Giles County Animal Rescue
Client: Christine Link-Owens

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# Table of Contents

**Executive Summary**  
3

**Users’ Manual**  
4

**Developer’s Manual**  
7  
Figure 1: Concept Map – GCAR Sitemap  
7

**Lessons Learned**  
10  
Figure 2: Old Website  
11  
Figure 3: Website Final Version  
13

**Acknowledgements**  
14

**References**  
15
Executive Summary

Giles County Animal Rescue is a small group of volunteers located in Giles County, Virginia. These volunteers work with the Giles County Animal Shelter to help increase the chance that the animals in the shelter will be adopted instead of euthanized. They take pictures of the animals to publish in local newspapers and various media outlets with the hope of increasing interest in pets available for adoption. They also work to place animals in rescue groups in other areas when they are able. They organize, finance, and provide transportation so that more of these animals can be saved and have a chance at a good life. The group also campaigns to raise awareness of the importance of spaying and neutering.

As a group that is trying to raise awareness for various causes, it is important that they use any outlet available. For the past few years, Giles County Animal Rescue has owned and operated a website where they post news and events, animals available for adoption, and any information that may help their cause.

This website has not been as useful as they would like, however. The Giles County Animal Rescue website suffered from many problems. Several features did not work, including contact forms and changing animal’s statuses. Along with these problems, users would complain that the site was confusing and difficult to use. The client, Christine Link-Owens, decided that these were problems that needed to be fixed if they wanted to accomplish their goals.

The goal of this project was to fix and update the Giles County Animal Rescue website (gilescountyanimalrescue.org). On top of that, there were several features that our client wanted to add to the site. Our goal is to make the site easy to use and update, and help the volunteers of Giles County Animal Rescue to raise awareness of available animals.

This paper outlines several areas. The Users’ Manual section explains how the site is used. The Developer’s Manual contains several sections: It begins with the concept map, outlining the structure of the site, followed by the different parts of the site and what each section is about (including installed modules and themes). Lessons Learned discusses the problems we faced during this project, how we overcame them, and what we learned. Finally, we give acknowledgements to those that helped us and provide the references we used.
Users’ Manual

The Giles County Animal Rescue website, located at www.gilescountyanimalrescue.org, has many parts. In this section, each area of the website will be listed with a description of how it is used.

News & Events (Home)
The News & Events (or the “Home” page) is a blog-like section. On this page, there are chronologically sorted stories that may contain information on events that Giles County Animal Rescue has attended or held, along with any news they may need to share. This is the landing page for the website, and can be accessed by clicking the “Home” link on the main menu bar or by clicking the logo at the top of the page.

About Us
About Us describes what Giles County Animal Rescue is, what it does, and what its goal is. This page can be found under the “About” link on the main menu bar and is titled “About Us.”

Contact Us
The Contact Us page contains a contact form that may be used to send questions or comments to Giles County Animal Rescue. This page can be found under the “About” link on the main menu bar and is titled “Contact Us.”

Location
The Location page contains the various ways of contacting Giles County Animal Rescue. This page can be found under the “About” link on the main menu bar and is titled “Location.”

Newsletters
The Newsletters page contains PDF files of the Giles County Animal Rescue newsletters. When clicked, each link will open up the corresponding newsletter. To return to the page after opening the newsletter, simply click the back button or press the backspace key. This page can be found under the “About” link on the main menu bar and is titled “Newsletters.”

Adoptable Animals
The Adoptable Animals page contains images and details about any animal that is available for adoption. The page is not paginated, so all of the available animals will be displayed on the same page. To narrow a search, there is a filter located at the top of the page that allows a user to sort by species (any, cat, dog, or other). If you wish to use this function, simply select one of the options in the dropdown menu and click apply. The web page will then be reloaded and will display animals that fit your criteria. This page can be found under the “Animals” link on the main menu bar and is titled “Adoptable Animals.”
Lost & Found Animals
The Lost & Found Animals page contains images and details about any animal that has either been lost by an owner or found. The page is paginated, so if you do not find what you are looking for be sure to check all of the Lost & Found pages by scrolling to the bottom and selecting “next.” This page can be found under the “Animals” link on the main menu bar and is titled “Lost & Found Animals.”

Saved Animals
The Saved Animals page contains images and details about animals that have either been adopted to sent to rescue. These animals are no longer available for adoption. The page is paginated, so if you do not find what you are looking for be sure to check all of the Saved Animals pages by scrolling to the bottom and selecting “next.” This page can be found under the “Animals” link on the main menu bar and is titled “Saved Animals.”

Adoption Procedures
The Adoption Procedures page contains information on what is required in order to adopt an animal from the Giles County Animal Shelter. This page can be found under the “Animals” link on the main menu bar and is titled “Adoption Procedures.”

In Honor of/Memorials
The In Honor of/Memorials page contains images and stories submitted by users of animals and people that have passed on. The page is paginated, so if you do not find what you are looking for be sure to check all of the In Honor of/Memorials pages by scrolling to the bottom and selecting “next.” This page can be found under the “Memorials” link on the main menu bar.

Success Stories
The Success Stories page contains images and stories submitted by users of animals that have been saved or rescued. The page is paginated, so if you do not find what you are looking for be sure to check all of the Success Stories pages by scrolling to the bottom and selecting “next.” This page can be found under the “Success Stories” link on the main menu bar.

Volunteer
The Volunteer page contains information on how to volunteer for Giles County Animal Rescue, as well as any requirements. This page can be found under the “Volunteer” link on the main menu bar.

Donate
The Donate page contains information on how you can donate to Giles County Animal Rescue. This page can be found under the “Donate” link on the main menu bar.

Hidden Animals
The Hidden Animals page contains images and descriptions of animals that have been euthanized or that have an unknown status. This page is only visible to administrators. This page can be found under the “Administration” heading in the footer and is titled “Hidden Animals.”
Developer’s Manual
In order to make any changes to the website, you must first log in as an administrator.

Figure 1: Concept Map – GCAR Sitemap

Introduction
Drupal 7 is used as the content management system for the Giles County Animal Rescue website. Drupal allows for fast content creation and management while providing a low overhead and easy-to-use interface for users. The current theme being used is “Corporate Clean” by Zsolt Kacso (Kacso, 2011).

Modules
Several third party modules were added to the site to achieve the desired functionality. The enabled modules can be found by logging in as an administrator and opening the Modules tab on the administrator menu. The third party modules are used include:

- Chaos Tool Suite (used to extend the base Drupal functionality and necessary for many third party add ons)
- Display Suite (allows for multiple column layouts in content types)
- Simple News (a newsletter distribution service)
- Mail (allows for contact forms within the site and the distribution of newsletters)
- External Links (opens external links in a new tab)
- Insert (allows for uploading and inserting images into text fields)
- WYSIWYG and CKEditor (provides a WYSIWYG text editor for creating content)
- Gallery Formatter (provides a scrollable gallery for images)

For a full list of modules, please sign in as an administrator on the site and visit the “Modules” link.

Updating Modules
Drupal third party modules are constantly under production. If a module goes out of date, visit the “Modules” link as an administrator. There you will find an “Update” tab on the top right corner of the modal. Visit that tab and download any available updates.

Administrators
This site allows for an unlimited number of administrators. To become an administrator, please contact Christine Link-Owens.

Views
The views for this website correspond with each section listed above in the Users’ Manual. To create a new view, select the “Structure” link from the administration menu at the top of the page. Once the modal displays, select “Views” and then select “Add New View.” If you wish to edit a view, there are two options. The first option is to find the view in the list of views given in Structure > Views and then select “edit”. The second option is to find the page where the view is located, hover over it, click the gear that appears in the top right corner, and select “edit.”

Content Types
There are several content types used in this site. The “Animal” content type is used in any of the animals links (adoptable, lost & found, saved) and displays a description of each animal with images. The “Basic Page” content type is used in static pages (about us, location, volunteer, donate) and displays a large text area with the option to include images. The “Memorial” content type is used in the Memorials page (in honor of/memorials) and displays a small text field, a name, and an image. The “News Story” content type is used for the News & Events page and displays a large text area and images. The “Newsletter” content type is used on the Newsletters page and displays the names of the newsletter files. The “Success Story” content type is used on the Success Stories page and displays a large text area, images, and a name.

Creating Content
Creating content is fairly simple in Drupal. Once you are logged in as an administrator, two menus will appear at the top of the screen. The first menu lists the many administrative links. The menu beneath that contains two links: add content and find content. To create new content for the site, simply select “Add Content.” a modal popup will display allowing you to choose a content type (these content types are detailed in the “Content Types” section of the Developer’s
Manual). Simply select a content type, fill out the information, and save. A tutorial for this can be found on the Tutorial Videos page.

**Editing Content**
If at any point you may want to make a change to content that has been added to the site, there are two options. The first option is to find the specific content using the “Find Content” link at the top of the page. Once clicked, it will open a modal. Select any filters you wish to use and search the list of content. Another option is to find where the content is located, hover the mouse over it, click the gear icon that appears in the top right corner, and select “edit” from the dropdown menu. A tutorial for this can be found on the Tutorial Videos page.

**Appearance**
If at any point you would like to change the appearance of the website, simply find the “Appearance” link on the administration menu at the top of the page. From there, you will have the option to install or enable new themes or change the settings of your existing one.

**Editing Permissions**
This site allows an administrator to edit user permissions. To create a new permissions group, click the “People” link on the administration menu at the top of the screen. Once there, click the “Permissions” tab at the top of the modal. Once there, underneath the tabs you will see two options: permissions and roles. Select “roles.” This will take you to a new screen where you can create a new role (permission group) or edit an existing one.

**Editing Users**
This site allows users and administrators to create accounts. To create an account, click the “People” link on the administration menu at the top of the screen. Once there, select “+ Add User” at the top of the modal. There, you will be able to create a new user and assign the appropriate permissions (such as “administrator”).

**Simplenews Newsletters**
This website allows the administrator to send out newsletter emails to whoever subscribes on the home page. To create a newsletter, an administrator selects “Add content” and chooses the “Simplenews newsletter” content type. Once the newsletter has been created and saved, the administrator then selects “Find content” and navigates to the “Newsletters” tab. The created newsletter is then selected and the administrator updates the status to “Send” in the “Update Options” section. Newsletters are sent every hour in order to help the domain avoid being flagged for spam. A tutorial for using this module can be found on the Tutorial Videos page.

**Tutorial Videos**
The Tutorial Videos page contains links to videos that show how to accomplish various tasks on the website. This page is only visible to administrators. This page can be found under the Administration” heading in the footer and is titled “Tutorial Videos.”
The Tutorial Videos included are:

- Adding and changing animals (00:02:51)
- Adding and changing newsletters (00:01:35)
- Adding and formatting images on pages (00:02:04)
- Creating and sending Simplenews newsletters (00:02:53)

These videos are .avi file types and may be viewed with Windows Media Player or Quicktime.

Other

If you have any general Drupal questions, sign in as an administrator and visit the “Help” link at the top of the screen or visit the forums at drupal.org (“Drupal”). Administrators and developers might also want to view the Linda tutorial for Drupal if they are new to it (Geller, 2011).
Lessons Learned

Timeline
At the beginning of this project, we developed a timeline that we hoped to follow:

February 8th: Meet with the client
Met with client to discuss requirements and timeline.

February 15th: Submit plan and mockups for proposed interfaces/functionality
Designed website mockups in Google Draw and presented them to the client.

March 15th: Give update of development status
Updated client on development status, and made the decision to remake the website.

March 30th: Submit all implemented functionality as prototype for evaluation
Gave the client access to the site and asked them to complete several tasks to test the functionality.

April: 10th: Finish initial development

April 15th: Wrap up testing, bug fixes, begin user testing
As the client to perform any usual tasks and inform us of any issues.

April: 30th: Finish user testing, last bug fixes, release website
We had also initially decided to update our client on the development status twice a month, on the 15th and the last day of the month. However, it soon became clear to us that we would need to keep in somewhat constant contact with our client. We ended up exchanging emails several times a week to make sure we were all on the same page and making our client happy.

Problems and Solutions
Over the course of this project, we ran into several problems. Most notably, after creating mockups and starting development, we found several issues with the previous site. These problems ranged from undocumented CSS changes to being unable to access several pages. The theme that was being used was missing many customization features that our client wanted. This left the site looking very messy with only a few ways to fix it. Here is an example of what the home page looked like:
With this in mind, on top of the other issues we were facing with it, we were left with two options: either find workarounds for our problems or start from scratch. We decided that, since so much already needed to be changed and rebuild from the old website, it made more sense to just completely remake the website. This involved creating a new installation of Drupal, recreating any functionality (content types, pages, etc.), and migrating the data.

While this solution did take a long time to complete, in the end we believed we made the correct choice. With the many problems in the old website, it may have taken just as long—if not longer—to find all of the problems with it and restore the full functionality as it did to completely remake the site. By remaking the site, we were also able to give our client many more options and much more control on exactly how she wanted the website to work and feel.
Though it took a while, we were able to recreate much of the functionality of the old website in the new website. However, during this change we also upgraded to Drupal 7. While this allowed us to make some of the necessary changes, we also discovered that some of the old modules were no longer being developed and would not work with the new version. To get around this problem, we researched other options and were able to find modules that could replace many of the others. However, we were not able to find modules that would replace some functionality, such as the Colorbox module. In these cases, we informed our client and tried to find ways around it.

The final issue we face throughout the development was changing requirements. We were initially given a long list of changes and fixes our client wanted us to make. Once those were complete, we received more requests from the client. This continued until the end of the project, when we finally released the website. While this was not a problem, we realized the importance of discussing all of the requirements ahead of time and leaving enough time to make any final changes our client might want.

The following is a screenshot of the final version of the new homepage (to view the entire website, visit www.gilescountyanimalrescue.org):
In the future, if any other changes are necessary for the website, an administrator can turn on “Maintenance Mode” in the “Configuration” link to take the site offline. Then they are able to make changes without making them visible to users.
Acknowledgements

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References


<drupal.org/project/corporateclean>.