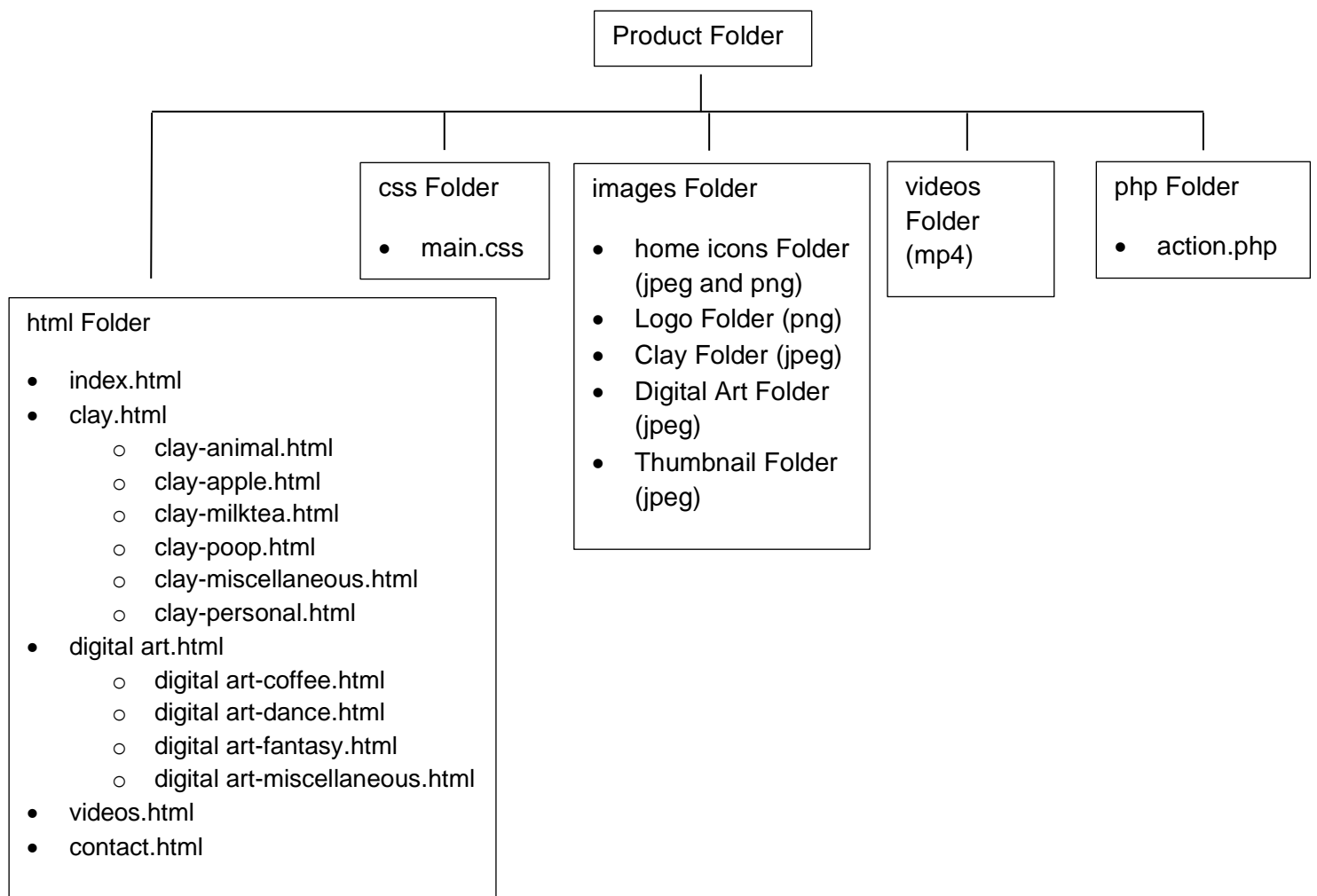


Criterion E: Product development

Complexities to Address the Client's concerns:

1. Cascading Stylesheets (pp. 3- 4)
2. Manipulation of HTML (pp. 5- 7)
3. Manipulation of PHP (pp. 8)
4. Manipulation of Graphics (pp. 9- 11)



Technique: CSS

The manipulation of CSS code is done in Dreamweaver. CSS is used to design and improve on the layout of the website. All the webpages have one main CSS file attached, namely, main.css.

The CSS file is attached to the HTML files with the <link> tag:

```
<link href="../css/main.css" rel="stylesheet" type="text/css">
```

type="text/css" is to specify that the media type¹ and only allow the sheet to contain CSS code

Allow the HTML to locate the main.css file

rel="stylesheet" is to specify that the external source is a stylesheet

Figures below are the CSS code that is common for all webpages which is also to ensure consistency between webpages.

A. Background and Heading

```
body {  
  background:#AFCBE2;  
}  
  
.header {  
  font-family: Baskerville, "Palatino Linotype", Palatino, "Century Schoolbook L", "Times New Roman", "serif";  
  font-size: 50px;  
  text-align: center;  
  color: mediumpurple;  
}
```

Style the <body> tag to change the background color

Style the id="header" for the heading of the website

B. Navigation

```
#navi {  
  overflow: hidden;  
  background:#FFD2E5;  
  padding: 15px 15px;  
  text-align: center;  
  margin: 0px 10px 0px 10px;  
}  
  
#navi a {  
  font-family: Consolas, "Andale Mono", "Lucida Console", "Lucida Sans Typewriter", Monaco, "Courier New", "monospace";  
  color:darkslateblue;  
  background:white;  
  padding: 10px 30px 10px 30px;  
  margin: 0px 20px 0px 20px;  
  text-decoration: none;  
}  
  
#navi a:hover {  
  background-color:lightpink;  
}
```

Style the navigation bar or class="navi"

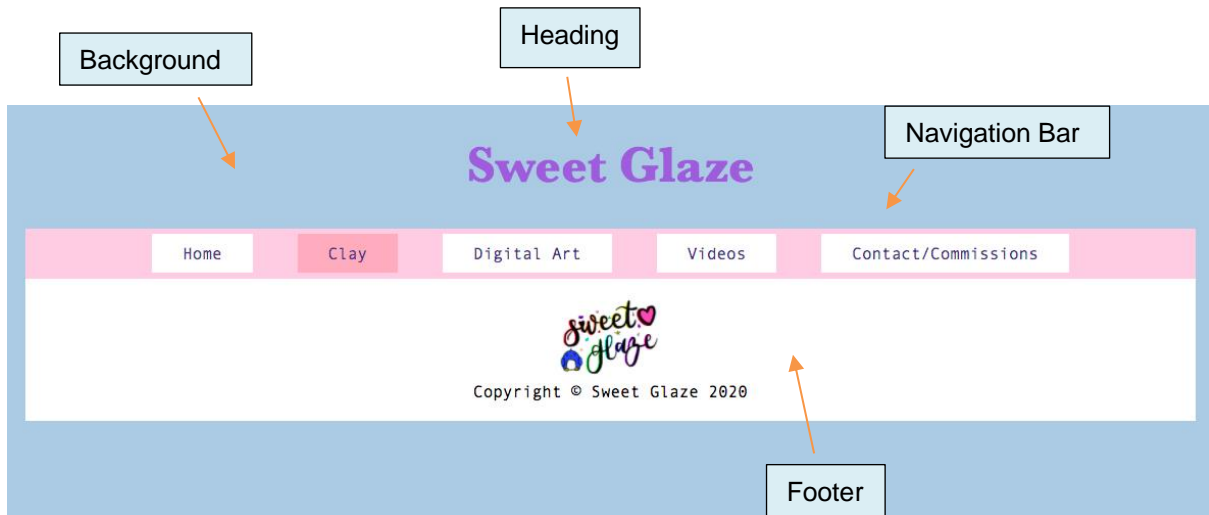
Style the links inside the navigation bar

Style when the user hovers over the links

¹ HTML Type Attribute, www.w3schools.com/tags/att_type.asp.

C. Footer

```
footer {  
  text-align:center;  
  background:white;  
  margin: 0px 10px 0px 10px;  
  padding: 20px 0px 20px 0px;  
  font-family:Consolas, "Andale Mono", "Lucida Console", "Lucida Sans Typewriter", Monaco, "Courier New", "monospace";  
}
```



Above shows the screenshot of the website corresponding to the above CSS code. When the cursor hovers over the 'Clay' button, its color changes as seen in the above navigation code.

Technique: HTML to improve Functionality

A. Overall Structure

Divisions are used on the main content of each webpage by mainly using the `<main>` and `<div>` tags. These tags are assigned class and identifiers so, that the CSS and JavaScript are able to make changes specific to that element.

For example, this can be seen below which shows the HTML code for the home page.

```
<main class="parent">
  <div class="home">
    <div class="section1"> <im...
    <div class="section2"> <di...
  </div>
</main>
```

`<main>` tag called parent which acts as a container for all the other divisions

`<div>` tag called home which acts as a container for the other divisions: section1 and section2

B. Images

As the Client's wish, images are embedded in different webpages with different formatting and layouts. For example, below is HTML of the images that are placed in the division called section2.

```
<a href="clay.html">
  
</a>
<div class="homedesc">I have always been into clay making! Click for more info! </div>
```

The `` tag is so that when the image is clicked, the user is sent to a specific location

`alt="..."` is the alternative text to the image

`src="..."` is the location of the image in order for the html to show the image in the website

The text here is to give a description under the image which is enveloped inside another div tag

`style="width:..."` changes the design of that specific image

C. Navigation Bar

<nav> tag called navi holding contents inside the navigation bar

```
<nav id="navi">
  <a href="index.html" class="btn">Home</a>
  <a href="clay.html" class="btn">Clay</a>
  <a href="digital art.html" class="btn">Digital Art</a>
  <a href="videos.html" class="btn">Videos</a>
  <a href="contact.html" class="btn">Contact/Commissions</a>
</nav>
```

 directs the user to the intended location when they click the button in navigation.

D. Video Gallery

In videos.html, I placed a video gallery to show videos. The video gallery gives the user a selection of videos of which they can choose from.

The HTML code for the gallery is as follows:

type="..." is used to specify that the source is an mp4 file

This is so the video has video and audio controls

```
<section class="videocontainer">
  <video class="slider" src="../../videos/Video part 1.mp4" type="video/mp4" controls>
  </video>
  <ul>
    <li>
      <video onclick="videoslider('../../videos/Video part 1.mp4')" src="../../videos/Video part 1.mp4" poster="../../images/Thumbnail/Part 1 thumbnail.png">
      </video>
    </li>
    <li>
      <video onclick="videoslider('../../videos/video part 2.mp4')" src="../../videos/video part 2.mp4" poster="../../images/Thumbnail/Part 2 thumbnail.png">
      </video>
    </li>
    <li>
      <video onclick="videoslider('../../videos/video part 3.mp4')" src="../../videos/video part 3.mp4" poster="../../images/Thumbnail/Part 3 thumbnail.png">
      </video>
    </li>
    <li>
      <video onclick="videoslider('../../videos/video part 4.mp4')" src="../../videos/video part 4.mp4" poster="../../images/Thumbnail/Part 4 thumbnail.png">
      </video>
    </li>
  </ul>
</section>
```

 and tags are used to arrange the video selection by putting each <video> into its own tag

OnClick="..." executes the JavaScript from source in page 12 when the video is clicked

poster="..." acts as the thumbnail for the video

E. Contact Form

A contact form is used to allow visitors to give requests and commissions to the client. The contact form is made with the guidance from the ITGS teacher.

Below is the <form> tag in the HTML file:

```
<form method="post" action="../php/action.php">
```

method="post" means that it will send data to the web server²

action="..." is where the data is sent to when the form is submitted, the php file, action.php, is put as the location.

Below is the content of the <form> tag:

'type' is the kind of input that is accepted

The 'for' attribute is to show which id the label is attached to

'placeholder' is essentially a text to guide the user on what to type on the input

```
<label for="name">Full Name </label>
<input type="text" id="name" name="name" placeholder="Enter your name..">

<label for="email">Email</label>
<input type="email" id="email" name="email" placeholder="Enter your email..">
<br>
<br>
<label for="subforcontact"> Subject for Contact</label>
<select id="subforcontact" name="subforcontact">
  <option value="adclay">Air Dry Clay </option>
  <option value="pclay"> Polymer Clay</option>
  <option value="digart">Digital Art</option>
  <option value="quest"> Others</option>
</select>

<label for="content"> Message</label>
<textarea id="content" name="content" placeholder="Tell us more..." style="height:200px">
</textarea>

<input type="submit" value="Submit">
```

The input is called 'name' and this is used later to get the information in the php code

<select> tag gives the user a list to choose from. The <option> tag shows the content of the list.

<textarea> tag is the space that allows the user to type in

² Broadley, Claire, and Claire is seasoned technical writer. "Attribute for METHOD = GET: POST." ", 3 Nov. 2019, html.com/attributes/form-method.

Technique: Using PHP to improve Functionality

PHP code is used to handle the content when the user submits the contact form.
Below is the code inside the action.php file.

```
<?php
$name = $_POST['name'];
$email_from = $_POST['email'];
$subforcontact = $_POST['subject'];
$content = $_POST['content'];

$email_subject= "Form Submission from Sweet Glaze";
$email_body= "Visitor Name: $name.\n".
             "Visitor email: $email.\n".
             "Visitor Subject: $subforcontent.\n".
             "Visitor Content: $content.\n";

$to= "fenylau@gmail.com";
$headers= "From". $email_from;
mail($to,$email_subject,$email_body,$headers);
header("Location: contact.html");
?>
```

Declaring variables. \$_POST is to obtain the value of inputs inside the <form> tag from the HTML file

Declaring variables for the content of the mail

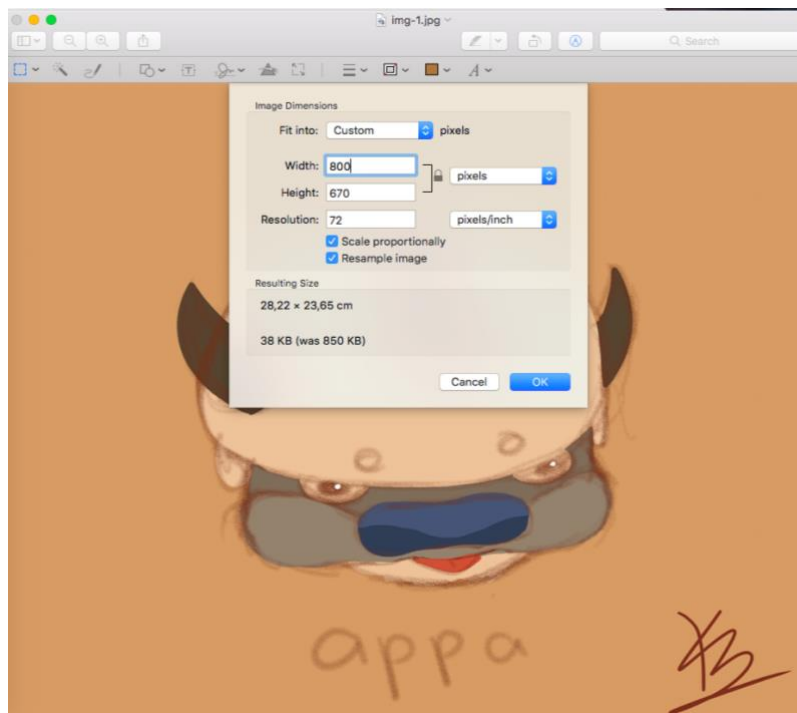
header() where it goes back to after the form is submitted

mail(...) is so it can send the variables to the email

The data from the form is collected and sent to the client's email.

Technique: Image Manipulation

A. Reducing File size

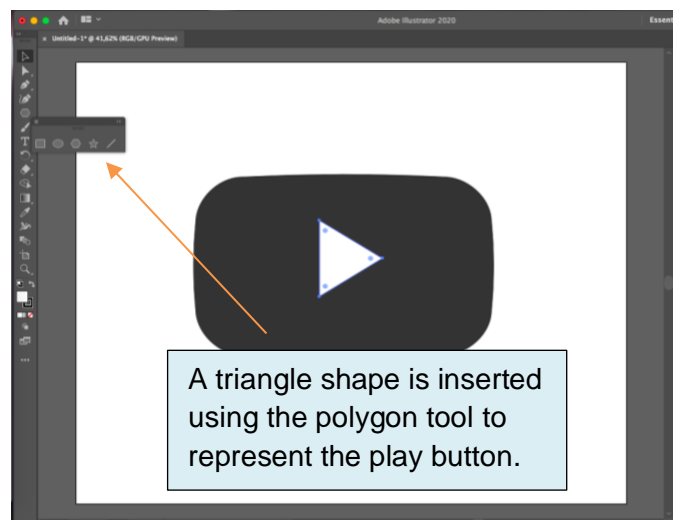
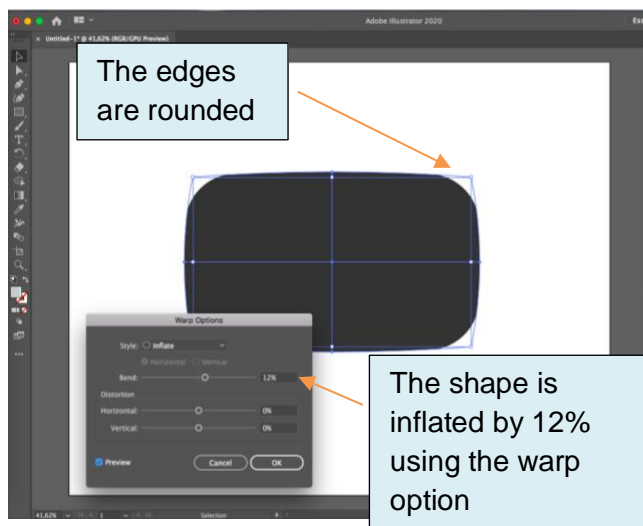


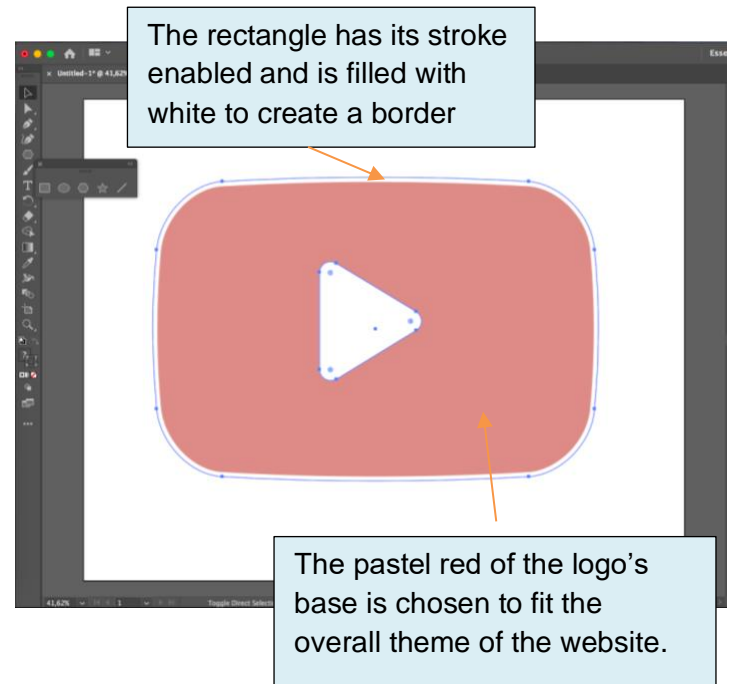
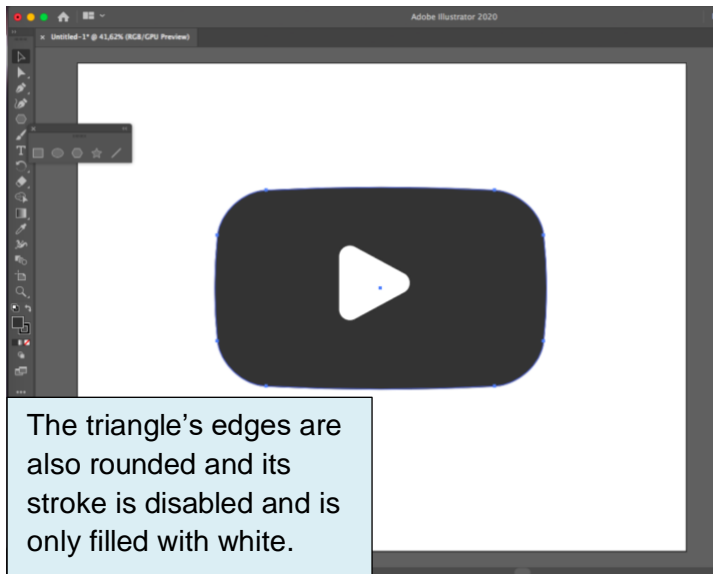
Images are manipulated to change in width and height using Preview. This is to reduce the file size so the images can load faster in the website and to prevent visitors to steal the original images. As seen on the left, the image was 850 KB and after changing the width and height it becomes 38 KB.

B. Making Logos/ Icons

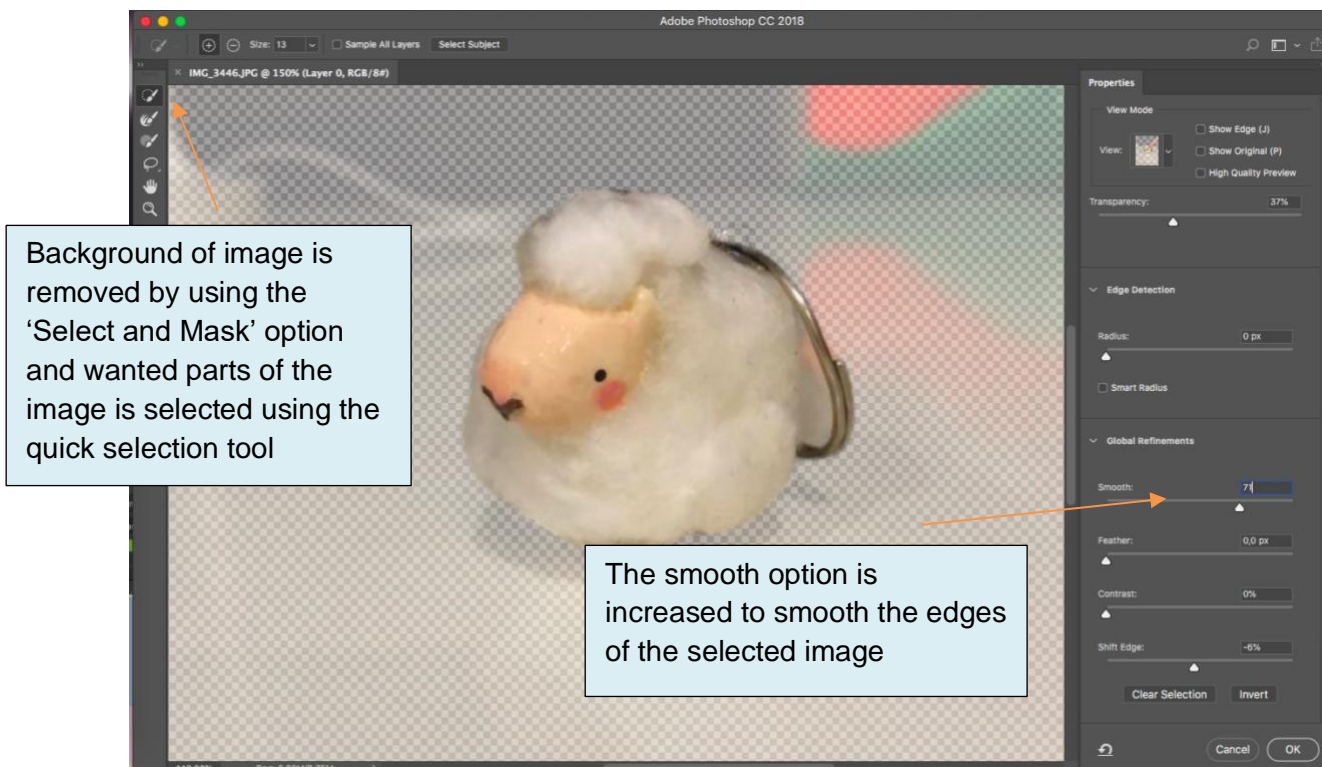
Adobe Illustrator was used to design logos for page 5 (Contact Us/ Commissions) to link to social medias.

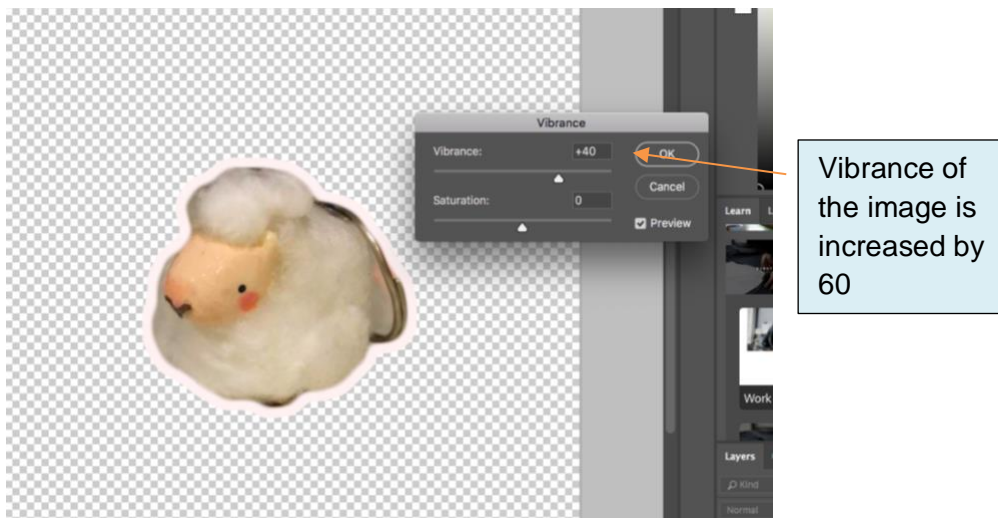
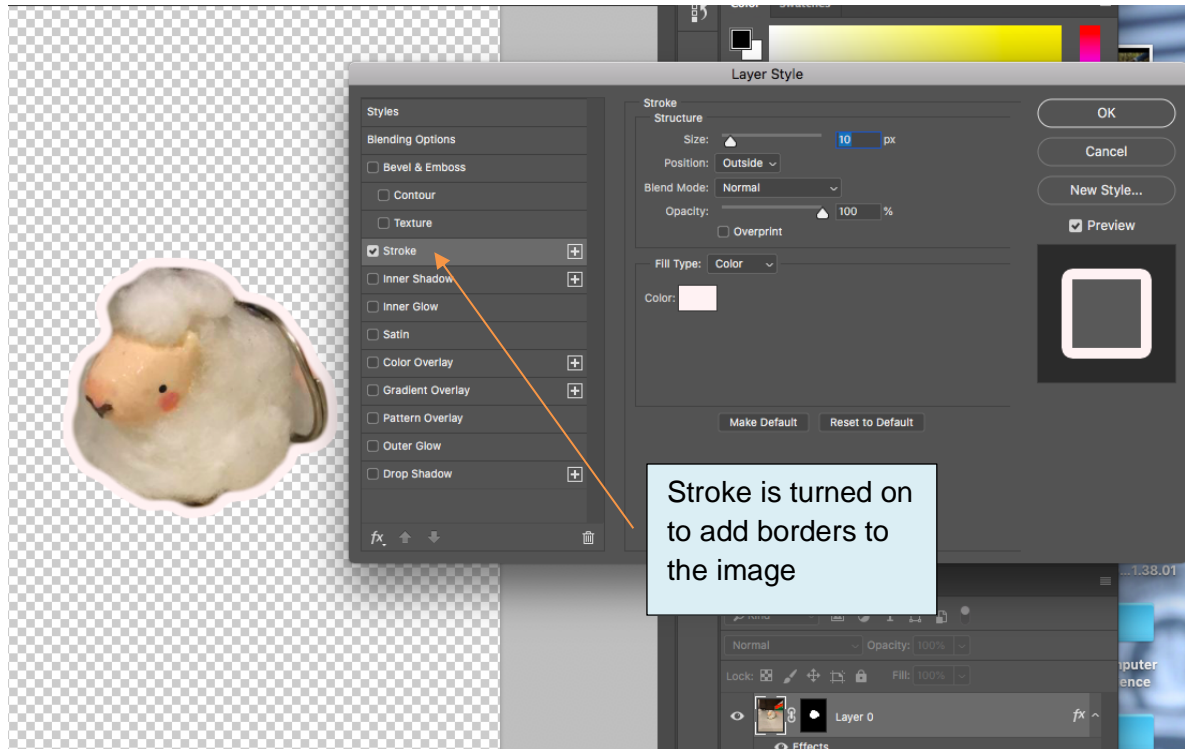
Images below show the process of creating a YouTube logo.





The home page also requires icons. This time, Adobe Photoshop is used to make these icons by modifying the appearance of the Client's image as seen below.





To produce more user interaction there are some sections of the code of the website that are written in reference to the following tutorials and adjusting the code to fit appropriate class and identifier names:

- A. To make the sticky navigation so that the navigation bar remains at the top when the user scrolls down:
“How TO - Sticky/Affix Navbar.” *How To Create a Sticky Navbar*,
www.w3schools.com/howto/howto_js_navbar_sticky.asp.

- B. To make image gallery and lightbox in order to organize the images and to open up a lightbox when images are clicked:
CSS Image Gallery, www.w3schools.com/css/css_image_gallery.asp.

“How TO - Lightbox.” *How To Create a Lightbox*,
www.w3schools.com/howto/howto_js_lightbox.asp.

- C. To make the video gallery in order to organize videos and switch between videos in big screen:
I Make Design Easy. “Video Slider Using Html Css and Javascript | Video Slider Tutorial | Frontend Design.” *YouTube*, YouTube, 14 Aug. 2020,
www.youtube.com/watch?v=M8_2_p47UXI.

- D. To make vertical tabs in order to display alternating content in a single webpage:
“How TO - Vertical Tabs.” *How To Create Vertical Tabs*,
www.w3schools.com/howto/howto_js_vertical_tabs.asp.

Word Count: 1172

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www.youtube.com/watch?v=lv93yjdvkWI&t=847s.

CSS Image Gallery, www.w3schools.com/css/css_image_gallery.asp.

“How TO - Contact Form.” *How To Create a Contact Form with CSS*,
www.w3schools.com/howto/howto_css_contact_form.asp.

“How TO - Lightbox.” *How To Create a Lightbox*,
www.w3schools.com/howto/howto_js_lightbox.asp.

“How TO - Sticky/Affix Navbar.” *How To Create a Sticky Navbar*,
www.w3schools.com/howto/howto_js_navbar_sticky.asp.

"How TO - Vertical Tabs." *How To Create Vertical Tabs*,
www.w3schools.com/howto/howto_js_vertical_tabs.asp.

HTML Type Attribute, www.w3schools.com/tags/att_type.asp.

I Make Design Easy. "Video Slider Using Html Css and Javascript | Video Slider Tutorial | Frontend Design." *YouTube*, YouTube, 14 Aug. 2020,
www.youtube.com/watch?v=M8_2_p47UXI.

Krossing, Dani. "58: How to Create A PHP Contact Form: PHP Tutorial: Learn PHP Programming: HTML Contact Form." *YouTube*, 27 Nov. 2017, youtu.be/4q0gYjAVonI.