obstacles, Pets4Life requires a centralized digital solution that integrates key functions, minimizes manual processes, and enhances operational efficiency.

Technical Feasibility:

The proposed solution will consolidate volunteer coordination, event scheduling, donations, and customer support into a single, user-friendly platform. This platform will feature a "Petcare Hub" to manage client requests efficiently, integrating a chatbot and ticketing system to handle frequently asked questions while escalating complex inquiries as needed.

For donation processing, Stripe will serve as the primary payment system. It provides secure financial tracking and supports various payment methods, including credit cards, Google Pay, and Apple Pay. This will be implemented using the PayPal and Stripe Donation plugin.

To automate scheduling and event management, we have chosen Amelia over PlanHero after a detailed comparison of their features and alignment with the client's requirements. Amelia meets all client requirements by allowing for the collection of additional information from users

before booking through custom questions. It supports upfront deposit payments to confirm bookings and enables multiple appointments to be scheduled efficiently for large clinic events.

Additionally, volunteer management will be streamlined through a free WordPress plugin tailored for nonprofit organizations. The Wired Impact Volunteer Management plugin was chosen for its structured volunteer sign-ups, tracking, and engagement features. The system will incorporate a Live Chatbot plugin (AI WordPress Chatbot), which will be integrated to handle common inquiries, reducing staff workload and improving response time. AI WPBot will handle automated customer support through predefined responses, while Conversational Forms will integrate interactive forms into chatbot interactions for efficient user input.

The proposed system builds upon Pets4Life's existing WordPress infrastructure, ensuring seamless integration and compatibility. The selected plugins—Stripe, Amelia, Wired Impact Volunteer Management, and a Chatbot—enhance the system's functionality while keeping Pets4Life's workflow streamlined. Ensuring long-term plugin support and regular updates will be a priority to prevent potential disruptions.

Economic Feasibility:

The financial sustainability of this solution is a key consideration. By leveraging WordPress as the foundation, Pets4Life avoids the high costs associated with migrating to a new platform, making the project cost-effective. The primary expenses will be Stripe's transaction fees and the Amelia Pro plan, which costs $184 per year. This investment provides critical features such as recurring appointments and deposit management, ensuring that scheduling operations remain efficient. Amelia frequently offers promotional discounts, which can lower expenses by up to 50%, further reducing financial strain.

The long-term economic impact of this system extends beyond software costs. By automating manual processes, Pets4Life will reduce administrative overhead, freeing up staff time for mission-driven activities rather than repetitive tasks. A more structured financial tracking system will also enhance transparency in donation management, minimizing errors and improving accountability.

A cost-benefit analysis reveals that the current annual technology expenses for Pets4Life amount to $806, which includes WordPress and web hosting at $84 per year, Airtable for two users at $288 per year, Zapier at $254 per year, and PlanHero at $180 per year. With the

implementation of the new system, the projected annual costs will increase slightly to $810, accounting for the Amelia Pro Plan at $184 per year, replacing PlanHero, and maintaining the other existing tools. Additionally, Stripe transaction fees of 2.9% plus $0.30 per transaction will apply.

Despite the marginal increase in yearly expenses, the long-term financial benefits outweigh the costs. Automating tasks, such as scheduling, donation processing, and volunteer management, will significantly reduce inefficiencies. The new system will also help boost donor engagement, leading to potential increases in funding. Overall, the investment in an integrated digital solution is expected to yield a strong return by enhancing financial stability, improving operational efficiency, and fostering growth for Pets4Life.
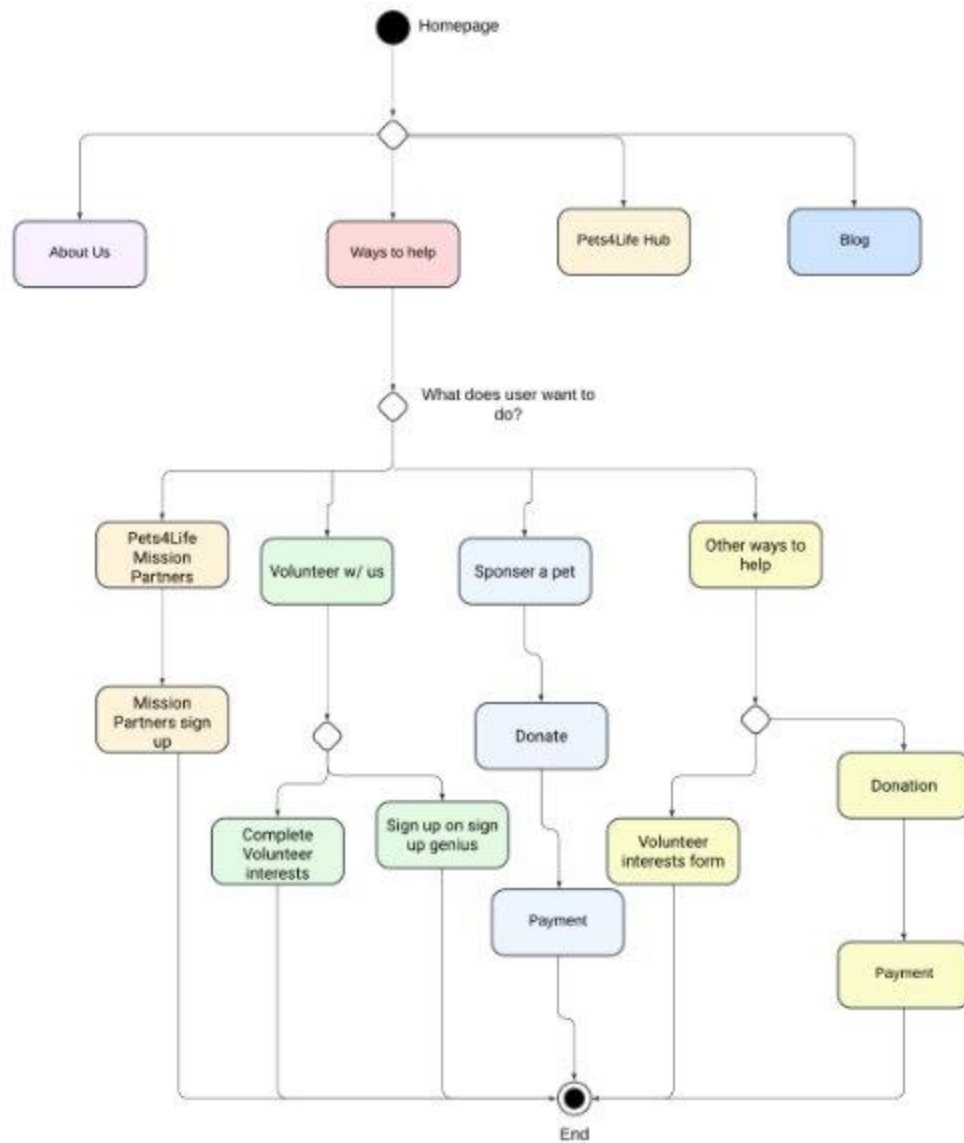
Organizational Feasibility:

The implementation of this system will lead to significant operational benefits, reducing manual data entry, streamlining communication, and enhancing efficiency in donation processing. The automated chatbot will decrease staff workload by handling common inquiries, improving overall customer service.

Since the new system is built on a familiar WordPress platform, existing staff will require minimal training to adapt to the new workflow. Volunteers, donors, and community members will benefit from an intuitive platform that simplifies interactions and engagement. Pets4Life's team will be able to focus more on expanding outreach programs and strengthening community partnerships instead of managing fragmented systems.
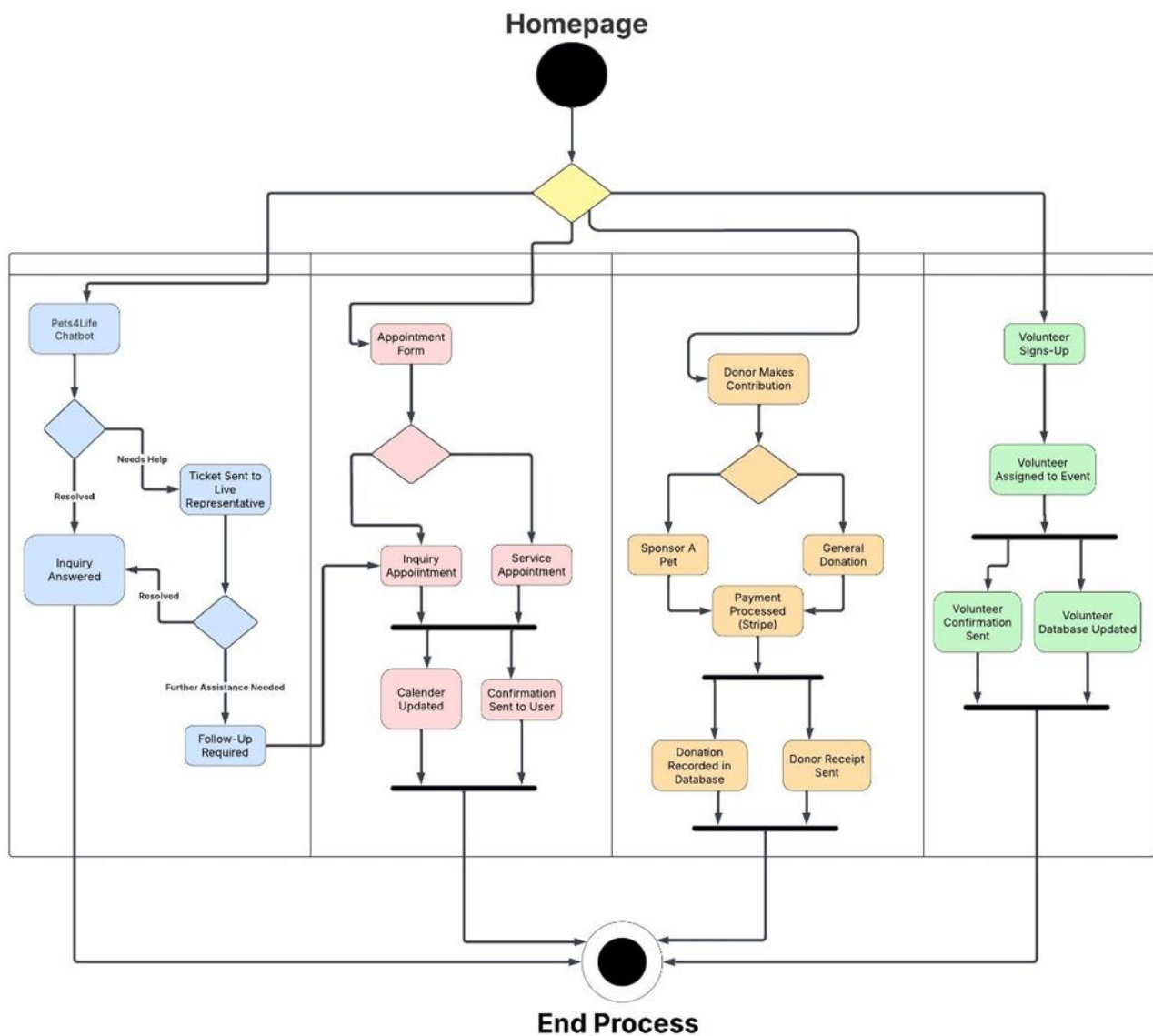
Process Model

As-Is: Information System

Process Model

To-Be: Information System

Homepage

Pets4Life Chatbot

Needs Help

Ticket Sent to Live Representative

Resolved

Inquiry Answered

Resolved

Further Assistance Needed

Follow-Up Required

Appointment Form

Inquiry Appoiintment

Service Appointment

Calender Updated

Confirmation Sent to User

Donor Makes Contribution

Sponsor A Pet

General Donation

Payment Processed (Stripe)

Donation Recorded in Database

Donor Receipt Sent

Volunteer Signs-Up

Volunteer Assigned to Event

Volunteer Confirmation Sent

Volunteer Database Updated

End Process

**Ladybirds
Vision (Small Project)**

Version <1.0>

Revision History

Date	Version	Description	Author
16/02/2025	1.0	Vision Document First Draft	Ladybirds

Table of Contents

Vision (Small Project)

1. Introduction

The purpose of this document is to research, analyze, decide, and define the high-level business needs, requirements, and features of the Pets4Life database redesign. This will focus on the capabilities of users, why these users access the website, and why the needs exist in this aspect. This document will also focus on the integration of databases for the client and employees on the back end, with easy-to-use integration in accordance with volunteers, pop-up events, clinic appointments, pet supplies, and other business aspects. The details of how the Pets4Life system will fulfill these needs and requirement are detailed in the content and supplementary specifications below.

1.1 References

The document resources and references are as follows:

- Pets4Life Louisville
- **Secure Payment System**
    - o PayPal & Stripe Donation Plugin
    - o Stripe
- **Volunteer Management**
    - o Wired Impact Volunteer Management Plugin
- **Event Scheduling**
    - o WP Amelia
        - ▪ Petcare Event Scheduling Demo with Amelia
    - o Planhero
    - o WPForms Lite
        - ▪ WPForms Conversational Forms
- **Chatbot**
    - o AI Chatbot for WordPress
        - ▪ Conversational Forms
- **Other Product Requirements**
    - o WPBeginner - WordPress Server Requirements
    - o Website Load Time Speed Statistics
    - o Reasonable Website Uptime

- o [Web Performance Optimization](#)

2. Positioning

2.1 Problem Statement

The problem of	- Low integration of Airtable, WordPress, calendar, and other paper forms used for clinics and Pet pop-ups. - User interface is hard to use on the front-end and disorganized in processes pertaining to volunteer-signups and donations. - Low capabilities of providing fast information for those using Pets4Life services.
affects	- Dr. Lisa Keehner (President) - Connie Hunt (Treasurer) - Cindy Reinhart (Secretary) - Karen Crompton Gaskin (Director) - Rich Smith (Director) - Karen Mujica (Executive Director) - Volunteers for Pets4Life - People in 40210 area code who cannot afford pet care

the impact of which is	- Excessive time is spent on sorting through documents, information, payments, and other ports of information on at least five different apps and websites.
	- Hard-to use interface drives people away from the non-profit and confuses those who are unsure of what they can provide for their pet, such as emergency services.
	- The lack of timely information for people with pets who are in a serious condition.
a successful solution would be	- The addition of a fully integrated WordPress website with Airtable and Stripe with website conversational forms to decrease the use of paper forms in pet pop-ups and clinics.
	- Easy-to-use interface with easy access FAQs and chatbot for harder to answer questions integrated into a website with simple navigation to needed places such as donation, volunteering, and others.
	- Timely information for those who require it.

2.2   Product Position Statement

For	Karen Mujica and her team of employees and volunteers
Who	Are currently not able to provide and efficient and timely pet care service and clinic to those in the 40210-area code who cannot afford pet care
The (product name)	Is a WordPress Website, Airtable, and Stripe
That	Will allow Pets4Life to provide a timely, efficient, and productive business for those working the services and those requiring them.
Unlike	Pets4Life's current WordPress website, Airtable, and use of payment systems such as Venmo, PayPal, CashApp, and others.
Our product	Will provide clients in need in the 40210-area code with the needed clinic appointments, animal resources, and other services depending on what they need. It will also provide the necessary documents and information for those who want to donate and sign up to volunteer.

3. Stakeholder and User Descriptions

Currently, Pets4Life's website and back-end integration lacks the resources to be truly efficient for those in need for Pets4Life resources. This, therefore, creates an inefficient and hard-to-use website for those who are in need. Karen Mujica and her other board members and employees would like a newer system built from the old remnants of what she currently has with low-code opportunities, so the employees of Pets4Life can easily manage and scale WordPress, Airtable, and others, as their business continues to grow. This newer system should also be affordable with their non-profit budget and grants, especially if the choice is made to focus on more than just the 40210-zip code. Our goal is to provide Pets4Life with an all-access website for users to easily navigate and access in a timely manner and efficiently, whether the users are pet owners, donators, or volunteers. We also want to ensure the affordability of the plugins, calendar apps, payment systems, and others, to ensure Pets4Life will continue to be able to afford them, while also having the option to scale up as necessary to continuously provide pet resources for those in need.

3.1   Stakeholder Summary

Name	Description	Responsibilities
Karen Mujica	Executive Director of Pets4Life Louisville	- Ensure the system supports Pets4Life's long-term and short-term goals, specifically within the 40210 area and others. - Record and document necessary paperwork for the pop-up events, clinic appointments, and other check-in appointments within Airtable that had been integrated through WordPress and Stripe.

		- Ability to petition for non-profit funding and the resources to receive the necessary donations for company resources. - Monitoring the amount of people who are capable of accessing Pets4Life's resources and clinic opportunities.

3.2 User Summary

Name	Description	Responsibilities	Stakeholder
Pet Owner	Those who will be navigating the website with intentions of finding information about pet resources and clinics.	- Access and schedule appointments for pets correctly and with the correct information. - Correctly contact Pets4Life and their team depending on the services needed. - Provide feedback in survey form from the services they were provided.	Those in charge of customer service, Karen Mujica, and others on the board for Pets4Life.
Name	Description	Responsibilities	Stakeholder
Volunteer	Those who will be navigating the website with intentions of	- Correctly sign up for volunteer opportunities and shifts for Pets4Life	Karen Mujica and others who sit on the board.

	finding information about volunteer opportunities and resources.	events and clinic opportunities. - Correctly show up to assigned volunteer time and easily access their shift information.	
Name	**Description**	**Responsibilities**	**Stakeholder**
Donator	Those will be navigating the website with intentions of finding resources of how to donate and how to sponsor a pet.	- Correctly access website with intent to donate to Pets4Life specifically. - Access the website also with some intent to sponsor a pet and ensuring the information is input correctly.	Karen Mujica and others on the board.

3.3   User Environment

As of right now, users of Pets4Life's website are unable to access the website in a timely manner to find resources, donation opportunities, and volunteer options, when necessary. Our team's goal is to provide these people, especially the affected pet owners in the 40210-area code, with an efficient and effective website to find the correct calendar events, pet resources, pet information, volunteer opportunities, and donation information. Users will be able to select from the selection bar what resource they require, and then navigate to the correct information for such resources. This could include a calendar sign-up for volunteers, a sponsor a pet or general donation option for donators, or a schedule of events and information on what a pet owner needs

for their animal. Users will also be able to pay for donations, appointments, and other resources through the website using Stripe. All forms being filled out and used will be processed and integrated through a Conversational Forms WordPress plugin that will ensure accuracy and accessibility.

3.4   Summary of Key Stakeholder or User Needs

Need	Priority	Concerns	Current Solution	Proposed Solutions
Integrated database and calendar use.	High	Current system is clunky, inefficient, and uses extra time that could be spent doing other things then organizing the business information before being able to analyze.	Using Airtable and Sign-Up Genius that someone goes in and regularly updates depending on pet pop-ups and volunteers.	Using WordPress plugins that directly integrate to Airtable and Ameila, the proposed calendar app, to ensure efficiency and effectives with easy access calendar information and does not have to be constantly updated.
Need	Priority	Concerns	Current Solution	Proposed Solutions

Central Payment System for Donations and Deposits for Events.	High	Current payment system is not just one payment system, but many working together that must be updated regularly to stay current.	Current solution is offering as many payment options as needed, such as PayPal, Venmo, and Cash App, and then documenting and integrating after the finished payment.	The proposed solution includes a centralized payment system, Stripe, that also has the options to integrate with apps such as Venmo, Cash App, and others. This centralizes all payments with the correct documentation with them. This will also centralize and divide the donation portion.
Need	**Priority**	**Concerns**	**Current Solution**	**Proposed Solutions**

Need	Priority	Concerns	Current Solution	Proposed Solutions
Chatbot for Frequently Asked Questions	Medium	Currently, the client does not have a feature that tells people who are requiring Pets4Life resources if their issues is something out of their wheelhouse. This could involve things such as emergencies that Pets4Life cannot handle.	There is no current solution for this other than contacting someone in customer service, and they are not 24/7.	Our group's proposed solution includes adding a WordPress plugin chatbot that will focus on frequently asked questions and has the ability to ticket certain instances where the company can help, but would require service from a customer service representative. This chatbot would also have the ability to highlight when something is not in Pets4Life's services.

Volunteer Management	High	Other than just the calendar for volunteer management, there is also not a centralized form for volunteers who would like to join the Pets4Life family. This is inefficient and time consuming.	The current solution is having two separate forms and buttons for volunteers depending on long-term or short-term, and then contacting them directly for volunteer opportunities after signing up with Sign-Up Genius.	The proposed solution is to automate the volunteer forms with a WordPress plugin that will directly integrate into a calendar for volunteers and events. This would centralize the need for volunteer forms and automate the process.
Need	**Priority**	**Concerns**	**Current Solution**	**Proposed Solutions**
Scheduling Automation	High	Appointment scheduling at the moment is currently not an effective method, as some features are necessary and some aren't in the current process.	Appointment scheduling currently uses Calendly, which then has to be manually added into Airtable and recorded.	The proposed solution is to use Amelia, a WordPress plugin that will automate the appointment scheduling directly in the website, and therefore should integrate with Airtable.

3.5 Alternatives and Competition

The alternatives to our proposed solution will include Zapier, an automation site that fully integrates many websites and databases. This would link the website and the Airtable database together, which is what the client likes and prefers, especially since the platform is low-code for beginners. This, however, would introduce yet another platform for Pets4Life to manage and integrate, which could be managed by WordPress plugins that are already integrated into the website.

Another alternative could include the use of Jira Service Management, which is a platform that the client currently uses for help desk management and frequently asked questions. This is in place of a proposed chatbot currently, and therefore could be managed manually without too much issue. However, this system would not be automated like a chatbot and would include some type of manually additions or updates.

Planhero is another current competitor for our proposed solution of Amelia, a WordPress Calendar plugin that integrates directly with the website and databases. PlanHero is also another scheduling app that is advertised towards organizations like non-profits, and provides more low-code options and easy to understand scheduling for those on the front and back end. However, PlanHero is yet another individual platform that would have to integrate into WordPress and Airtable, when Amelia is already produced in WordPress and can easily attach to Airtable.

Another alternative is WP Forms Lite, with the Conversational Forms add-on that would replace our original plan of integrating Amelia within WordPress. Conversational Forms would adapt and change depending on the requirements for the pet owner and what service they would need, and then integrate into another calendar. This could be cheaper for the client, but the integration goals would probably not be achieved as efficiently with this solution.

4. Product Overview

4.1 Product Perspective

Our team's Pets4Life solution is not an independent system, but an enhancement of the existing system, designed to increase operational efficiency by providing a centralized and integrated solution for key functions, such as volunteer management, appointment scheduling, donation tracking, and customer support. The current system relies on multiple disconnected tools, such as Google Sheets, Airtable, Zapier, Sign-Up Genius, and various forms of communication such as phone, email, Facebook, Instagram, and more. Our proposed system aims to eliminate

unnecessary inefficiencies by reducing the current heavy reliance on multiple tools, which in turn will streamline workflows, and minimize manual work. By building upon the current system, we believe that it will create a seamless transition for administrators and users. By reworking and consolidating the operations, the overall functionality of the system will improve and the reworked system will create a more efficient, user-friendly experience for all stakeholders involved.

4.2 Assumptions and Dependencies

Assumptions

When building this improved system, there are several key assumptions that must be considered to ensure the system is successful. Our first assumption is that WordPress remains as the core CMS platform. Our proposed enhancements are all based on WordPress plugins and ways to enhance the original site. If Pets4Life ends up using a different CMS than WordPress, then a complete reworking of the system plans would likely be necessary. Our next assumption is that the staff can manage the improved system with minimal training. We designed this system with ease of use in mind which eliminates the need for extensive staff training on the system. Should there need to be a heavier level of training, then alterations may need to be made. The next assumption is that the automation will reduce manual data entry. The proposed product features will automatically record data, such as volunteer hours, appointments, and donations. The next assumption is that users will actively interact with the improved system. Users will accept the new system and recognize its benefits, preferring this system over alternative methods. Users will interact with the new features and find them simple and efficient. The next assumption is that the automated information sent to users will improve user engagement. Users will read and act on automated notifications, making it an efficient way of getting the necessary information to them. Our final assumption is that the budget will be large enough to cover the expenses of hosting costs, as well as whatever plugin costs are needed.

Dependencies

Our Pets4Life system relies on several external tools and services to function properly and those are their dependencies. The first dependency in the system we designed is that the internet connection and the system will be accessible and reliable. The success of this system depends on whether or not it can remain up and running. If users are trying to access the site and there are interruptions or downtime, issues can arise. The next dependency is that payment through Stripe and PayPal will remain functional and secure. We are under the assumption that

Stripe and PayPal will be able to deliver efficient and secure ways to make transactions. If this changes, then the payment management system used will need to be revised.

The next dependency is that the plugins chosen are fully compatible with WordPress and hosting environment. This means that future WordPress updates will not impact plugin functionality, plugin developers will continue maintaining and updating the plugins to ensure their security and remove bugs, and the chosen plugins will not impact the overall performance of the site. The next dependency identified is that integration tools will be functional. Some automation may rely on integration tools like Integrately or Zapier to connect WordPress with Airtable. If these integrations experience failures, delays, or changes, manual intervention may be required. The final dependency we identified was that user data remains secure and private. The system will handle volunteer information, donor payments, and appointment records, requiring that all users' personal information remains secure and private.

5. Product Features

There are four parts of the current system that we are focusing on when it comes to enhancing the overall system, these include:

1. Volunteer Management

Current System: Volunteer management in the current system is through Sign-Up Genius, which tends to lack a structured tracking system for hours and those who attend the events. In order to record the data that comes with the volunteer management, administration has to manually log them into Google Sheets, which is not only time-consuming but is also more prone to errors. With the current system, there is no clear way for volunteers to be notified of the events they have, whether there are cancellations, or any further information they may require.

Proposed Solution: Considering these challenges, our team suggests using the Wired Impact Volunteer Management plugin. This plugin is easily integrated into WordPress, allowing for a more integrated set up and a dedicated volunteer registration system within the platform itself. By using this plugin, users are able to sign up to volunteer directly through the website, eliminating the need for a third-party application like Sign-Up Genius. Tracking data will also become simpler, as it will allow administrators to automatically track hours. The plugin also

allows for one-time volunteering or flexible volunteering, which can be extremely useful for the client when trying to find long term volunteers. Automated reminders and notifications will be sent to both the administrators and the volunteers so that both are aware of the event planned. With the calendar feature, volunteers are able to look through upcoming events and choose the one best for them.

2. Event Scheduling

Current System: For event scheduling, Calendly is currently used, which results in appointment data having to be manually exported into Airtable. This is a time-consuming and altogether ineffective option. When it comes to deposits for appointments, they must be manually processed, which only increases the client's workload and makes it difficult to track the financial transactions. Along with this, there are no automated responses sent to both the administrator and the user, which increases the number of no-shows.

Proposed Solution: In order to make event scheduling more effective, our team proposes the use of Amelia scheduling plugin which can be integrated with the WordPress site and can automate the appointment scheduling. Users will be able to receive confirmations and reminders on their appointments to ensure that they are fully aware of the necessary information in order to make the appointment, which can result in a decrease in no-shows. Additionally, Amelia allows for payments and deposits to be dealt with directly through the system, which will reduce the number of errors and scattered payment records.

3. Customer Support/Chatbot

Current System: Currently, there are multiple channels where inquiries are being sent through, making it overwhelming and difficult to answer them all accurately and in a timely manner. This system also lacks any form of frequently asked questions, which results in users needing to reach out to the staff, where they must manually give answers to repetitive questions such as clinic dates, available services, and donation options. This only wastes the user and the staff's time, taking valuable time away from other aspects of the organization that might need more focus.

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With there being no system to track these inquiry requests, some urgent inquiries get lost or result in delayed responses.

Proposed System: By using the AI WPBot plugin available for WordPress, administrators can create a list of predefined responses that the chatbot can deliver based on user inputs. This allows for users to get quick and easy responses to their common questions. Should users be trying to locate where to sign up for an event or schedule an appointment, the chatbot can pull up the form for them using the ChatBot Conversational Forms plugin. This saves the user time that would have been spent searching for the form on the site and makes the overall process more efficient. In the case that the chatbot is not able to address and solve the issue, a support ticket can then be made through the bot and will get sent to a staff member for a follow up. These support tickets are then tracked and organized for Pets4Life so that staff members know which questions need urgent answers. Implementing this chatbot will reduce the workload on staff by automating responses to common questions and provide instant assistance to users, improving their overall experience. It also ensures that urgent inquiries are escalated and organized, preventing missed requests or delayed responses.

4. Donations and Sponsor-a-Pet

Current System: There are currently two ways to get to the donation button on the Pets4Life site itself. One is by scrolling down on the home page and either scanning the large QR code or clicking the small donate button. The other is to go to the Sponsor-a-Pet page, which can be found under the Ways to Help drop down menu. However, the donation buttons found on the website are small and visually unappealing, making them easy to overlook. Donations are also processed through multiple platforms, including PayPal, Venmo, and Facebook Fundraisers, making it difficult to track all financial data in one centralized system. The lack of a structured donation tracking system results in staff having to manually enter information into Google Sheets and Airtable. This increases the chances of errors in the data inputting as well as consumes unnecessary time from staff members. While the Sponsor-a-Pet page mentions that donors will receive email notifications once their contribution helps a pet, it is unclear whether this process is automated or manually managed by staff. If staff must manually track

sponsorships and send donor notifications, this adds to the administrative workload and increases the potential for delays or missed updates. The lack of automation in donor tracking makes it harder to engage donors consistently and maintain accurate records.

Proposed System: The new system will streamline donations by integrating the PayPal and Stripe Donation plugin into the Pets4Life website, reducing the need for manual tracking across multiple platforms like Venmo and Facebook Fundraisers. While platforms like Venmo and Facebook Fundraisers can still be available and used for making donations, they will be supplementary, with the website serving as the primary donation hub. This will result in better tracking and transparency. The Sponsor-a-Pet page will allow donors to choose a specific service to support, with their contributions automatically recorded and updated in real-time. To boost engagement and donor contribution, larger, more noticeable donation buttons with calls to action will be placed on the page and in the dedicated donation page. Donors will receive instant receipts, thank-you emails, and updates on how their contributions are making an impact, and if the pro version of the plugin is chosen, they will also have the option to set up recurring donations for long-term support. By centralizing and automating the donation process, Pets4Life will reduce staff workload, improve donor retention, and create a more efficient and understandable fundraising system, while still allowing external platforms to contribute where it is beneficial.

6. Other Product Requirements

Since the site will handle sensitive user information, SSL encryption (HTTPS) will be required to ensure secure data transmission. The system will be built on WordPress and requires a hosting environment that supports PHP 7.4+ and MySQL 5.7+ for plugin compatibility and security. In order for the system to maintain reliable performance, the hosting server should have at least 2GB of RAM, a fast multi-core processor, and SSD-based storage. Since the system is a .org and will be hosted on an independent WordPress site, a reliable web-hosting service will be required to manage uptime and performance.

The system should maintain fast response times and high availability, even in the case of increased traffic. Performance standards include a 99.99% uptime, page load times of three seconds or less, and real-time data synchronization for appointments, donations, and volunteer records. The system should also contain a fault tolerance, so the system can handle unexpected

errors without crashing, ensuring smooth recovery if any failure occurs.

The system must be compatible with various devices like laptops, PCs, mobile phones, and tablets, and must be fully responsive and optimized for various screen sizes and resolutions in order to deliver smooth performance. The system must also be accessible by using common browsers like Chrome, Firefox, Safari, and Microsoft Edge. To support underserved communities, the site should function well, even with weaker internet connections, which can be done by using compressed images, caching, and fast-loading pages to reduce data usage.

There are a few constraints when it comes to the system we are proposing. The system must operate within WordPress, using only approved and high-quality plugins to maintain security and stability while ensuring minimal staff training is needed. The hosting service chosen must support the required PHP and MySQL versions in order for the plugins to be functional. The payment processing fees and policies will be dependent on Stripe and PayPal and the system must meet PCI-DSS standards for data security. Key dependencies include PayPal and Stripe Donation for payments, Amelia for scheduling, Wired Impact for volunteer management, an AI Chatbot for customer support, and a reliable web hosting provider.

Should the staff and administration need assistance when implementing the enhanced system, documents are available online that can inform them on the various plugins and how to work them. If they run into further issues with WordPress, then contacting the WordPress help desk is another viable option should more information be needed.

Our Pets4Life system prioritizes security, automation, and performance to ensure a seamless user experience. Secure SSL encryption is a high-priority feature that protects sensitive user data, ensuring safe transactions and user privacy with little implementation effort and low risk. Automated donation processing is another critical feature, reducing manual workload for staff and improving efficiency will take a bit more effort as well as come with a bit more risk. Similarly, another high priority aspect that comes with about the same effort and risk as the automated donations is the automated volunteer tracking. This streamlines event coordination and automatically logs volunteer hours, saving staff time and increasing overall efficiency. To maintain system stability and long-term functionality, WordPress plugin compatibility is another essential factor making it a high priority. Ensuring that all features integrate smoothly while maintaining security and performance can be a lot of work and come with quite a bit of risk as well, which is why there should be constant maintenance and monitoring on plugins to avoid any

failures.

Agile Stories

ID: 0001

Title: Volunteer

As a(n): volunteer for Pets4Life

Workflow (I want to...): Be able to see available events, including time and location, and sign up in an efficient manner.

When I sign-up for an event, **this happens:** I receive a confirmation email with event details, including time, location, and any needed instructions. If any changes occur, I am notified immediately.

ID: 0002

Title: Pet Owner

As a(n): pet owner needing assistance

Workflow (I want to...): Use a chatbot or help desk for quick answers to my questions

When I submit a query, **this happens:** I get automated responses or am guided to further help and resources if needed, ensuring my concerns are resolved efficiently.

ID: 0003

Title: Donator

As a(n): donator for Pets4Life

Workflow (I want to...): Be able to view donation options, including one-time and recurring donations, and have this process be executed quickly and securely.

When I make a donation, **this happens:** I receive a confirmation email with the donation amount, the date, and a thank-you message. I also see how my donation makes an impact.

ID: 0004

Title: Employee

As a(n): employee seeking customer data

Workflow (I want to...): be able to access necessary data all from a centralized location without the need for manual entry

When I look through the database and calendar, **this happens:** I am able to access all the information I need efficiently and seamlessly without the need for navigating around multiple systems or manually entering data.

Team Charter

This charter outlines our team's division of work, mutual goals, and strategies for achieving them. It details how we communicate through meetings, how we finalize decisions as a group, and where key project documentation is held. As the Ladybirds, we all share the same desire to fulfill the business needs of Pets4Life and provide them with an all-inclusive platform that can manage volunteers effectively, centralize documentation and payments, and serve as an information hub for users to refer to as necessary. We plan to achieve these goals through implementing a new system for volunteer management, a chatbot, an interactive calendar of events, and a section to sponsor a pet with secure payment methods offered. These features will be integrated into a seamless, automated platform for easy access by all users. With the successful implementation of our proposal, our client's site will have an enhanced system with a user-friendly experience that meets the organization's needs and drives growth.

Our team has decided to divide work according to our strong suits and preferences, with each member naturally gravitating towards one of the roles in the systems development life cycle. Prior to submitting project deliverables, we meet on a call to discuss the overall components. Once we come to a consensus on key points each part should include, we divide the work into specific parts based on such preferences and where members feel the most well-informed. Despite the division of work, we maintain a system of feedback and collaboration, where we encourage other members to look over our work and suggest needed changes. This allows for us to prevent one person from being confined to one thing, but rather making this a team collaboration as intended with transparency throughout.

To foster team collaboration and ensure all voices are heard in each and every part of the project, our team has decided to conduct synchronous meetings as we deem necessary. These meetings are decided as we discuss in or after class where our status is as a team. If we agree that a team meeting is needed, we plan a time in the group chat we have established on iMessage that was created when our group was initially formed. We agreed this would be the most efficient way to reach any of us and best used for quick updates, and thus it was chosen. Our calls are then conducted through a Microsoft Teams link that is sent to our emails. This platform will only be used for verbal communication. In these meetings, we come to a mutual understanding of where we are in the process and make decisions as necessary. Our team communication is based off of the promotion of open communication and sharing of all ideas. We talk through ideas together,

allowing for all to have their voices heard and reflected in the mutual decision we make. While ideas will mostly be communicated to each other when we see each other in person, they will be elaborated on through a meeting as necessary. By allowing each team member to focus on tasks that align with their strengths while also providing input on other aspects of the project, we will deliver the most optimal product to our client. The diverse skill sets and perspectives that we each offer are necessary for such a project, making this process the most ideal. Lastly, for project sponsor inquiries, we agreed to reach out in class, during office hours, or via email – whichever is the most efficient at the time. With any questions for our client, our client informed us they could be reached through their email linked in their presentation.

When it comes to making decisions, we discuss the choices during meetings. From there, we elaborate on the pros and cons of each one to come to a final decision. By weighing out each option, we gain a full understanding of the potential value it could provide to Pets4Life. While we aim to plan meetings at a time when everyone can attend, if members cannot make it and a decision had to urgently be made, they will agree with the consensus. Additionally, they will follow up on information and decisions they missed through the meeting notes in the shared Word document and a general summary that we send in the group chat. If any conflicts were to arise, we will address the issue as a whole team and vote on a mutual decision that pertains to all sides. If the situation escalates, we will ask our project sponsor to act as a mediator until a common decision can be made.

We utilize a common Word document distributed through email, where we will share ideas of what we need for project deliverables. This document serves as a brainstorming document and place to store any resources we deemed important in decision making. For new documents pertaining to project deliverables, a new Word document is shared through email. Each member will then directly place their part onto that document as they finish. This ensures organization and accessibility for all team members.

In conclusion, as the Ladybirds, our objective is to develop an all-inclusive platform to manage volunteers, centralize documentation and payments, provide a customer service hub, schedule for events. This will be done through specific plugins picked through careful research. Despite the division of labor based on our strengths, we prioritize feedback and transparency throughout, using iMessage for quick messages, Microsoft Teams for discussions, and in-person meetings when possible. Decisions are collectively made by weighing out pros and cons, and

absent members agree with the consensus as documented in meeting notes. Conflicts, if any, are resolved through whole team discussions, or if needed, mediation with the project sponsor. Our documentation is through Word documents shared through email. By leveraging strengths, open communication, and teamwork, a seamless and efficient platform that meets our client's needs will be made. With clear decision-making processes and a commitment to transparency, we are well prepared to achieve our shared goals. Our strong foundation for productive teamwork and success will lead to the development of an efficient and effective system.