Jessica Filippelli
40046560
Cart 361 – Networks and Navigation
Final Project Documentation

Documentation of all your research process

When I first started this project, I did research on the way online advent calendars look like to get a general understanding of how to design the project's home page. The three advent calendars I found are from my proposal; one was the *Jacquie Lawson Edinburgh Advent Calendar* (https://www.jacquielawson.com/advent). I picked this one because I like the aspect of the snow falling down, the animations of the people and the dog and the way the creator intergraded different activities for the user to do, like games and creating your own snowflake. The second one is (https://adventmyfriend.com/). I picked this one because of the simplicity of the calendar. The fact that it is not too busy, gives the user the aspect of not getting distracted from the background aspects, because with the first example the animations and exploring might be more exciting than what is behind the doors. At the end of the day, what's behind the doors should be what is more important in an advent calendar. But giving that it is an online advent calendar, it needs to be engaging enough for the users to come back each year. And I think my online advent calendar has a good mix of the two first examples. The last example is (https://www.adventcalendar.com/). The reason why I liked this example is because it is different from all the rest. This one is a question and answer advent calendar.

When it came to finding the songs and movies I try to pick them all by memory but there were not enough examples after I was done thinking. I couldn't think of enough for my taste so I just googled "The best Christmas movies" and I picked the movies from the google list at the top of the page that I did not think of. For the images I wanted to pick the movie poster from each movie because I thought it would be easier to recognize what movie it is. There are 24 movie options in my project. Some movie examples are; ELF, Home Alone one and two, The Santa Clause one, two and three, and A Charlie brown Christmas. I tried to pick a mix of popular Christmas movies and not so popular Christmas movies that users would want to watch during the holidays.

For the music I used the YouTube creative studio audio playlist. It is free music that people can use in their YouTube videos. So, I downloaded what I thought were the songs that users would want to hear during the holidays. There are 36 options in my project. I picked what I considered to be classic Christmas music. Some music examples are, Jingle Bells, Deck the Halls, 12 days of Christmas. I decided to have multiple version of each song because I thought it was a nice element to have because not everyone is going to like every song. The different version are, just vocals, jazz, or just instrumental. Not every song has the three versions. Some have one, some have two and some have all three.

For the coco recipe I found a Betty Crocker recipe online and I switched it up a bit to the way I liked it.
(https://www.bettycrocker.com/recipes/christmas-cocoa/61e82461-962e-43af-942a-7cd9d2efe104)

For the coming soon pages I wanted each page to be different. I did google something along the lines of "best coming soon pages" and that is where the idea for the countdown timer and the gradient background came from. The rest of the ideas I came up with myself.

The process for the two games was, I took the same concept of my assignment two and made it Christmas theme for day 4. There was not that much research process for that one. For the other game I was researching game tutorials and I found the W3Schools game tutorial (https://www.quanzhanketang.com/games/game_canvas.html) and I used that one but modified it to make it Christmas theme.

The elements that I would have loved to have was a view result button for the games. For the elf game (day 4) it would have been nice to have users see the score from the other users. For the Santa game (day 3) I would have liked to add a timer score like day 4. For the drink page I would have liked to have a comment section where the users who tried to make the hot chocolate, share their thoughts about it. The original plan was to have all 12 doors be connected to a database. I wish that was a possibly. I wish I could have put the username next to what input that the user searched for day one and two. I wish that I was able to put whatever a user filed out on the form in day 6 be put under the image they uploaded in the "see other user's input" section. The last aspect that I would have love to have for this project was that it have been responsive, so a user can use it on any platform.

A detailed description of the different technologies used and how they work and why were they relevant.
This project is best view on a desktop and not a phone because of resizing issues

The only technologies I used for this project was HTML, CSS, JavaScript, PHP, JSON and Ajax. The HTML is relevant because each page needs a platform to stand on. With no HTML I would not be able to display the project.

The snow was created in JavaScript. I followed a tutorial by the net ninja (https://www.youtube.com/watch?v=ANDyf6VEYHE).

I used JSON to represent the data for the music and movies page so that it can be displayed on the main HTML page. The JSON sends the data of the music and movies from the server to the user and then that data gets displayed on the HTML page.

The PHP is relevant because of the databases. I have a view results for the music, movies and the art section and the PHP helps gather all the users input and put it into a database so it can be displayed when a user clicks on the “see other users input”. I also have a “enter a user name” form on the main page and the PHP helps generate a username. Because if a user does not enter a username than they cannot enter the advent calendar. The database than returns the results back to the PHP.

I have JQuery libraries in order for all the databases to work. The way it works is that we are making a request for the data using JQuery.

The way that we can get the data from the web we have to use Ajax. I use Ajax for when the users upload an image under day six. For example, the user uploads an image and is waiting for the image to be uploaded to the database and when they click the “see other users input” button they can see their input and other users input.

For day 3 and 4 I created both game with JavaScript. For the ELF game (day 4) I used addEventListener to get the ELF heads to disappear when a user clicks on one of the images of the elf heads (mouse down). There is a const MAX_ELLIPSES that make the elf heads which is an array of 10 heads. Without this the heads would not appear on the canvas. I put the elf heads in a function called myRunningEllipse. To win the game the length of the Ellipse has to be 0, which I put into an if statement. I have a reset game function to restart the game. Lastly, I put a scoretext function in order to show the score in the upper left corner.

For day 3 I created each candy cane as its own obstacle on the canvas which is defined as a component and each cane has its own location and “crashWith” function. The “crashWith” function is when the Santa head hits one of the candy canes. That means it is game over. The locations are not random, I placed them at their own location. A user controls the game with the arrows on the keyboard, which was created with addEventListener. The candy cane components are the same size and have the same speed. The game has an update area when to know when the components hit the candy canes, it tells the game that it is game over. To get the components to move I have each obstacle a speed of x+= -1;. I have a reset game function to restart the game. Lastly, I have a GameOverText and a YouWonText function to showcase text when you win and lose.

For the coming soon pages, I wanted all of them to be different. They are all done with HTML and CSS and some JavaScript. Day 7 and 10 are the only ones that have JavaScript. Day 7 has JavaScript because of the typewriter effect and the bouncing “DAY 7”. Day 10 has JavaScript because of the countdown timer.

Day 8 is a loader animation and is created in CSS with @-webkit-keyframes spin and @keyframes spin. Both have a rotation of 360 degrees. The loader is in a div class in the HTML page. I followed a W3Schools tutorial

(https://www.w3schools.com/howto/howto_css_loader.asp). What is different from the video is that I change the size of the loader and the colours.

Day 9 is created with CSS. Each Christmas ball has a div class with the same elements and are put in a straight line with a flex-container. I followed a tutorial on YouTube (https://www.youtube.com/watch?v=FQfWGuPr_X0), to figure out to create the Christmas ball. The video did not show me how to use the flex-container. On the HTML page there is five div classes that make up the Christmas balls. A "ballwrapper", a "string", a "ring", a "topper" and a "ball". I duplicated all five of these div classes to get all of the Christmas balls. I also wanted when a user looks at this day on a laptop that the Christmas ball resizes to that screen, so in the CSS I switch % to vw and that got the Christmas ball to resize on a smaller screen (just don't look at the project on a phone ☺).
Day 10 is created with JavaScript because there is a countdown timer. It is counting down to the 10th of December. I wanted at least one countdown timer, which I followed a tutorial on YouTube from Dark Code (https://www.youtube.com/watch?v=hbQrcrslXEo) because I didn't know how to do it on my own. The element that I did not use from the video was the border around the text. I did not like the way it looked and I used a different font from the video. For the days, hours, minutes and seconds; on the HTML page they are in a div class called "count". In side that div is a div class called "countd" and in that one is a span tag with an id. One for each time element.

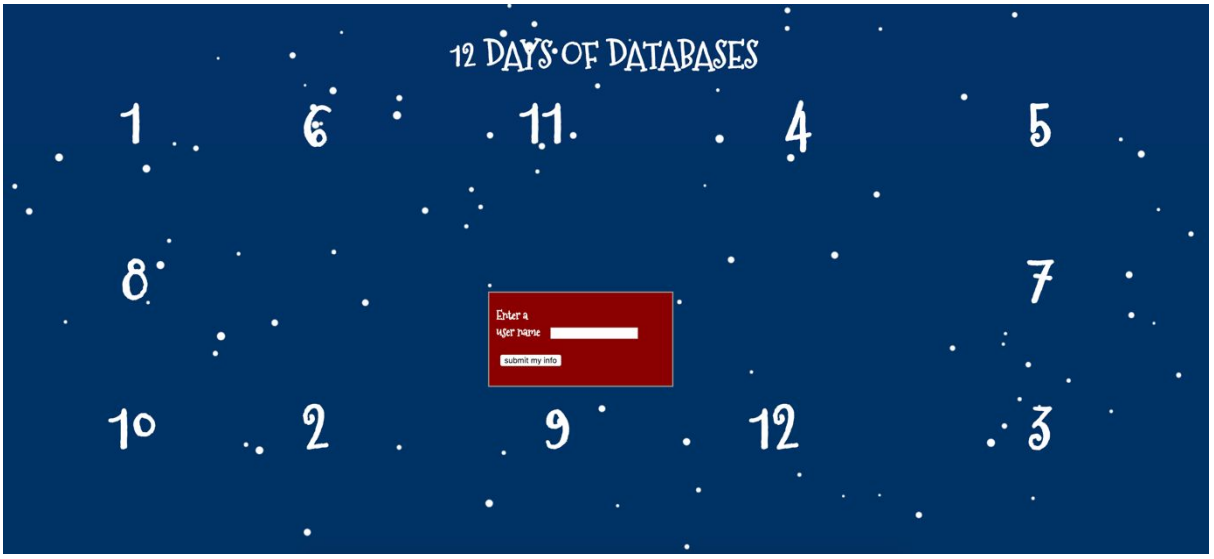
For day 11 I used another Dark Code tutorial for the gradient background (https://www.youtube.com/watch?v=NnrBempao2M). I used my own colours and not the colours in the video. This day was created with a CSS animation and a background image linear-gradient. On the HTML page there is a div class called "text". And in that div there is the text that is on the gradient background.

Day 12 was the easiest one to make. It is an image on a HTML page with text and a button and of course some CSS. There is two div classes. They are called "image" and "text". The text class is inside the image div.

Minimum 8 or more screen shot of the finished project with annotations

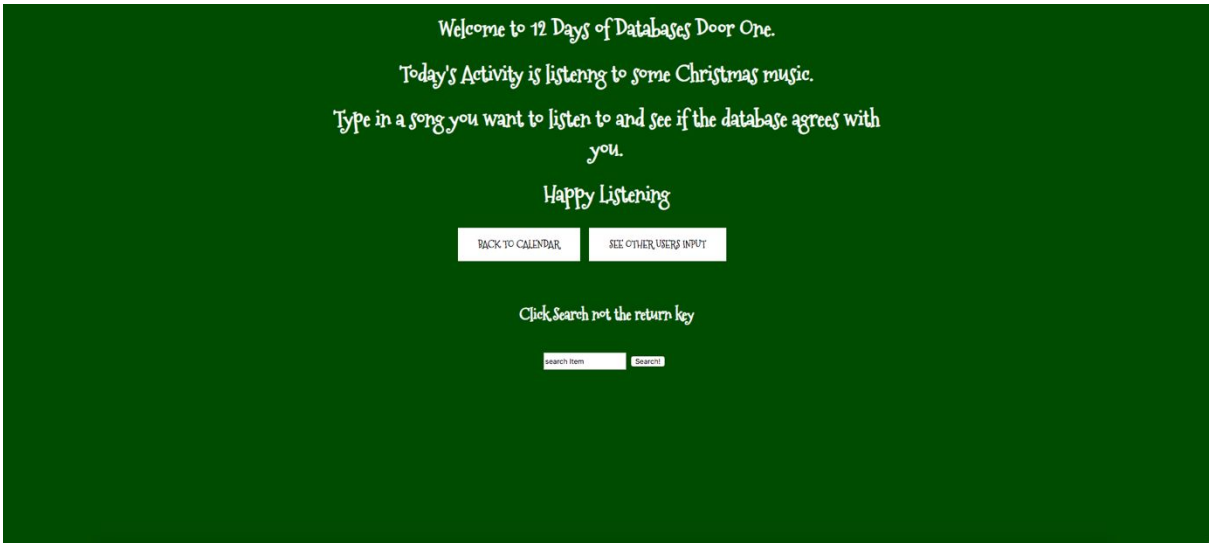
1- Home Page

This is the home page. When you first enter the advent calendar this is the page that will pop up. On this page there are 12 numbers. One number a day, for 12 days. Behind each door is something different. For this purpose of this project there is only six main doors and the other six are "coming soon" doors. The coming soon doors give the project a little element of something real. For example, if it is day five of the advent calendar and the user wants to open day nine they can't. Well they can click on the door but it will have a "coming soon" page. In real life a person can open up every door right away but with the aspect of this being an online calendar, it gives the creator the aspect to block the user until the right time. The design aspect on this page was supposed to represent a snowy night. The blue colour is the night-time sky and the white circles are snowflakes. There are three main colours for this project; blue, red and green. I picked the font that I thought when well with the Christmas them, it is called *Mountain of Christmas* and it is a free font from Google Fonts. I use this font all throughout the project.

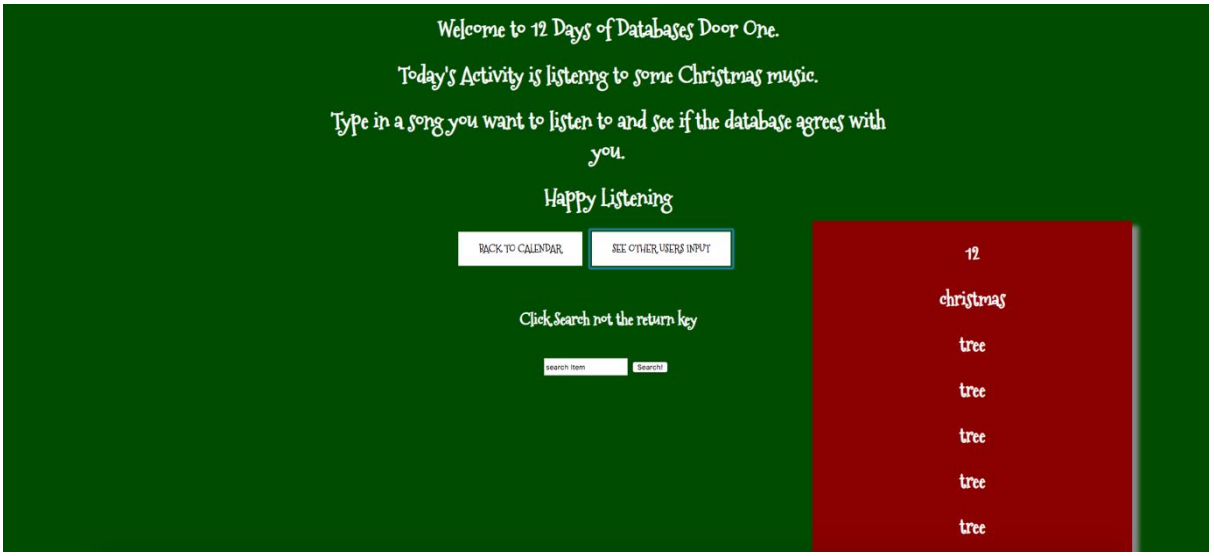


2- Door Number one

This is door number one. I wanted to go for a minimalist style which is simple and sophisticated for each door. At the top there is the instructions on what a user has to do (Every door has instructions at the top of the page). You have the search box and the search button. When you type in any song that you want and click the search button an audio play box will appear on the screen with that song and all you have to do is press play to listen to the song. If the user types in a song that the data base does not have, nothing will pop up. The user can try again of exist the page. A user has to click on the search button to actually search their answer and not hit enter on the keyboard because I did not add that element of the keyboard, in the PHP. On top of the search box I made a "back to calendar" and a "see other users input" button.



3- Page one part two – a screenshot of an "see other users input" (view results)
This shot is when you click on the "see other user's input" button you will get to see all the input that other users have searched (view results). I put the view results box to the right side of the screen because I thought it would look more aesthetically pleasing right near the "see other user's input" button. I did not put the users name in the view results because I wanted people to focused on the input and not the username.



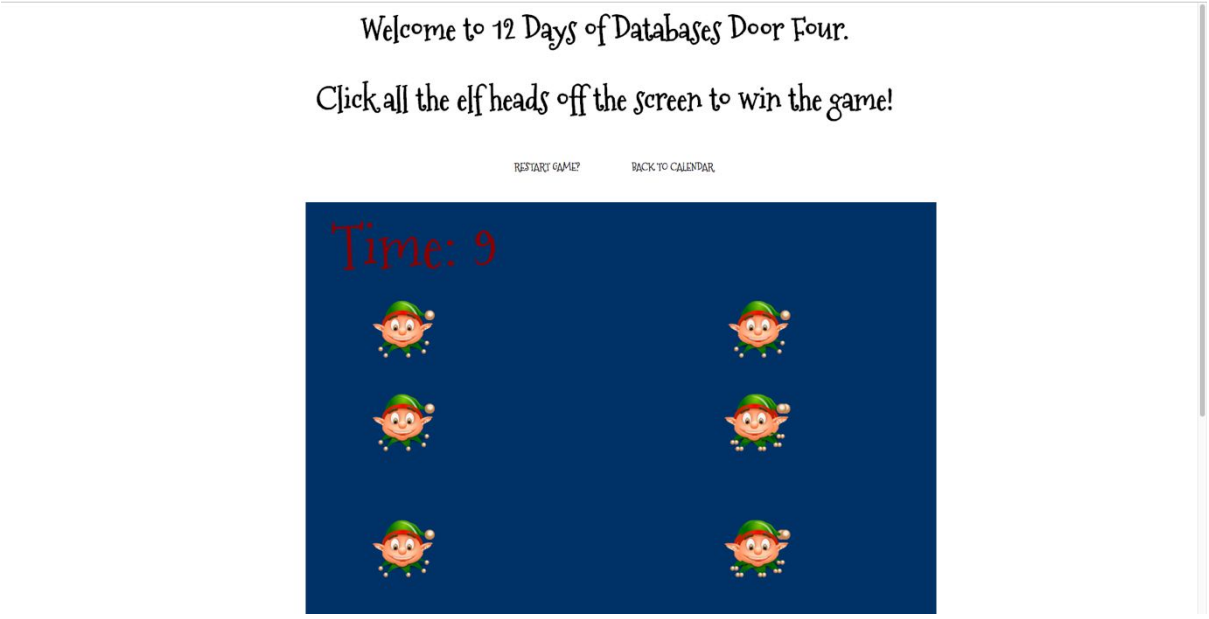
(Door number two has the same layout as door number one. But door two has a red background with a green view results and it is movies and not music. So instead of an audio track popping up, it will be an image. Both view results have the text the user input and both do not show the usernames that goes with that input.)

4- Door three – Santa Game

This page is a game. For this game there is no database apart from the username. The way a user plays this game is by moving the Santa head with the arrows on the keyboard to get to the other side. The Santa head starts on the left and you have to try and get in to the right side but you have to go through the candy cane forest. If the Santa head touches a candy cane than it is game over. Only way to win is by touching the right side of the canvas with the Santa head. Just like the ELF game there are two buttons. One to restart the game and one to bring you back to the calendar. There are only 10 candy canes and once they are all off the screen a user most probably won the game. The candy canes come on to the screen from the right to the left side.

5- Door four – ELF Game

This page is another game. It is called *ELF Game*. Just like the *Santa Game* there is no database connected to it. Unless you count the username database because a user would have to enter a username to be able to click on the door this game belongs to, to be able to play the game. There are no view results. The concept of this game is to click all the ELF heads off the blue canvas to win. There are two buttons on this page. One to restart the game and one to bring you back to the calendar. There is a timer in the upper left corner, to showcase how long a user takes to win.



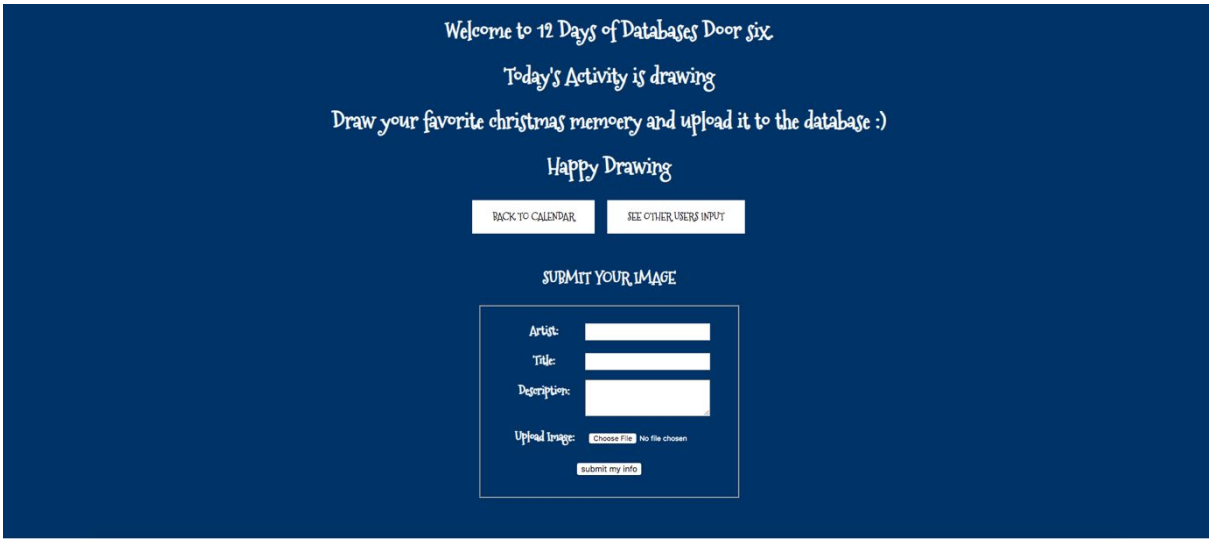
6- Door five - Recipe page

This page, the user does not give anything back to the database and the database does not give anything to the user. This is supposed to represent a fun little activity that people can do together. Some people might like it and some might not. I created this page to give me a break from the databases and the games and the coding. I created the image in InDesign.

7- Door six – Upload Art

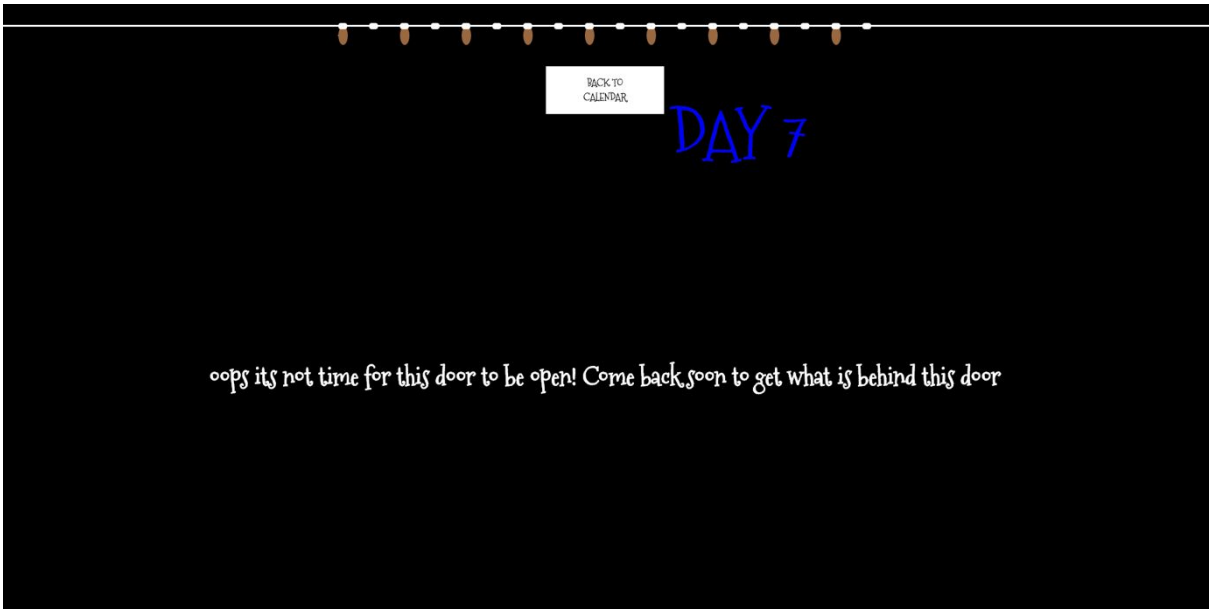
This door has the same layout as the door number one and two but the user uploads an image instead of putting information in the search and see if the database has that information. The user is in a way adding to the database by uploading their image. I put the buttons in the same place and the view results box is also on the same side as the first two doors. When a user has uploaded an image, then the “submit my info” button will be hidden so the info will not

get uploaded more than once to the database. For example, in the view results, we should be able to only see one of each images. (a part from the first one, which I used to test the page when I first started working on it)



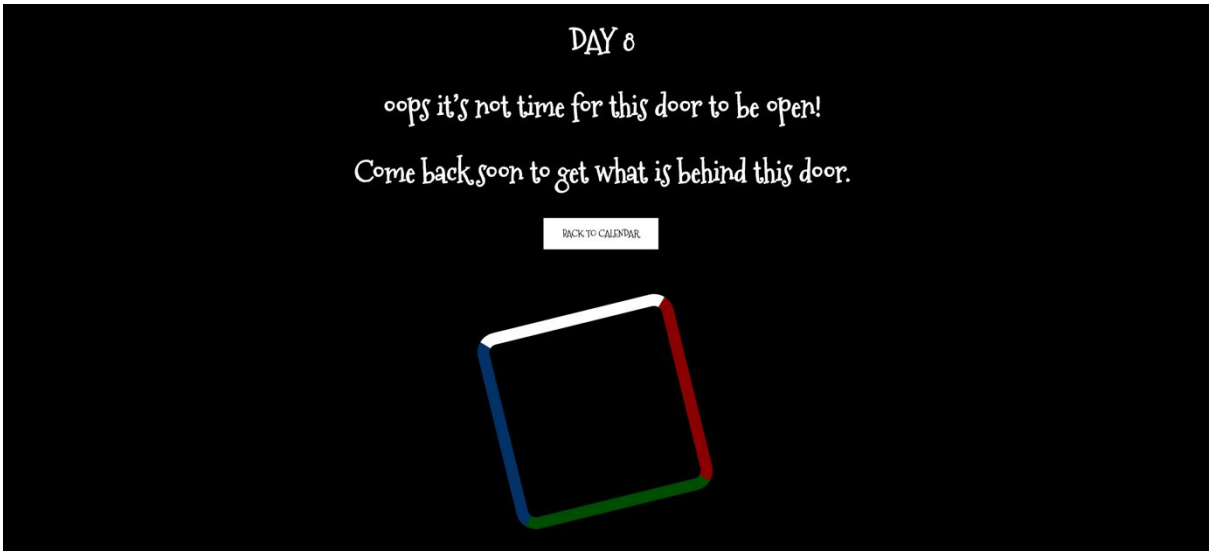
8- Door seven – t "coming soon page" Part 1

This door is supposed to represent if a user clicks on the door but it is not time to have what is behind the door. For example, if it is day three and a user wants to get what is behind door 10 and they click on it, this is the screen that they would be greeted with. The "DAY 7" is bouncing and the screen and the white sentence comes onto the screen like a typewriter.



9- Door eight “Coming soon page” Part 2

This is door number eight. This is another page when if it is day three and a user wants to get what is behind door 8 and they click on it, this is the screen that they would be greeted with. This is a loader animation with the main colours of the project. I followed a W3Schools tutorial (https://www.w3schools.com/howto/howto_css_loader.asp).

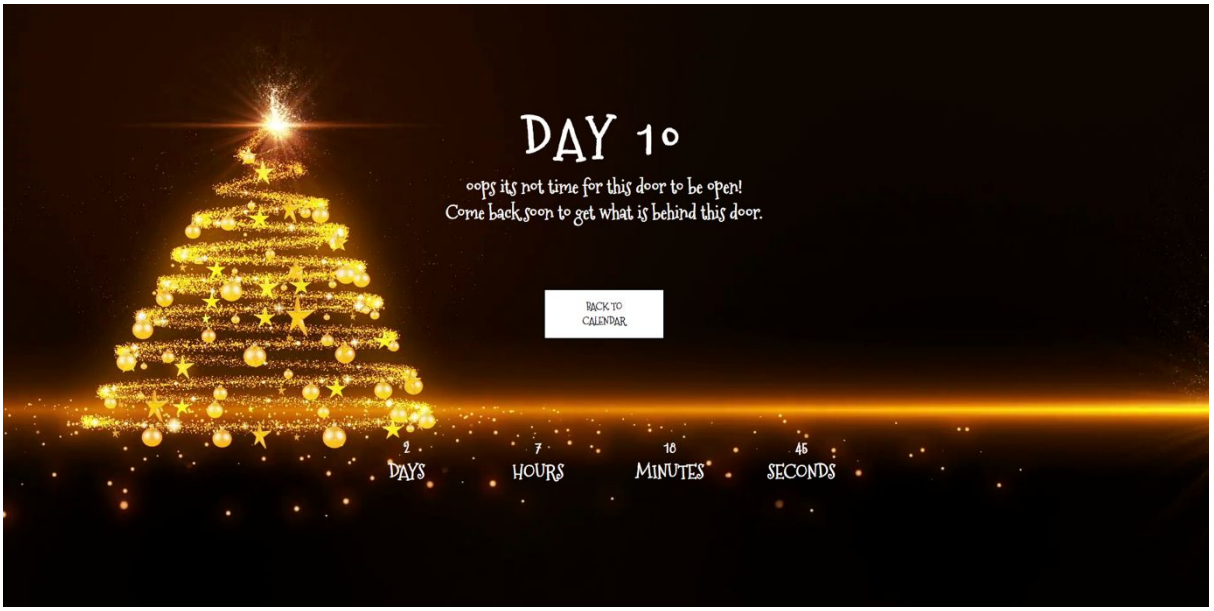


10- Door Nine – “Coming soon page” Part 3

The theme for this one is flat design. I wanted to keep the page simple and have the main design element be around Christmas ornaments. I followed a tutorial on YouTube (https://www.youtube.com/watch?v=FQfWGuPr_X0). It showed me how to do only one Christmas ornaments, the one on the left side, and I figured out how to make more. However, every time I made a new one it would go lower on the page. It was like it gave itself some padding without me telling it to. That was until I put them all in a flex-container, that it started to work the way I wanted.

11- Door Ten – “Coming soon page” Part 4

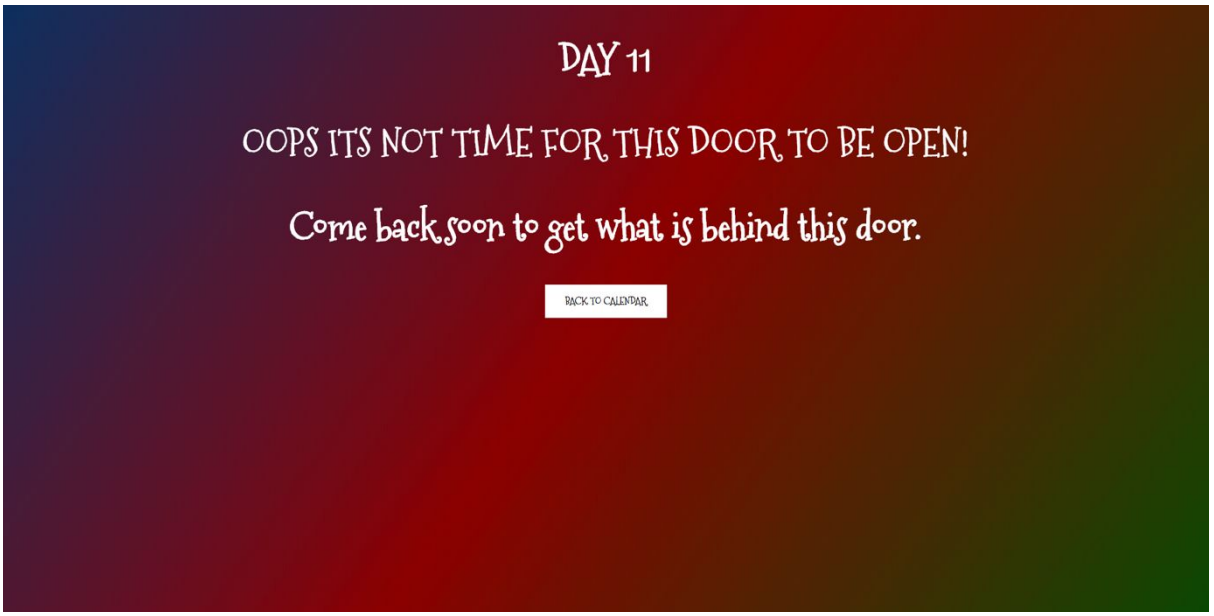
This is a countdown until a user can open the door. The reason why the button is not one of the main colours (red, blue and green) is because I thought these colours on this page looked out of place so I made the button yellow/gold to match the background image. If you would go to this page on my project now, all the number would be negative, because it is currently, as I am writing this, December 10th. So, in reality, the user was supposed to have what is behind this door already. The first screen shot was taken on Friday, December 7th 2018.



This second photo is to show what it currently looks like as of Monday, December 10th 2018. As of today, a user technically should have opened the door. I followed a tutorial by Dark Code (https://www.youtube.com/watch?v=hbQrcrslXEo)

12- Door 11 – “Coming soon page” Part 5

This is a CSS animation and a background image linear-gradient. The background colors move from side to side. It makes the page more interesting having the colors move than stay still.



13- Door 12 – “Coming soon page” Part 6

This was the first page I made when I started working on the coming soon pages. My first plan was to make all the pages like this one, with just an image, some text and a button. I changed my mind last minute, maybe 2 weeks before it was due to have all the pages be different. I'm glad I made them all different now, because it makes the project more interesting. It was stressful but worth it.