



# UNIT 9 ASSIGNMENT 2

## Assignment 2

### Learning Aim B & C

Carry out project initiation for an IT project and carry out the planning, execution, monitoring, and controlling an IT project, using an appropriate methodology

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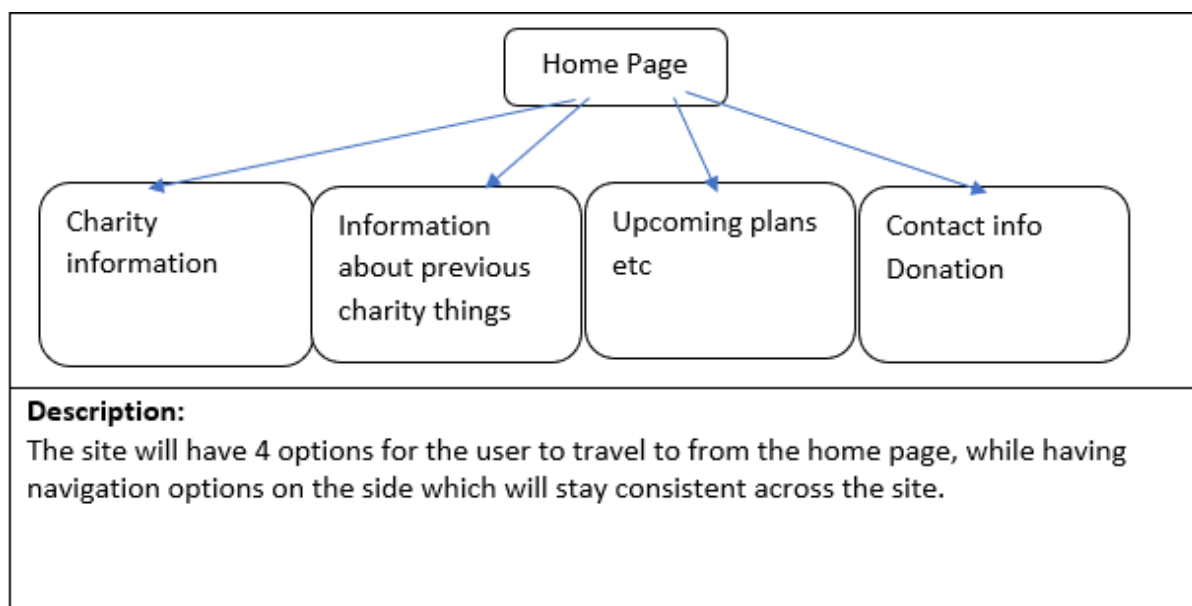
## Introduction

The following document outlines the IT project management process for creating a website using the Agile methodology. While it is unconventional to use Agile for website development, the project team recognised that the fast-paced development approach and close collaboration with stakeholders/product owners aligned well with the nature of the project, which involved building a website for a charity. Therefore, Agile was chosen as the preferred methodology over the traditional Waterfall approach.

## IT Problem and solution

### Problem

The problem for this project is using the correct software to accurately develop a successful website. There are many options available to develop websites, such as notepad++, visual studio code, visual studio community, and Dreamweaver, and among these many options we will have to choose one that works effectively for our project. Below is a display of the website and how it should work when all it comes together, taken from the initial design of the project.



This is the initial sitemap which displays the different pages that will be available for the project.

### Solution 1

The first solution is to make the website using visual studio code. Visual studio code is a lightweight code editor with many powerful tools, such as having options for plugins and add-on onto the software in order to enhance it (VS Code, 2023). There are advantages to using visual studio code and these are detailed below describing the strengths:

- Support for multiple programming languages. This will enable me to do javascript and CSS inside of VS Code as well.

- Intelli-Sense, this is a Microsoft exclusive feature that aims to help developers by trying to autocomplete the code that the developer is typing.
- Cross platform support, this is the fact that visual studio code can be used by all devices, such as Mac, Linux, and Windows, making it somewhat unique as a code editor.
- Extensions and plugins, this is where VS Code offers options for plugins and extensions to improve the base application for visual studio code and expand on it. (Padamkar, 2023)

On the other hand, some of the weaknesses and disadvantages of VS Code include:

- It is not as extensive and feature rich as other IDEs, such as Visual Studio Community
- It does not work well for specific kinds of development such as mobile applications or game development
- It can encounter performance issues with largescale projects
- Some users might find the UI less intuitive compared to other options available (Maurya, 2023)

### Alternative solution 1

Another option that might be used is Notepad++. This is similar to visual studio code as it is another lightweight editor and works well for projects like web development. Some of the advantages can be found detailed below:

- Notepad++ allows users to edit any of their scripts without having to access any heavy-duty editors or software that might require a long loading time for minimal changes
- There is different syntax highlighting for all scripting languages, such as html and JavaScript
- It is completely free and there is a lot of support available online for it
- It is simple and intuitive to use the software for beginners (TrustRadius, 2023)

Some of the weaknesses and disadvantages of the software include:

- It has many bugs, such as when updating the software and this can lead to issues in development
- Opening files over a certain size can cause issues with the software and that is not ideal for our website as we do not want to have the website crash during development
- It lacks support for code auto completion and formatting, putting it behind when compared to newer code editors
- It does not have as many features compared to newer code editors (TrustRadius, 2023)

### Alternative solution 2

Another alternative solution for this project is to use Dreamweaver. Dreamweaver is Adobes IDE for website development and is highly optimised for this, offering options such as

making tables through drop down boxes and is an efficient tool for developing a website for this project. Some of the strengths of Dreamweaver include:

- Dreamweaver highlights code that is written so it can be quickly read through and understood
- Dreamweaver has options that allow users to see their changes live as they make them, meaning that they do not have to switch tabs
- Dreamweaver has constant code validation and syntax checking to ensure that everything is correct
- Dreamweaver offers code suggestions to users as it helps to autofill the code

Some of the weaknesses of Dreamweaver include:

- Dreamweaver is not browser based, meaning that it might not look the same in the web browser
- It can be complicated to learn and understand for new users as it has a large amount of features that can complicate it for new members
- It has a high price point that can be quite off putting, especially when considering the budget of this project
- Automatic coding options such as autocomplete are non-specific as they are made to meet as many users' needs and demands as possible and might not always work for our project scenario. (Gaille, 2016)

## Feasibility study – Visual Studio Code

### Technical assessment

When creating our website in visual studio code, there are many factors that need to be taken into consideration. For example, the hardware and software of the device we are working on needs to be up to speed, and therefore there will be some minimum requirements for working with Visual Studio Code. Due to the fact that there will likely be multiple instances of Visual Studio Code open, the device will have to be able to handle multiple tabs running at the same time and this will be considered when outlining the minimum requirements.

Some examples of the minimum requirements for the technical ability to run Visual Studio Code include:

- A CPU with a minimum of 2 cores, recommended 4 cores at 2.5Ghz clock speed
- Windows 10 or 11
- 8GB of RAM, recommended to be 16GB
- 256GB HDD
- Internet
- 1080p monitor

If these requirements are met then the device will likely be able to run visual studio code effectively and this is a strong advantage for the project.

### Economic assessment

Given that Visual Studio Code is an open-source free software available for users, there is no economic loss when using it, however the hardware costs for the devices to run it will be included in the final costs. Additionally, the average costs of staff, rent, and all of the necessities like electricity and heating are considered as the project cannot begin without a proper space to work effectively. Finally, due to the fact that Visual Studio Code is free for private and commercial use, this means that there will be no issues of legality using it and puts Visual Studio Code at a strong advantage.

Here is a rough budget outline of the project:

Item	Cost
Electricity	£752
Developer salaries	£75/hour (includes all developers)
Team manager salary	£32.50/hour
Visual Studio Code	Free
GitHub	£32/month
Other software	£460
Hardware for each developer	£600 x 4
Temp office space	£3200/month

### Legal assessment

Due to the nature of creating a website there are many legal issues to consider, such as copyright and creative laws for the project. In order to ensure that this does not become an issue in the future, all aspects of the project that are going to be involved in the final product will be screened heavily for any potential issues, and only then will they be able to be introduced to the project. Other than this, any content or media that is used will have to be created in house by the team to prevent any issues arising through the use of media. Any authors of content will have to be credited when we use their work in the visual studio code project, such as in the page or even in the source code through the use of comments that visual studio code allows. Finally, it is important to talk about how nothing in the website is used for profit as the whole website is to raise awareness and therefore it is not for profit other than to sustain itself.

### Operational assessment

Visual Studio Code has a wide array of features that can be expanded upon to be able to include all the features that are required of the website, such as having an image carousel and including multiple pages. Additionally, it has the ability to work on multiple pages at the same time and have different tabs open of the source code, which will greatly help to decrease the total project time and result in a successful final product for the project. Visual Studio Code also has the biggest bonus feature of all of the aforementioned options, in that it supports plugins and extensions, enabling developers to expand on their IDE and customise it for themselves and allowing developers to work faster and expand on the original Visual Studio Code, making it stronger and more powerful compared to before.

### Scheduling assessment

Although Visual Studio Code does not have any specific scheduling features, due to the numerous features available within the software it is highly likely that this will aid in saving time during the development phase and allowing for the project to be completed successfully. Due to the nature of this project being under a tight time schedule, allowing only a few months from start to finish, the ability to save time during development is very attractive and is a considerable advantage for Visual Studio Code and will likely be focused on when choosing the software to plan and develop the website.

### Sustainability assessment

As Visual Studio Code is owned by Microsoft there is always a chance that Microsoft could discontinue production and updates on the software of VS Code, leading to future security issues in the software and potential breaches, however that only applies for the development for the website. Once the website has been created and is published, whether or not VS Code is continued will hold little significance. Given that the time frame for development is miniscule compared to larger projects, being only a few months, the likelihood that VS Code will suddenly be discontinued *and* face security breaches while in development is astronomically low. Due to this, it is highly unlikely that sustainability will be an issue for this and this is a big advantage for Visual Studio Code.

### Security assessment

There is a minimal security risk to developing the website with VS Code as Visual Studio Code is software owned by Microsoft who would likely be at risk if there were any security issues in their own software and therefore it makes it even more unlikely that there would be any security issues with the software. Additionally, the shorter development time for the project means that there is a minimal time frame where there is any chance of a security risk, i.e. development period, and therefore leaves the security high for Visual Studio Code. Finally, with the combination of security software like antivirus and firewalls, there is an even lower possibility of anything happening to the website.

### Usability assessment

Visual Studio Code has earned an esteemed reputation for its outstanding software quality and performance. Furthermore, due to the diverse nature of Visual Studio Code, offering many extensions and plugins, this enhances the usability of Visual Studio Code and allows more creative options for our development team when making the website. Additionally, due to the fact that we are creating a website, it is also important to consider the website that will be used, like Chrome, Edge, Opera, and Firefox, and therefore these are also factors that have to be considered with the development of the website. Overall, VS Code has a high usability score when compared to other options like notepad, notepad++ and more, based on its extensibility options like add-ons and plugins.

## Feasibility study – Dreamweaver

### Technical assessment

Similarly, to Visual Studio Code, Dreamweaver requires roughly the same hardware and software requirements in order to function effectively and handle the work load of



developing multiple websites at the same time. Additionally, it is imperative to establish if Dreamweaver is even able to accurately create a website and this can be verified through things like videos about it and its capabilities.

After reviewing content regarding Dreamweaver, it is established to be a highly effective software for creating a website and the requirements will be specified below:

- A CPU with a minimum of 3 cores, recommended 4 cores at 2.5Ghz clock speed
- Windows 10 or 11
- 8GB of RAM, recommended to be 16GB
- 512GB HDD
- Internet
- 1080p monitor

If these requirements are met with the hardware and OS of the system, then Dreamweaver will be able to effectively make a website for the project.

### Economic assessment

Contrary to VS Code, Dreamweaver requires a paid license to use and therefore will incur more costs for the project and this has to be considered for the budget. Due to funding from the stakeholders, this will likely not be an issue however it is still something to consider and keep in mind. It costs a total of £20 a month (£19.97), and this will have to be for every developer, monthly, to be continued to be used by the team for the development of the project (Adobe, 2023).

This is the budget when including Adobe Dreamweaver prices for all the months of developments for each of the developers.

Item	Cost
Electricity	£752
Developer salaries	£75/hour (includes all developers)
Team manager salary	£32.50/hour
Dreamweaver	£320
GitHub	£32/month
Other software	£460
Hardware for each developer	£600 x 4
Temp office space	£3200/month

### Legal assessment

As Dreamweaver is a part of Adobe, and Adobe is large tech giant, it is highly likely that Dreamweaver follows all necessary laws. This is mostly the same to VS Code, when mentioning how images must be screened and adequately give credit when needed, however it is important to reiterate for this project that it is a non-profit website, which means other than the profits needed to run the page and project, all other profits will be donated to charity as this is what the website is based around. Additionally, we will all be following the necessary procedures in order to follow the relevant laws, like copyright, and therefore there should be no legal issues for our project.

### Operational assessment

In the aforementioned sections of this paper, we briefly discussed the capabilities of Dreamweaver and these remain vital in this assignment as they help to expand on the capabilities of normal text editors such as notepad, etc. Dreamweaver supports the ability to look at the live changes made through your edits to the code by displaying the website on the top half of the screen and the code on the bottom. Additionally, Dreamweaver also enables the project members to work on HTML, CSS, and JavaScript as it supports all of these programming languages, meaning that this is a very viable solution for developing a website. Finally, Dreamweaver also has options to use templates when making a website, meaning that it will be much easier to make new web pages based on previous templates.

### Scheduling assessment

Dreamweaver does not have any built-in scheduling capabilities, however, just like VS Code, Dreamweaver is a highly capable tool that can be used to create an effective website. These tools that can be used to enhance the development and complete the website quicker, which will eventually aid in the scheduling. Saving this significant amount of time is a big advantage for choosing Dreamweaver and helps to promote the choice of Dreamweaver. Yet again, this is crucial as there is a limited amount of time to make the website and all the time that can be saved is highly valuable.

### Sustainability assessment

Similarly, to VS Code, Dreamweaver is at risk of being shut down and discontinued by Adobe, leading them to potential security risks and breaches in the future and this is unsafe. However, given the short duration of the project, it is highly unlikely that even if Adobe shuts down Dreamweaver, the chances of any security issues arising or being detected while development occurs is even more unlikely and therefore it should be a sustainable option for the project. Once the website is developed it will be possible to keep it running without the need for Dreamweaver, eliminating that sustainability risk.

### Security assessment

There is little to no security risk for developing the website in Dreamweaver and once it is online, there is even less risk. The website will be hosted securely and privately, and given that Dreamweaver is a paid service, if there were any security issues then Adobe would be liable for damages if people wanted to sue, and therefore they would want to secure their software to prevent this from happening. It is due to this self interest that I believe Dreamweaver is acceptable as a software to use in terms of the security of the application.

### Usability assessment

Dreamweaver is a highly acclaimed software that has been in use by web developers for many years and therefore has a high credibility. Additionally, it has many different options for development, such as Chrome, Firefox, Opera, and Edge, just like VS Code, and its easy to work with UI makes it great to work for web development. Although it can be harder to understand when beginning, once the user is experienced then it can be an effective tool for development. Finally, due to the ability to see the live changes to the website during

development, it makes Dreamweaver a very attractive option for the project, giving it a big advantage.

### Evaluation of preferred solution

Initially, I was leaning more towards choosing Dreamweaver as the preferred solution for developing this website, however after taking some time to consider the benefits and negatives of both, I ended up deciding to proceed with Visual Studio Code.

The largest advantage of Visual Studio Code compared to the weakness of Dreamweaver is the high price point of Dreamweaver. Given that funding is limited and we need to save every penny that we can, this puts VS Code in a much stronger position compared to Dreamweaver, and therefore the outcome of the economic assessment puts Dreamweaver behind VS Code.

Furthermore, the flexibility of VS Code is a big advantage that I have taken into consideration. Being able to work in multiple programming languages and have different extensions for each developer that they might prefer to have means that every developer will have an enhanced experience creating the website and makes it much more significant for me as the project manager if I were to choose VS Code. This will help to save on both the economic aspect, as well as the usability and scheduling aspect as lots of time will be saved through this.

Finally, given that VS Code is a universal light weight IDE, there is a high probability that our developers will be experienced with using it and therefore be able to work better and faster in VS Code than compared to how they would work in Dreamweaver. This makes VS Code much more advantageous to use and therefore my ideal choice for this project.

### Project Requirements

#### Introduction to the project

##### Purpose of the website:

My aim and purpose is that the website will act as a source of information about the chosen charity 'Strays Meet Holland'. This will be with the intent of raising awareness for this charity.

##### Target audience of the website:

The target audience of the website are primarily pet owners, but also anyone with an interest in animals. Some more specific points include:

- 18 to 65+
- All genders
- Low – high income

Due to the site having the ability to donate my target audience will be older than 18 for people of all genders.

## Project Phasing

### Functional and non-functional requirements

The functional requirements for this project can be seen documented below and elaborated on. Those points include:

- Donation processing: The website will allow users to make online donations securely using a clickable button that links users directly to the donation page of the charity.
- Image carousel/slideshow: the website features pictures and of the animals the charity has saved, this to encourage users to become emotionally invested into the animals shown in the images, increasing the chance of users revisiting the site and donating to the cause.
- Subpages: The site has 4 options for the user to travel to from the home page. I will have the user come back to the home page every time they want to travel between the pages as it is the central page of my site and will help to draw users in. I will do this using images the user can click on to go to the next.
- Social media integration – The website features links to different pages that the charity is related to. Some of these being the original website, Facebook and contact info. As well as my awareness page on Instagram.

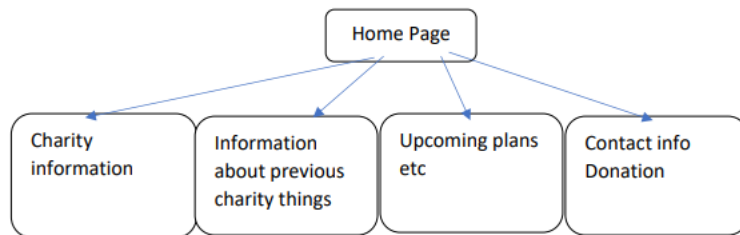
The non-functional requirements for this project are also detailed below:

- High performance/speed: An important part of this project is to ensure that the website loads quickly and provides a smooth user experience even when there is high traffic.  
Furthermore, it is important that the website is highly documented and of high quality, meaning that I can resolve issues or bugs that might occur with the website in the future.
- Layout of the website: This is also an important part of the website; the website is designed in a way that logically organizes the amount of information into categories and different pages. The website background matches that of the original site in order to maintain consistency for the convenience's sake. This means the background colors will provide a sense of comfort and familiarity for the users and will increase user reviews.
- Intuitive design: The website also needs an intuitive design in order to make sure it is easy to navigate, meaning that the focus on the design will be simplicity and this will be improved and expanded upon while the website is being developed.
- Security: Due to the fact that the website will be handling directing people to donations and customer queries, we have to ensure that the website will be secure and all of these aspects of the website will be encrypted.

## Planning

### Design

#### Sitemap



The site will have 4 options for the user to travel to from the home page. I will have the user come back to the home page every time they want to travel between the pages as it is the central page of my site and will help to draw users in.

#### Mood board

**Moodboard**

**Website Colours**

Hex: #ce0d4ac	#e9e7e7			
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**Website Fonts**

I will be using "Arial Font" at 12px for my website as the normal text and "Lucida Sans" at 16px for my headers. I have chosen these two as they are easily readable fonts and commonly used on websites

Images are to be determined however they will be centred around the charity such as where it is, and animals they have rescued as long as permission is given. Example of potential animals is as below. These images will be used in order to give the user an idea of what the site and charity is about, with direct links to the charity included in the site.

Adapted with us in 2020

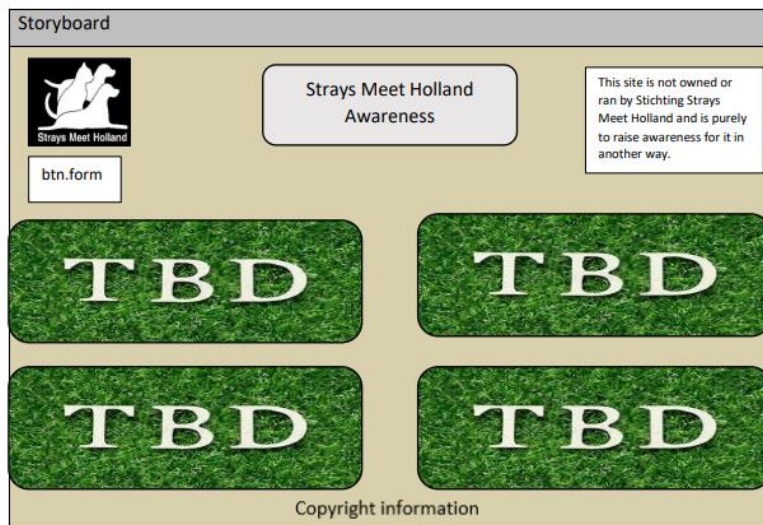
Giselda

Laddy & Benny

Emmal

The colours chosen are to stick to a neutral colour scheme which is the same as the original charity in order to stick to consistency. The grey I chose is to compliment the neutral colour the charity has and to slightly differentiate but not enough to throw anyone off. The images and colours are directly due to the fact that I wish the site to be similar to the original Strays Meet Holland website as I do not want there to be a big contrast between the sites due to the nature of the site being about raising awareness and creating a positive space where I can do that, and if there is too much of a difference between the sites then that many create issues regarding that.

### *Storyboard*




The “TBD” boxes are to be determined/decided images for the site, and they will be images the user can click on to go to the next page. The next pages will all follow the same format and I have included that this site is separate to the original site. The background matches that of the original site in order to maintain consistency for conveniences sake. Matching the background colours to the original site will help to provide a sense of comfort and familiarity for the users and therefore increase user reviews

### Page designs

Page #1	Page Name
<div>Image carousel</div>	<div>Info about image</div>
Copyright information	

This page will feature an image carousel of different animals that the charity has saved and information available about the animal

Page #2	Page Name
<div>Information on charity</div>	<div> Stays Meet Holland</div> <div>Credits for images social media links regarding charity</div>
Copyright information	

This page will feature information on charity and links to different pages that the charity is related to.

Page #3	Page Name
Image of animal	Anbi certification
	Anything they want me to add
Copyright information	

Here I will explain that the charity is ANBI certified and explain what that is, alongside an image of an animal and anything the charity wants me to add.

Page #4	Page Name
Donate here (clickable button)	
Asking users to donate to charity here	Links to Instagram account where more info can be found
	image of the account
Copyright information	

Here I will add a clickable button that links users to the donation page of the charity, as well as adding something to track how many users click on the donation. I will also link my Instagram account for the charity which I am doing for my other unit.

### Resource plan

The resources that will be involved in my project will be vast in order to ensure that project is high quality and covers all of the necessary goals and therefore is successful. Currently, the primary source of resources will come from human knowledge of web development, alongside online tutorials, which can be expanded and improved through the use of



different sources, such as academic books written about web development, experienced developers, and finally the general internet.

These will all be used efficiently and effectively in order to ensure that the charity website is high quality and therefore meets the standards of the client. Furthermore, other resources that could be of use include high quality tech to develop the software as this will ensure that any issues that arise are not technically based, purely human/knowledge based, and therefore can be resolved by taking steps like researching to solve the issue.

### Time plan

TASKS	06/02/2023	13/02/2023	20/02/2023	27/02/2023	06/03/2023	13/03/2023	20/03/2023	27/03/2023
Requirements planning for website								
Meetings								
Pseudocode of website								
Priority planning								
Risk management								
Contingency planning								
Website design								
Website development								
Adjustments for website based on development								
Website testing								
Review of website								
Evaluation of website								

As seen previously, the project has extended periods of time to allow for development and testing to make sure that the website application has a successful outcome. Additionally, when we discuss the budget for our project earlier in the documentation.

Additionally, the final week that has no development and simply review will be a great time for any final bug fixes or issues to be resolved in the scenario that something comes up at the end.

Some additional contingency plans are detailed below:

Risk	Probability	Preparation	Response
Technical problems	Low	In preparation for any technical problems, I have ensured that there will be many backups throughout the project that can be reverted to and relied on in case something occurred.	If there are any technical problems that occur we will ensure that we track back to before they begin and then taking a step by step approach to isolate the problem and resolve it.
Poor project management	Low	In the scenario that the project management is not up to standard, there will be an external third party that comes in and ensures that management is continuing at a high level to ensure the project will be successful.	If the project management becomes a vocalised issue then I will step back and let someone else take over briefly to ensure that the project will run well while I take notes on what I can improve.
Inadequate testing	Unlikely	In preparation for any testing, I will ensure that there is outlined detail on how to perform testing, including	If the tests that occur are not good enough, using the source control software I will go back to the version

		documentation and what steps to take when doing the testing to maximise the efficiency.	that the test was done during, and redo the testing to make sure that test will be done better.
Inadequate resources	Medium	To ensure that the adequate resources for the project, I will ensure that the resources are managed well such as budgeting what is available and rationing the resources to make sure that nothing is stretched thin.	If there is a lack of resources then I will have to ask for more from the stakeholders, as otherwise the project will have to shut down and this will end the project.
Changing requirements	Likely	To prevent much issues to the project if there are many changes to the requirements, I will ensure that there is space within the time plan to adjust for any changes.	If there are changes in the requirements I will ensure that it is integrated as seamlessly as possible to make sure that the project continues running on schedule.
Personnel Issues	Low to medium	To prevent personnel issues during the project I will ensure that all the members of the team are spoken to and make sure that they are satisfied. Furthermore, I will promote the option of communication with a mediator if something occurs.	If any issues occur I will ensure that the project team members will have an opportunity to talk about it and raise any issues, while also looking for satisfactory solutions together.

### Project constraints

The project is to run just shy of two months and supposed to be completed at the end of March. This means that there is a time constraint regarding the schedule of the project that has to be followed in order to create a successful product, the website, and to complete the project successfully.

Additionally, there will be budget constraints as the funding is limited due to the small nature of the project. This means that the team used to create this application will be smaller than might ordinarily be seen for creating software, however they will be supported adequately to ensure that everything runs smoothly. Furthermore, the startup costs will likely be the most expensive, such as purchasing the technology for the developers to create the web applications, such as hardware and software i.e., purchasing GitHub, visual studio code, and laptops to work on.

There are little to no sustainability issues for this project as it is small scale and once the project has been closed, the application should run fine with minimal changes needed. If there are any issues, those can be resolved with external contractors, i.e., the developers that made it initially, and of course they will be paid in the future.

Finally, there are no ethical and legal constraints as this project does not involve anything that could be considered ethically ambiguous, and has no possible legal issues, such as the use of private data or information that is collected about customers, and therefore remains free of this issue

## Risk and issue processes

### Management of risks and issues

There are a number of risks and potential issues that must be considered when running a project, and these will be listed below alongside their severity.

Risk	Probability of occurrence	Issue severity	Expected impact on project
Technical Problems	Likely	Negligible to Severe	Technical issues such as bugs or crashes could present themselves during development or after release of the website leading to a range of consequences from minor inconvenience to significant financial losses depending on the severity of the technical problem.
Poor Project Management	Unlikely	Mild to Severe	Poor project management such as an inability to communicate with others involved, which is crucial for the AGILE project management methodology, could result in delays, missed deadlines, and the failure of the project.
Inadequate Testing	Unlikely	Mild to Severe	Testing is one of the ongoing stages during development and if done poorly could result in a broken and bugged final product that was not correctly fixed due to lack of oversight in finding them.
Inadequate Resources	Low	Mild to Severe	Not enough resources such as time, budget, or scope/people, could lead to rushed development, making the product not as high quality as intended.
Security Breaches	Low to Likely	Dangerous to Severe	Security breaches or vulnerabilities are one of the most dangerous parts of development, and if these were to be exploited it could result in a tirade of issues, meaning that the project could possibly be shutdown.
Changing Requirements	Low	Mild to Severe	Changing requirements, such as shifting user needs or evolving technologies, could instigate changes to the project and therefore make it run off schedule
Legal and Regulatory Issues	None	Mild to Severe	Legal and regulatory issues, such as patent disputes or compliance violations, could lead to internal issues in the project and shut it down.
External Dependencies	Medium	Mild to Severe	External dependencies, such as for Visual studio code and GitHub (for back ups), could leave the project down if something happens to those software and therefore put the project at risk.
Personnel Issues	Low	Mild to Severe	Personnel issues, such as team members leaving or conflicts between team members, could disrupt the development process and lead to delays or subpar work.

Lack of User Adoption	Unlikely	Mild to Severe	Even if the application is well-designed and technically sound, a lack of user adoption could result in low engagement and ultimately, the failure of the project.
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### Ongoing monitoring

This will be further documented later, however as the project will be ongoing, there will be many logs and documentation of the project, such as meetings, test plans, errors identified, and improvements to be made. This ensures that the project can stay on track and heading into the right direction, while keeping the stakeholders involved and providing them with clear evidence that the project is progressing forward at a steady pace, ensuring that the project remains funded and operational due to the stakeholder's satisfaction.

## Execution and management processes

### Time

Throughout the project this section will detail the time spent on sections, such as planning, followed by development and testing.

Date	Work completed	Problems and issues
03/02/23	Hired team and assigned job roles to everyone	Some developers were unable to work when they were required to start so some agencies were contacted to ensure that the project could continue on time.
10/02/23	Finished design of applications and held meetings with shareholders about design	None
15/02/23	Pseudocode of application finished, framework of website clearly shown	The developers struggled a bit initially to keep to the schedule with the pseudocode but they managed to finish it on time.
22/02/23	Priority planning completed and risk management meetings took place. Shareholders informed of biggest risks and they confirmed we could continue.	None.
27/02/23	Website has begun development alongside	There were some personnel issues however they were

	finishing the GUI design. Testing starts soon alongside adjustments for any mistakes	resolved in mediated meetings between both parties
01/03/23 – 20/03/23	Website has continued development. No large issues arisen and any issues that have arisen were dealt with due to previous planning. Contingency plans of allowing for more time in case of errors helped.	Work continued fine, no reported issues arisen and all resolved.
27/03/23	Website is finished by this point, now only the review of the work completed and any improvements that have to be made to the project.	None, stakeholders happy with final product and development team is finished.

## Cost

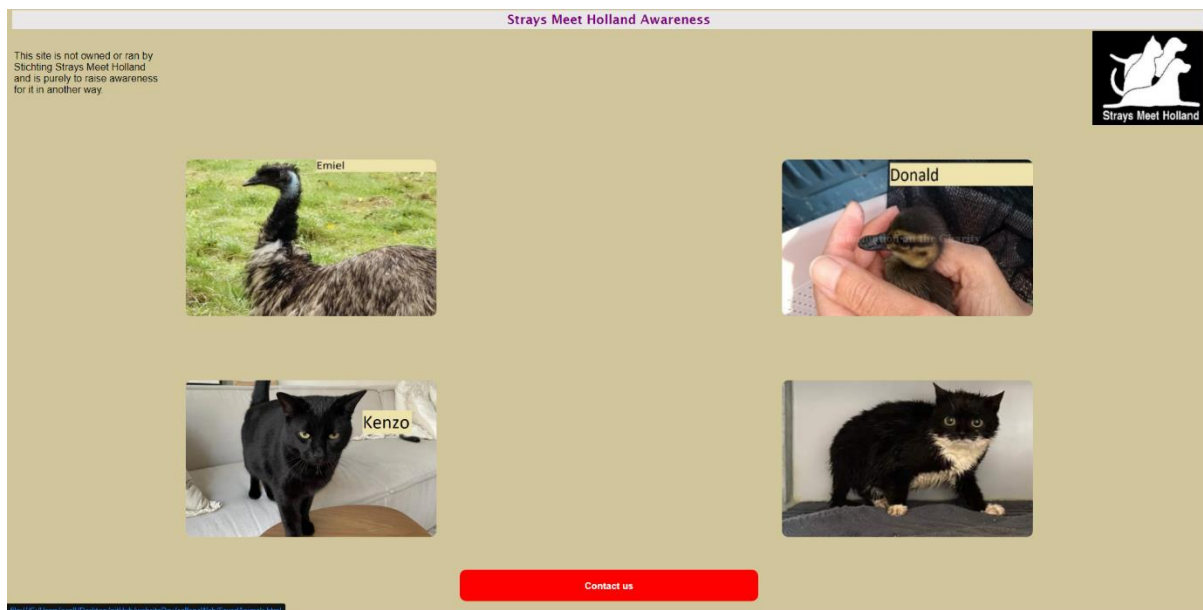
Below are the costs detailed with my project and what the money is used on.

Item	Cost
Electricity	£752
Developer salaries	£75/hour (includes all developers)
Team manager salary	£32.50/hour
Dreamweaver	£320
GitHub	£32/month
Other software	£460
Hardware for each developer	£600 x 4
Temp office space	£3200/month

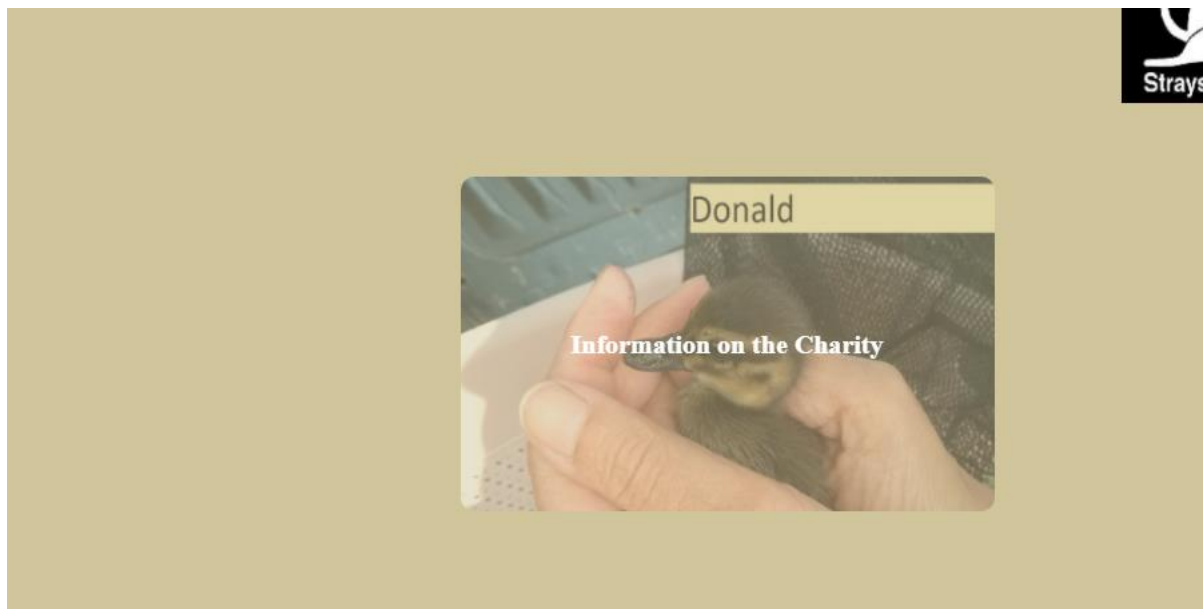
## Quality

The quality of this project will be defined by its ability to function and work without issues, i.e., any bugs preventing the website from running. This means that the definition of quality for this website is a high-quality intuitive user interface of the website that operates smoothly without any issues. This can be seen documented in the development of the website, and some snapshots below.

First I will display the home page that is available for the final website.



This also has highlighting features when hovering over an image:



The HTML for this part of the website is shown below.

This HTML shows the heading, followed by the text in the top left that states the website is not owned by the charity, and finally the logo in the top right.

```
<table width="100%" border="0" cellpadding="50x">
<tbody>
<tr>
<td>
<a href="SavedAnimals.html">
<div class="container">

<div class="fadeText">
<div class="overlayText">
<p style="font-size: 20px; font-weight: bold">
Animals Saved
</p>
</div>
</div>
</a>
</td>
</tr>
</tbody>
</table>
```

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8" />
<title>Home</title>
<link href="Styles/GlobalStyles.css" rel="stylesheet" type="text/css" />
<link href="Styles/HomeStyle.css" rel="stylesheet" type="text/css" />
</head>

<body bgcolor="#d1c69b">
<table class="bgColourPreset" bgcolor="#e9e7e7">
<tbody>
<tr>
<th class="homeHeader" scope="col">
<a href="Home.html">
<div class="headerDiv">Strays Meet Holland Awareness</div>
</a>
</th>
</tr>
</tbody>
</table>

<table width="100%" border="0">
<tr>
<td width="50%">
```

The code above displays how the images are set up, and I will now show the CSS that gives the image the hover effect when the mouse is on top of it.

```
.boxImage {  
  height: 250px;  
  width: 400px;  
  margin-right: auto;  
  margin-left: auto;  
  display: block;  
  border-radius: 10px;  
  opacity: 1;  
  transition: 0.5s ease;  
  backface-visibility: hidden;  
}  
  
.boxImage:hover {  
  opacity: 0.5;  
}
```

These images showcase the CSS styles that define the website and showcase how the different styles were achieved. The numerous styles vary and it is important to keep track of all of them in order to ensure that the team does not accidentally refer to the wrong style when trying to create something. The remaining images all use the same format in order to create the hover effect.

```
.container:hover .fadeText {  
  opacity: 1;  
}  
  
.overlayText {  
  color: white;  
  font-size: 16px;  
  left: 50%;  
}  
  
.fadeText {  
  transition: 0.5s ease;  
  opacity: 0;  
  position: absolute;  
  top: 50%;  
  left: 50%;  
  transform: translate(-50%, -50%);  
  -ms-transform: translate(-50%, -50%);  
  text-align: center;  
}
```

```

<div width="100%" style="text-align: center">
  <button
    class="buttonContact"
    onclick="window.location.href = './ContactUs.html'"
  >
    Contact us
  </button>
</div>
</body>
</html>

```

This is the final part of the page, where it shows the contact us button of the page.

This is the CSS for that part of the page where it shows how the button changes sizes when it is pressed, and also how the colour/format of the button is established.

```

.buttonContact {
  background-color: #ff0000;
  text-align: center;
  height: 50px;
  width: 25%;
  font-family: Arial;
  font-size: 15px;
  font-weight: bold;
  margin: auto;
  border-radius: 10px;
  border: 0;
  cursor: pointer;
  color: white;
}
.buttonContact:hover {
  background-color: #eb0000;
}
.buttonContact:active {
  transform: scale(0.98);
}

```

Due to the large number of pages, and all the HTML that the limit the pages shown in the document to the one containing form page, however there are more that the reader can view file: [Website link](#)

The next page is the image carousel page.



## Strays Meet Holland Awareness



These are all different animals that have been saved by Strays Meet Holland, each with their own story. It is important to the charity to make sure that every animal they can is rescued and provided a safe environment where they can recover until they are eventually ready to find their forever homes!

This is only a small sample of the many, many, animals that have been saved by Strays Meet Holland, and there is so much work they have done that is not even documented on their website, but instead on their Facebook page which can be found just by searching "Strays Meet Holland", along with their actual site.

They can also be found on the "Information" page which can also be reached through this button.

Information

Home

This is the whole page that contains the image carousel, and below we show how the team managed to set up the changes.

De 3 H's.

Princess & Daisy

Bibi

Waterkippie.

```

<table width="100%" border="0" cellpadding="50px">
  <tbody>
    <tr>
      <div class="containerSlideshow">
        <td>
          <center>
            <div class="slideshowImg fade">
              
            </div>
            <div class="slideshowImg fade">
              
            </div>
            <div class="slideshowImg fade">
              
            </div>
            <div class="slideshowImg fade">
              
            </div>
          </center>
        </td>
      </div>
    </tbody>
  </table>

```

This is the HTML for the image carousel, and now I will show the CSS and the javascript behind this.

```

let slideIndex = 0;
showSlides();

function showSlides(n){
  let i;
  let slides = document.getElementsByClassName("slideshowImg");

  for (i = 0; i < slides.length; i++){
    slides[i].style.display = "none";
  }

  slideIndex++;
  if(slideIndex > slides.length) {slideIndex = 1}
  slides[slideIndex-1].style.display = "block";
  setTimeout(showSlides, 3000);
}

```

This is the JavaScript for the Image carousel. It shows how the images rotate through each other every 3 seconds, and that loops through the different images by assigning them a number and changing that number every time it the function. Once the slideIndex is greater than the amount of slides, it loops back to number one, meaning that the images will loop constantly.

This is the CSS for the image carousel and shows the different aspects of that make up the image carousel, like the fade in that changes the opacity, to aligning the image in the centre of the left side of the screen.

```
.containerSlideshow {
  max-width: 100%;
  position: relative;
  margin: auto;
}
.slideshowImg {
  display: none;
  right: 50%;
  left: 50%;
}
.fade {
  animation-name: fade;
  animation-duration: 1.5s;
}
@keyframes fade {
  from {
    opacity: 0.4;
  }
  to {
    opacity: 1;
  }
}
.savedAnimalsP {
  font-size: 20px;
  margin: auto;
  text-align: center;
  top: 10px;
  font-family: Arial;
}
```

This is the final web page with the contact form that includes validation for the fact that the fields are filled in, and therefore the users using the page will be able to ensure that anything they fill out will not be missing crucial information that could get them a response or to send a form that does not make sense.

The screenshot shows a web page with a light beige background. At the top, a purple header bar contains the text "Strays Meet Holland Awareness". Below the header, on the left, are labels for "Name:", "Email:", "Subject:", and "Content:". To the right of these labels are input fields: a text box for "Your Name", a text box for "Your Email", a text box for "Subject", and a large text area for "Content". Below the input fields are two black buttons with white text: "Submit" and "Home".

This is website page that contains the contact form. Below is the HTML for this page.

This shows how the fields are setup, including the text, width, placeholders, etc.

```
<tr>
  <td width="15%">Subject:</td>
  <td>
    <input
      type="text"
      name="Subject"
      id="subjectInput"
      placeholder="Subject"
    />
  </td>
</tr>
<tr>
  <td style="vertical-align: top">Content:</td>
  <td>
    <textarea
      name="ContentArea"
      id="contentInput"
      cols="150"
      rows="5"
      placeholder="Content"
      required
    ></textarea>
  </td>
</tr>
<tr>
```

```
<table width="100%" border="0" style="margin: auto">
  <tbody>
    <tr>
      <td width="15%">Name:</td>
      <td>
        <input
          type="text"
          name="Name"
          id="nameInput"
          placeholder="Your Name"
          required
        />
      </td>
    </tr>
    <tr>
      <td width="15%">Email:</td>
      <td>
        <input
          type="email"
          name="Email"
          id="emailInput"
          placeholder="Your Email"
          required
        />
      </td>
    </tr>
```

The above tables also show how the content field was made to be so much larger than all of the others.

And this is the final button that shows how the user is able to submit the form to the owner of the webpage/our development team.

```
<td colspan="2" style="text-align: center">
  <br />
  <input
    type="submit"
    name="Submit"
    onclick="requiredForm()"
    id="SubmitButtonContact"
  />
</td>
```



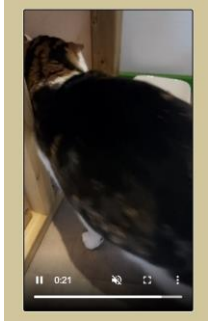
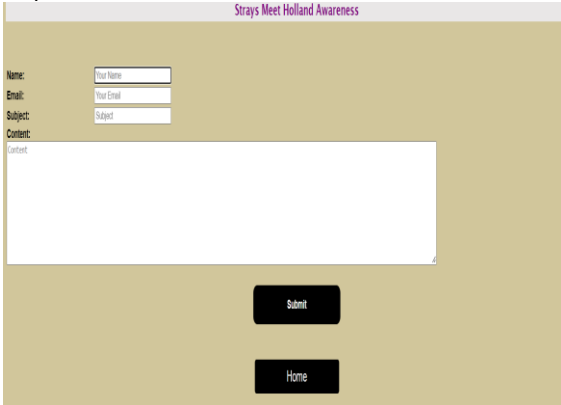
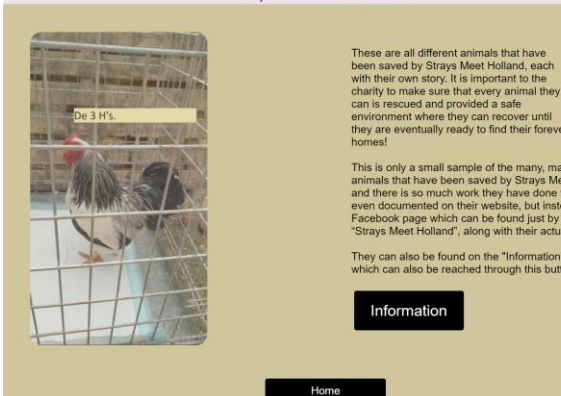
It refers here to the javascript function "requiredForm()", and this is shown below.

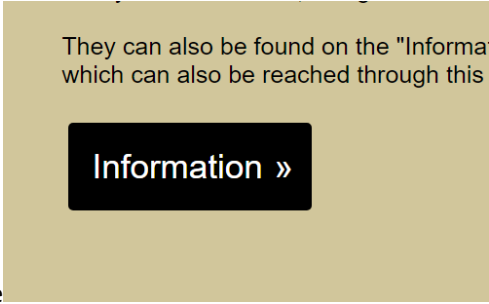
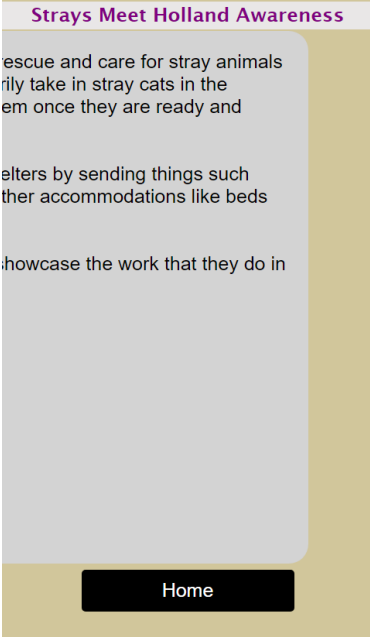
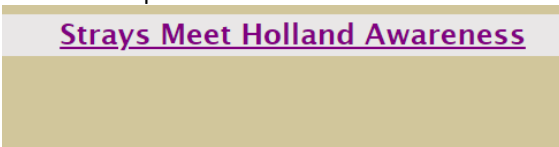
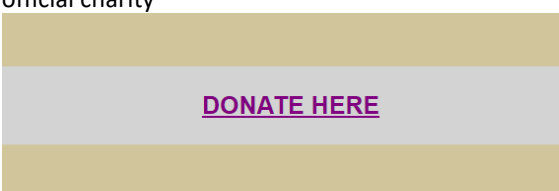
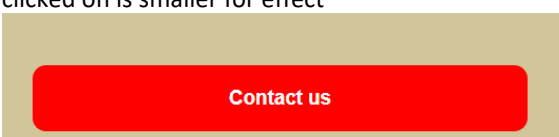
```
function requiredForm(){
  var emptyEmail = document.forms["ContactForm"]["Email"].value;
  var emptyName = document.forms["ContactForm"]["Name"].value;
  var emptyContent = document.forms["ContactForm"]["ContentArea"].value;
  if (emptyEmail == ""){
    alert("Please fill all fields");
    return false;
  }
  else if (emptyName == ""){
    alert("Please fill all fields");
    return false;
  }
  else if (emptyContent == ""){
    alert("Please fill all fields");
    return false;
  }
  else{
    alert("Submitted");
    return true;
  }
}
```

This script gets all of the required fields and assigns them to variables, and then checks if they are empty. If they are empty, it send a message to fill in the fields to the user, and if it is fully completed, it lets the user know they have successfully submitted the form.

Again, all of the web pages and scripts can be found and viewed by downloading them from the link above.

## Test log

Test No	Description	Expected Results	Actual Results	Comments
1	<p>The 4 images on the home page lead to the 4 separate pages</p> 	Pass	Pass	Leads to the 4 respective pages
2	<p>The video will play on the donate page</p> 	Pass	Pass	<p>The video plays</p> 
3	<p>The contact form will not submit due to lack of required information</p> 	Pass	Pass	Form does not submit. See image below
4	<p>The image carousel will change images every few seconds</p> 	Pass	Pass	Images change

5	<p>Information button takes user to information page</p> 	Pass	Pass	Loads information page
6	<p>Home page will load from home button</p> 	Pass	Pass	Home page loads from the button
7	<p>Home page will load when clicking on the purple text at the top</p> 	Pass	Pass	Loads home page successfully
8	<p>Donate here button loads donation page for official charity</p> 	Pass	Pass	Leads to external site of donation page
9	<p>Contact us button dims on hover and when clicked on is smaller for effect</p> 	Pass	Pass	Button dims and gets smaller on click. See image below
10	<p>Hovering over images on home page menu gives text displaying what the page is about and makes the image go white slightly/transparent</p>	Pass	Pass	Image goes slightly transparent, and text














































































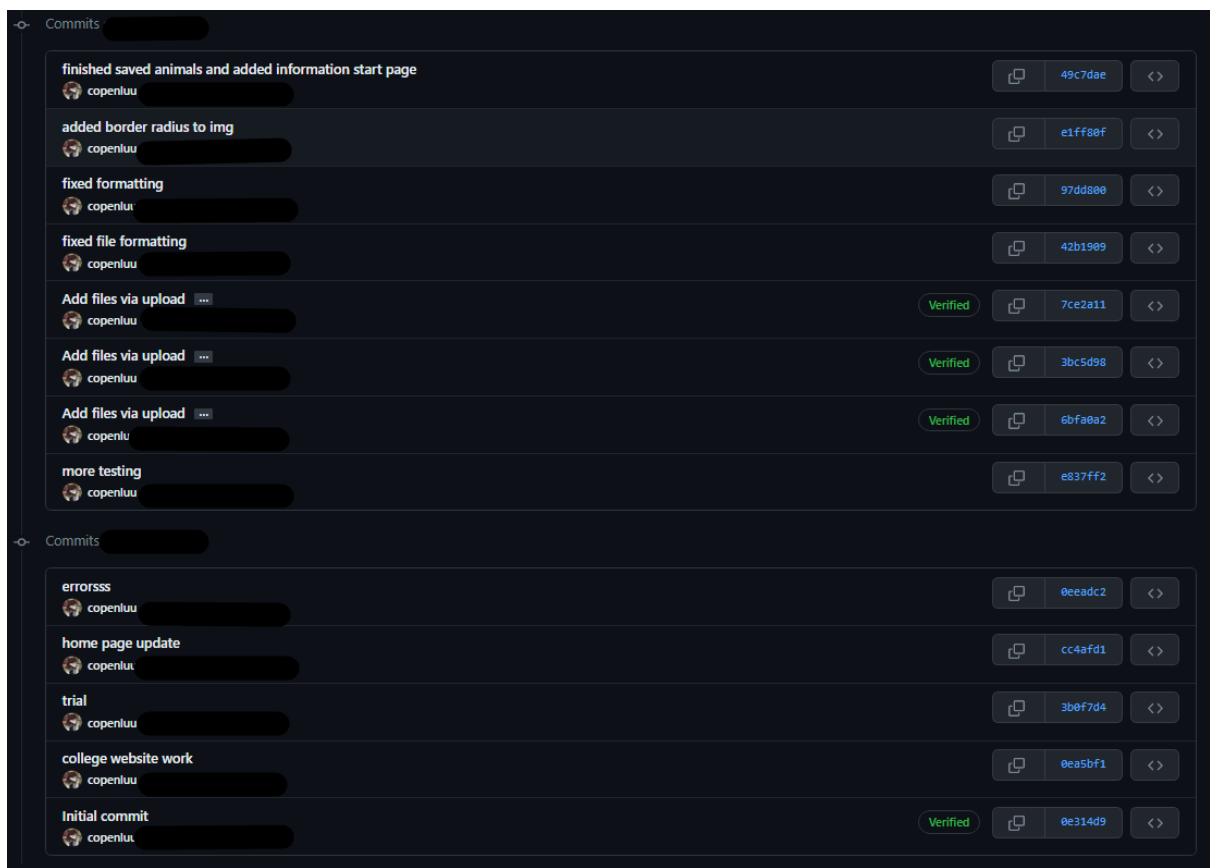




## Monitoring project management processes

Here is a list of the commits made on GitHub by the team over the course of the development of the website.

Commits	
 copenluu	 e92349e 
 copenluu	 35ec618 
Commits	
added alt  copenluu	 ca8a0a9 
Commits	
updated website and fixed formatting  copenluu	 a9f5937 
Commits	
added video. finished  copenluu	 97739d5 
updating <small>WIP</small>  copenluu	Verified  c6eb85d 
fixed input form  copenluu	 5438ccb 
Commits	
added new page and updated stuff. working on js for email validation  copenluu	 86869ba 
Commits	
Merge pull request #1 from copenluu/pulltowebDev <small>WIP</small>  copenluu	Verified  77c200e 
finished design for donate page  copenluu	Verified  b88f00a 
finished design for donate page  copenluu	Verified  b88f00a 
Commits	
work  copenluu	 e724708 
added new web pages and cleaned up. added page specific styles  copenluu	 40238e0 
added new page and image  copenluu	 f1d041e 
Commits	
update  copenluu	 18afcc5 
finished info page working on new certi page  copenluu	 f86c72b 
updated info page and style  copenluu	 b7ff8db 
Commits	
finished saved animals and added information start page  copenluu	 49c7dae 
added border radius to img  copenluu	 e1ff80f 
fixed formatting  copenluu	 97dd800 
fixed file formatting  copenluu	 42b1909 
Add files via upload <small>WIP</small>  copenluu	Verified  7ce2a11 
Add files via upload <small>WIP</small>  copenluu	Verified  3bc5d98 
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Please keep in mind that these are supposed to be viewed from bottom to top, with the Initial commit in the last screen shot being the first commit, and the “.” in the first screenshot being the last ones made.

Below are the meetings that took place for the project.

Date	Attendance	Agenda	Task Allocation	Due Date	Comments
06/02/23	Stakeholders and I. Afterwards, developers and team manager	Stakeholder meeting to discuss project and the direction they want to go, after we had a meeting about requirements for the website	Developers and team manager set about creating requirements for website	13/02/23	N/A
13/02/23	Developers and team manager	Reviewed created requirements and then assigned pseudocode task, alongside priority planning of tasks	Developers and team leader	20/02/23, 27/03/23	Team completed good work and is on schedule
20/02/23	Developers and team manager	Reviewed pseudocode and checked in on priority planning. Assigned GUI design alongside active development	Developers to do design and development, Team manager to continue priority planning	27/02/23, 06/03/23	Working on time and on schedule, AGILE project management methodology is working well.

27/02/23	Stakeholders, after that the whole team	Informed stake holders of current position in project, received approval to proceed. Developers have finished first stage of development and design of website. Testing, developments and adjustments now being executed in parallel	Developers to test, develop, and adjust the program, team manager to keep them on track	20/03/23	The team is working good and very slightly ahead of schedule, allows for more breathing room later on. Now the team will start alternating between testing, development adjustments, so weekly meetings will simply be updates
06/03/23	Developers and managers	Updated on current position, working on schedule and implementing new features	Continue as previously	20/03/23	All going according to plan, no bugs or issues
13/02/23	Developers and managers	Had some bugs with the website and some developers had called in sick, however the extra time from being ahead of schedule and alongside more agency developers has led to the project continuing at normal pace	Continue as previously	20/03/23	All going well, bugs and issues all resolved.
20/03/23	Team meeting, then stakeholder	Team showed us final product to give to stakeholders, working as intended and no bugs. Provided them with the task to review the website and evaluate it for the future. Had meeting with stakeholders who were happy with final product and accepted it, project soon proceeding to closing phase	Review and evaluate application	27/03/23	The project is almost completed, all parties involved are happy and all is going well.
27/03/23	Team and stakeholders	Final meeting including all parties, the team manager gave a final rundown on the project, including the	N/A	N/A	Project is closing now. Successful final project and product.

		review and evaluation, stakeholders complimented the work and ended there. Project closing now.			
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## Conclusion

To conclude, while throughout the project there were a number of bugs and issues that arose, they were resolved through the use of the contingency plans and preparing for any issues that might arise. Overall, the project was huge success, the final product was delivered on time, everyone was paid, and the work was concluded. I would be happy to use this project as an example to base future projects on as it allowed for a completed final product with minimal issues during the execution and monitoring of the project. This led to a relatively stress-free project and an enriching experience for hopefully all involved.

## Bibliography

Adobe. (2023, April 19). *Adobe Price Plan*. Retrieved from Adobe:

[https://www.adobe.com/uk/products/dreamweaver.html?gclid=EAlaIQobChMI08G\\_6tq1\\_gIV5OjtCh0WGQb2EAAYASAAEgLor\\_D\\_BwE&mv=search&mv=search&sdid=J7XBWQ1H&ef\\_id=EAlaIQobChMI08G\\_6tq1\\_gIV5OjtCh0WGQb2EAAYASAAEgLor\\_D\\_BwE:G:s&s\\_kwcid=AL!3085!3!474050988867!e!!g!!dream](https://www.adobe.com/uk/products/dreamweaver.html?gclid=EAlaIQobChMI08G_6tq1_gIV5OjtCh0WGQb2EAAYASAAEgLor_D_BwE&mv=search&mv=search&sdid=J7XBWQ1H&ef_id=EAlaIQobChMI08G_6tq1_gIV5OjtCh0WGQb2EAAYASAAEgLor_D_BwE:G:s&s_kwcid=AL!3085!3!474050988867!e!!g!!dream)

Gaille, B. (2016, January 19). *16 adobe dreamweaver pros and cons*. Retrieved from Brandon Gaille: <https://brandongaille.com/16-adobe-dreamweaver-pros-and-cons/>

Maurya, D. (2023, January 28). *Drawbacks of VS Code*. Retrieved from Quora:

<https://www.quora.com/What-are-the-drawbacks-of-using-Visual-Studio-Code>

Pedamkar, P. (2023, April 18). *What is visual studio code*. Retrieved from Educba:

<https://www.educba.com/what-is-visual-studio-code/>

TrustRadius. (2023, April 18). *Notepad++ Pros and cons*. Retrieved from Trust Radius:

<https://www.trustradius.com/products/notepad/reviews?qs=pros-and-cons#reviews>

VS Code. (2023, April 18). *VS Code*. Retrieved from VS Code Why VS Code:

<https://code.visualstudio.com/docs/editor/whyvscode>