Website Redesign Project
Creating Intuitive Content Management
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Executive Summary

Our client, Christine Link-Owens, is the president of the non-profit Giles Animal Rescue, which helps homeless, neglected, and abused pets in Giles County. The organization has a Drupal website, www.GilesAnimalRescue.org, that several groups of students have worked on, but it still needed bug fixes and feature expansion. Our goal was to make all the changes she asked for, as well as create a website content management environment that is easy to maintain, as well as thorough instructions of common tasks.

Many of our changes to the site were text formatting issues and adding images to pages, but also include:

• Updated the version of Drupal to resolve security issues
• Added pictures to many of the pages to showcase work of the rescue and its volunteers
• Added the ability to enlarge images by clicking on them
• Enabled gallery formatting to create image slide shows
• Changed settings in Drupal to make adding and editing content easy by creating tailored content types with specific fields
• Resolved text formatting issues by making Filtered HTML default on all text content boxes
• Accessed newsletter subscribers
• Created a separate tab for Giles County Animal Shelter for information about the shelter

Additionally, we migrated hosting from Go Daddy to Bluehost. While updating the Drupal core when hosted at Go Daddy, we experienced many technical difficulties including limited control of our files and difficult menus for tasking such as backups. We moved to BlueHost because we were able to find an organization, GrassRoots, which offers free webhosting through BlueHost. Bluehost has a very intuitive cPanel that displays all the options on one page to help navigate through the website with ease.

Overall, our client has been very pleased with our changes and is excited about the future of her website. We feel that we have put forth our best effort over the course of this semester. We are proud to have assisted such a great organization that helps save unfortunate animals. We hope that our changes will aid them with their mission.
Summary of Changes

Drupal and Content Modifications

We focused primarily on our client’s objectives, mostly fixing bugs and display issues, but also:

• Updated the version of Drupal to resolve security issues
• Resolved text formatting issues by making Filtered HTML default on all content boxes
• Accessed newsletter subscribers
• Created tailored content types for each type of page depending on the content to be included
• Modified search/filter on Adoptable Animals
• Removed metadata from News Events
• Added pictures to the Volunteer, Donate, and About Us pages to showcase work of the rescue and its volunteers
• Added the ability to enlarge pictures by clicking on pictures
• Enabled gallery formatting to create image slide shows
• Modified how picture galleries were being displayed for all picture content types
• Created a separate tabs for the Giles Animal Shelter for:
  o Information about the shelter,
  o Contact information
  o Map of the location
  o Links to shelter website
  o Shelter adoption procedures
  o Information to contact animal control
• Adjusted the Links block by:
  • Separating the “Like us on Facebook” with the “Like” button, then
  • “Donate” followed by the donate form
• Added a traffic counter to most pages of the website
• Modified status’s adoptable pets to better reflect the animals current status
• Made a new picture size standard in between medium and large for the news stories to better display images
• Added the volunteer application to the Volunteer page
• Added the Giles Animal Rescue adoption procedures to the adoptable animals page
• Added links to shelter adoption procedures to stories of adoptable animals in the shelter
Host Migration

At the beginning of the semester, our website was being hosted through GoDaddy. We quickly realized that GoDaddy had a lot of issue with their website. Navigating throughout the website turned out to be difficult and was not user friendly. GoDaddy’s file manager did not allow use to download a directory, but instead required us to download one file at a time. After weeks of dealing with GoDaddy’s support, we noticed that the hosting through them was up for renewal. Working closely with our client, we proposed that we could swap hosts for her and try to find one that is easier to use.

Spending a few weeks compiling a list of options, one in particular stuck out which was BlueHost. BlueHost works with an organization, GrassRoots, that helps non-profit organization with their websites by offering free webhosting, free technical support, and volunteers to assist with website issues. Our client would not have to pay for hosting through GoDaddy any longer and GrassRoots would cater to her organization. BlueHost’s other main selling point was their cPanel; it is very easy to use and could navigate to portions of the website with ease unlike GoDaddy.

However, we ran into some issues while migrating hosts. First, we noticed was that the current live website that was made by students the previous semesters was built incorrectly. Files that were custom to the site were outside of the sites folder which makes it impossible to update the Drupal core version. We spoke with our client and went with the decision to take one of the domains and rebuild the website correctly on BlueHost. Once the website was rebuilt, we took the other domain name and forwarded it to the new sites domain.

Another issue we ran into was that the domains were being connected to a previous students personal BlueHost account. We spent weeks trying to get into contact with the student and only recently did we gain access to this account. We have fully moved all the domains off of the previous students account. Now our client will be able to control the domains and hosting all on one account. This will reduce the number of passwords that our client has to keep track of and consolidates domains and hosts in the same place.
User Manual

The Giles Animal Rescue has a website that contains information about what the organization is, events they sponsor, stories of animals, how to volunteer, how to donate, and information about the shelter. The URL is www.GilesAnimalRescue.org and its home screen is shown in Figure 1.

When a user first visits the site, the home page shows recent event that Giles Animal Rescue has done, including fundraising activities, vaccination clinics, and adoption events.

The “About” tab includes information about the organization and their mission statement. There is information to contact the organization either through telephone or by submitting a form via email. Additionally, the previous newsletters are posted here.

The “Animals” tab displays stories of animals that are available for the adoption, found or missing, and saved. Adoptable animals are either in foster care with a volunteer or are at risk in the shelter. Lost or found animals are animals that someone found and are looking for the owner or an owner posting to find their missing pet. Saved animals are stories of animals that have been adopted and are
in a safe home. Additionally, this tab has the Giles Animal Rescue application to adopt an animal. If a visitor is looking to adopt an animal, this tab has information to do so.

Memorials are stories of families that have donated money in memory of a pet that has passed away. Their pet was a part of their family and wished to honor him or her by donating to the organization.

Success stories are stories of animals that have been placed in a safe home or to another location and are no longer at risk of euthanization.

If a visitor is looking to contribute to the organization, this tab includes actions of volunteers and information about how to get involved. The application to volunteer is also included in this tab.

If a user wished to donate to the organization, information about how to donate money via PayPal or mail is included. Additionally, this tab includes information of how donations are used and other ways to contribute to the organization.

Lastly, while the Giles Animal Rescue is not officially associated with the Giles County Animal Shelter, many of the animals the Rescue works with are in the shelter. The tab about the shelter includes information about how to contact the shelter, such as location and directions, as well as the procedures to adopt an animal. The website for the shelter is also included.

**Site Operations**

This section describes website administration basics including how to sign into Grassroots and Bluehost, manage the backend including backing up files, create user accounts and permissions for Drupal, add content, update the volunteer application, obtain newsletter subscribers, and clean up the site with Cron.

**Sign Into Grassroots**

To sign into Grassroots, navigate to [http://www.grassroots.org/home](http://www.grassroots.org/home). The email for the account is [gilesanimalrescue@gmail.com](mailto:gilesanimalrescue@gmail.com). Check your records for the password.
Sign into Bluehost

To sign into Bluehost, navigate to https://my.bluehost.com/web-hosting/cplogin then click on “Login.” Select login to “hosting.” The domain for the account is gilesanimalrescue.org. Check your records for the password. Then click “login.”

“Backend” Management

This section details how to manage the domain on the “backend” or where all the details of the website are hidden. This includes the file system and where Drupal is installed and running from.

cPanel Basics

Bluehost supports user functionality through the use of a cPanel. All tasks such as backing up the site, viewing files, viewing site emails, and other similar functionality, can be done through the cPanel.

To get to the cPanel, first log into Bluehost. Then click on “Hosting,” as shown in Figure 2.
From here, there are several sections of functionality; below are instructions on how to back up files. It is recommended to back up the files monthly.

**Backup Files**

Once at the cPanel, scroll down to the File Management section. This section contains all information and the ability to manage all files on the web server. One important ability is to backup the sites files. Click on “Site Backup Pro” button shown in Figure 3.
From here, there are two different options to choose from. We do not have the pro version of “Backup and Restore”, so click on “Back up and Restore” under the free version shown in Figure 4.

Next, click on “Download,” as shown in Figure 5.
A popup window will appear. Click “Download Now,” as shown in Figure 6.
Create User Accounts

To create, edit, and delete content, an account must be established. Another user (with appropriate permissions) can create an account. This site is set up that a new user must confirm the account via email.

To create a new user account, first sign in as a user. Log in at
http://www.gilesanimalrescue.org/user/login or navigate to the site and click on “Login” in the lower left hand corner.

Next, click on People, as shown in Figure 7.

![Figure 7 - Click on People](image)

Next, click “Add User” as show in Figure 8.
Fill in the username and assign a password. (When the user confirms their account, he or she will be able to set his or her password.) Next, select Active for Status. Select the role to assign which limits the permissions of the user. Make sure to check the box to notify the user of the account then click “Create New Account.”

**Create/Manage User Roles and Permissions**

The permissions, or the amount of functionality a user has on managing or interacting with the site, can be set by creating roles and setting permissions.

In People management, click on the “Permissions” tab, as shown in Figure 9.
From here, select either “Roles” or “Permissions.” In Roles, define new roles to allow different permissions. Set permissions for each role by clicking “Permissions” and checking boxes.

Add Content

To add a story, regardless of where the story will appear, click on “Add content,” as shown in Figure 10.
Next, click on the content type depending on what kind of story is being added. For example, any kind of animal, Adoptable, Lost & Found, etc, will be of content type animal. Fill in the form and click “Save.” The story will go to the appropriate page through the filters configured in Views.

**Update Volunteer Application on Volunteer Page**

First, click on the “Volunteer” tab then click “Edit,” as shown in Figure 11.
First, scroll down past the content fields and click “Remove” to remove the old version of the file, as shown in Figure 12.

Now, there is an option of choose a file to upload. Click on “Choose File” and select the file. Then click “Upload,” as shown in Figure 13.
The application is referenced twice on the page and each reference must be updated depending on the name of the file of the new application. The first reference is in the “top_body” content block at the top of the page, as shown in Figure 14.
The hyperlink button, shown as the arrow, is grayed out (inactive). To edit the link, scroll through the text until your cursor is on the hyperlink application, and once the cursor is there, the hyperlink button is active.

Click on the link button – the one without the x and a link edit screen should appear, as shown in Figure 15.

![Figure 15 - Link edit menu](image)

Edit the URL to reflect the new file name. Then press OK.

The next link is in the “bottom_body” content field as well. Repeat the same steps. Then press Save at the bottom of the page and test the links to make sure they work.

**SimpleNews: Newsletter**

After logging into Drupal, click on “People,” as shown in Figure 16.
Then, click on “Newsletter Subscriptions,” as shown in Figure 17.

Click on “Export,” as shown in Figure 18.
Next, checkbox “Active Users” under Status, “Subscribed to the Newsletter” under “Subscribed”, select the newsletter to send, then click on “Export,” as shown in Figure 19. Scroll to the bottom of the screen to obtain the comma separate values of emails.
Cron

* Whenever a notification pops up to run cron, make sure to run cron.

Cron will run periodically to perform routine maintenance to the site, for example, checking for updates. The site is configured for cron to run every 3 hours. It is good practice to run cron whenever a module is enabled. For more information, visit https://drupal.org/cron. To run cron, click “Cron”, as shown in Figure 20, then click “Run cron.”
Site Development

The site uses the Drupal framework to manage all the content. This section includes instructions for basic Drupal management including installing Drupal, determining the version of Drupal, maintenance mode, updating Drupal, modules, views, content types, blocks, and menus.

Install Drupal

Log into the Bluehost cPanel under “Hosting” then scroll down to the section “Mojo Marketplace.” To install Drupal, click on “One-Click Installs,” as shown in Error! Reference source not found.. This will take you to the Mojo Marketplace, a product that makes creating online presence easier.
Scroll down and click on Drupal 7, as shown in Error! Reference source not found.
Finally, click on “Install,” as shown in Figure 23 - Click on Install Figure 23.

Determine Version of Drupal Running

To determine which version of Drupal the site is using, click on “Reports,” as shown in Figure 24.
Next, click on “Status report.” The Drupal version is shown in the first row.

**Maintenance Mode**

Whenever updating or modifying content of a website, it is always good practice to put the site into maintenance mode. This restricts non-admin users to not being able to access the site while the site is in the process of being updated. To put the website in maintenance mode, go to the configuration menu by clicking on “Configuration,” as shown in Figure 25.
Under Development, click on “Maintenance mode,” as shown in Figure 26.

Click the checkbox “Put the site in maintenance mode,” edit the display message, then click “Safe configuration,” as shown in Figure 27.
Once the updates or changes are complete, take the site off maintenance mode by repeating the process of turning on maintenance mode but turn it off instead.

**Update Drupal**

* Before updating, back up the site, as described in Backup Files!

BlueHost provides an upgrade script that can be located on the Drupal install itself. However, Bluehost does not immediately get the most recent version of Drupal.

There is a manual way of installing the most recent version of Drupal to the site.

1. Download the new installation of Drupal from [https://drupal.org/download](https://drupal.org/download).
2. Unzip the file on your local machine.
3. Delete the sites folder out of this unzipped Drupal core update files. Otherwise, the standard sites folder will overwrite the sites folder that contains all your information.
4. Recompress the folder
5. Upload the file to public_html directory on BlueHosts file manager.
6. Extract the files (which replaces all the current ones).
7. Check to see if the report status on the Drupal site reflects the new version as described in Determine Version of Drupal Running. If not, run the
update.php script by navigating to http://www.gilesanimalrescue.org/update.php and following the steps.

**Modules**

Drupal modules extend the functionality of the Drupal core, such as formatting images, newsletters, text formatting, etc. To install, enable, configure, and use modules, first click on Modules, as shown in Figure 28.

![Figure 28 - Click on modules](image)

**Install**

To install a module, obtain the link to the zip or tar file from the web, or download the zip or tar file to your machine. Then, click on “Install new module.” Copy in the URL or upload the file from your computer then press “Install.” To return to the Modules page, click on “Enable newly added modules.”
Enable

To use a module, it must be enabled. In the modules listing, find the module that you just installed. Check the check box then scroll to the bottom and click “Save configuration.”

Configure

Some modules allow setting to be configured to tailor their functionality. To configure a module, find the module in the Modules list. Then click on “Configure,” as shown in Figure 29. The configure options will vary by module.

![Configure modules](image)

Figure 29 - Configure modules

Views

Views are one of Drupal’s powerful frameworks that allow users to group content by filtering rules. To create a new view, first go click on “Views” in the shortcuts menu shown in Figure 30.
Next, click on “Add New View,” shown in Figure 31.

Once in the new view page, the user can specify the name of the view and then choose how to display the content, as shown in Figure 32.
Once the initial set up has been completed, the following screen, shown in Figure 33, allows for full customization of the page. Information that was previously entered on the last screen can also be modified on this screen. In the screen, there are a few main areas that allow for the overall customization of the flow and content of the page. “Filter Criteria” allows the filtering of content being displayed on the view. As shown in Figure 33, this page is being setup to display a grid of adoptable animals where the content type must be “Animal” and status is “adoptable”.

Another main section, page setup, allows the creation of menu tabs, paths, and access permissions to the page. The last most important section is the formatting section. In this section, Drupal allows for five specific styles in listing information. The most common used throughout the site is a grid, which allows for a nice ordering of information with a grid displayed around each piece of information.
Once setting up all the information for a specific page, Drupal provides a preview of the view at the bottom of the page, as shown in Figure 34. Once the view is completed, click Save, otherwise all the hard work will be lost.
**Content Types**

Different pages of content can require different structures, for example, having pictures, dropdowns, etc. To create content types, log in and click on Structure, as shown in Figure 35.

![Figure 35 - Click on Structure](image)

Next, click on Content types. From here, you can create new content types, edit fields, and manage displays.

**Manage Fields**

Fields are a part of content types that allow pages to be tailored to their purpose. For example, different content types will have pictures or multiple blocks to add content. To demonstrate, look at “Animal” content type. Click on “manage fields,” as shown in Figure 36.
All the animal stories in the Animals tab use the content type Animals. Each animal story has all of the fields when the story is created. Note: Not all fields need to be displayed when the story is published. See Manage Display. To add new fields, enter the name of the field under “Add new field,” as shown in Figure 37.

Figure 36 - Manage fields of content type
Select the field type, for example, a text box, dropdown select, image, etc. Once you select field type and widget, click Save. This will take you to a new menu to set properties of the field type and widget, depending on what it is. The configuration of the field can always be edited by clicking “edit” for the field. The order of the fields, which can be changed by drag and drop, is the order of the fields when creating content.

**Manage Display**

Manage display determines what is shown when a story is published. In Structure > Content Types, click on “manage display” in Animal, as shown in Figure 38.
Here, all the fields that appeared in the manage fields tab are listed. First, select the layout for the content type (functionality provided by the views module) below the fields. Animals is a two column stacked. The fields are arranged in the two-column format and fields can be dragged and dropped to each section. They order on this page determines the order displayed when published. The label can be displayed inline or above, or hidden as well.

**Blocks**

The blocks that come with the theme configure the layout of the site. Different themes will have different block configuration. To view the blocks functionality, click on Structure then Blocks, as shown in Figure 39.
Figure 39 - Click on Blocks

View the block layout by clicking “Demonstrate block regions (CorporateClean)” (CorporateClean is the theme). Blocks can be added and configured so they only display on certain pages.

**Menus**

Menus are configured in Structures and appear on the site using Block configuration. To view menus, click on Structure then Menus, as shown in Figure 40.
This site uses the Main Menu that goes along the top of the screen beneath the logo. To view all the links, click on “list links” as shown in Figure 41.

The order the links appear and whether they are nested can be changed by drag and drop. Be sure to click “Save Configuration” at the bottom to save your changes!
To add a link, click on “Add link”, either from the menu page or directly in the list links page. Fill in all the fields and click “Save.”

To make a tab and appear only for certain users, change the settings in the corresponding view.

There are three more menus – Administration, Animal Links, and Site Links – that appear at the bottom of the screen. The blocks functionality configures where those menus are on the screen.

**Lessons Learned**

This being our first ever Drupal website, we had to spend time learning how the website was built. We quickly realized that the website previous students had built was pretty undocumented. We had to go through each page and figure out how each was set up. The hardest was part understanding the concept behind Views. Views had a lot of different style and options that could be used to modify a list of content. Eventually, we understood the basics of how the website worked and started documenting the website on how certain features worked. This would allow for future groups to be able to spend less time getting up to speed and more time focusing on providing changes to the website.

One of the most important things we learned was how to interact with a client and turn their wants into a finished product. We worked closely with our client meeting with her every other week to display our changes and get feedback while also asking for more changes. We can take this experience and use it in real life scenarios in the work place. Another lesson learned was to consolidate all the information for the website in one place. We ran into an issue where previous students had domains hosted on their private accounts. This was not fair to our client because they did not have any control over these private accounts. We made sure to get in contact with previous students in order to retrieve the domains from their private accounts.

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