# 3.43 (4 Credits) Digital Diary

## Website

| **Website Link:** 4cdebruyn.dx.am | |
|---|---|
| **Usernames** | **Passwords** |
| graham (Admin) | graham123 |
| lucy | lucy123 |
| joe | joe123 |
| sam | sam123 |
| kyle | kyle123 |

***Also See:***
***https://docs.google.com/document/d/1vSzYylE-0a4mCRVGBMOKDGL2vql09iptdxz_OMhiZ6w/edit?usp=sharing***

## Tools and Techniques

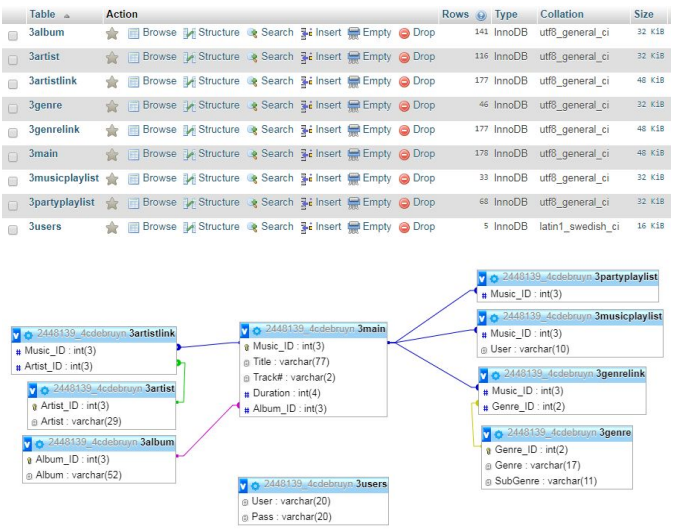
| **The tools I used** | |
|---|---|
| **What App or Language I used** | **How and why I used it** |
| PHP | Php is used in creating the database in the majority of ways, it is responsible for querying the data as well as displaying it, using login cookies and creating an" add a song feature". Using php is basically essential in order to communicate to the sql database |
| SQL | SQL is used in order to create tables and link them together to be queried for a database. It allows the user to add the columns of the music database they want as well as records they want. This is also responsible for the login table allowing the user to call up a user/pass. |
| Awardspace | Awardspace is a website that allows a free domain to be accessed online and worked from home, I used it so that the notepad++ files don't need to be shared to view the site as well as unlimited accessibility. |
| HTML 5 | Html is responsible for the body of the website, each div, each image, each bit of text is written in html. This allows the user to see CONTENT on the screen and is guaranteed to be used when coding websites, which is why I used it. |
| CSS 3 | As Html is gives the body, CSS gives the appearance. CSS colours the site, changes the formatting of text and divs as well as alignment of everything in the site. CSS isn't essential however is valued in it's use. I used CSS to give aesthetics and make it more appealing for the |

| | |
|---|---|
| | user to visit the site. This should make the viewer visit more frequently as it would be more pleasurable to see. |
| Moqups / Draw.io | Both Moqups and Draw.io serve the same purpose, they were used in the planning of the website and database. They are both non-essential but are a great deal of help in designing the database / wireframe of the site. I used them both to give clarity to the designs to ensure a bigger success in the overall outcome. |
| Photoshop CS6 | I have used photoshop when adjusting images or creating graphics to be used on the website. I would take images from creative commons and resize it as well as change the quality and size to be used on the website. I also applied filters (such as the background by making it blue shades). |

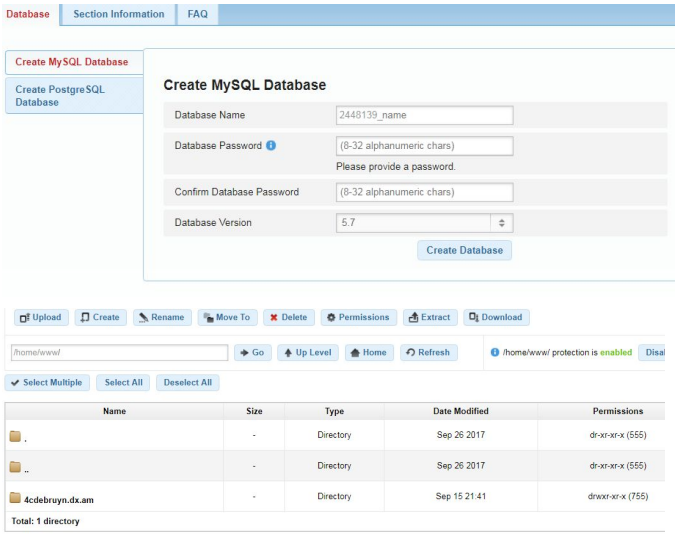
***Show the techniques in your Digital Diary below***

| **What I've done with the Tools I used** | |
|---|---|
| **Tool used** | **Example** |
| PHP: With Php I constructed a login page and retrieved data from the database to make the content of the music pages. I used PHP to create forms such as the Username and Password inputs, or the search bar. PHP is also used to query the data from the database, making each record of the music pages visible. | <br>**- Full Playlist -**<br>Title Artist Album Genre Duration<br>Casino Acoustic Alchemy Early Alchemy Acoustic 00:03:17 Add<br>Sarah Victoria Acoustic Alchemy Early Alchemy Acoustic 00:01:54 Add<br>Waiting For You Acoustic Alchemy Early Alchemy Acoustic 00:03:24 Add |

SQL: With sql I created the database tables, formatting them and linking them to be called up in the website. I primarily use SQL to make my music database, I used SQL to link the album, genre and artist tables to the main table to be called up when needed in the query. I also used sql to allow multiple entries to be added from the song add page. And to have a User/Pass table.

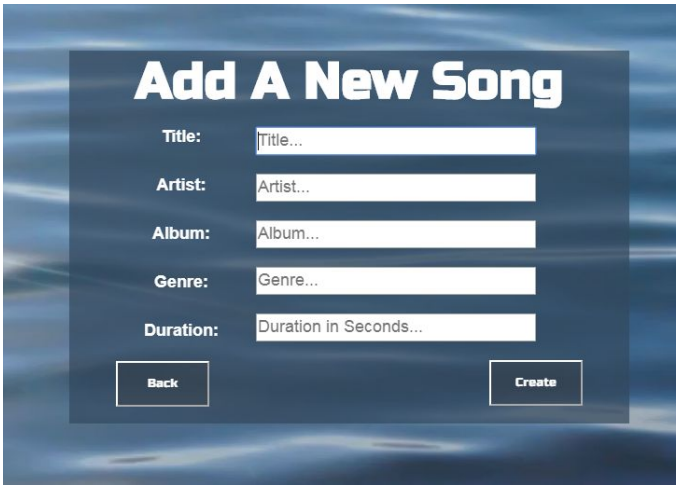



Awardspace: Used to create a domain for my website, it can hold my database and web page files so it can be accessed from anywhere. I personally used awardspace as it is easily available and is a free service for almost unlimited uses. Files and databases are easily findable and manipulatable.

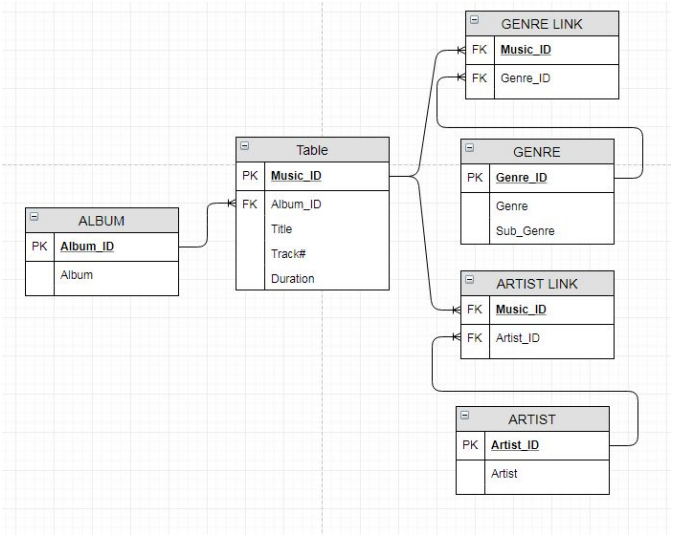


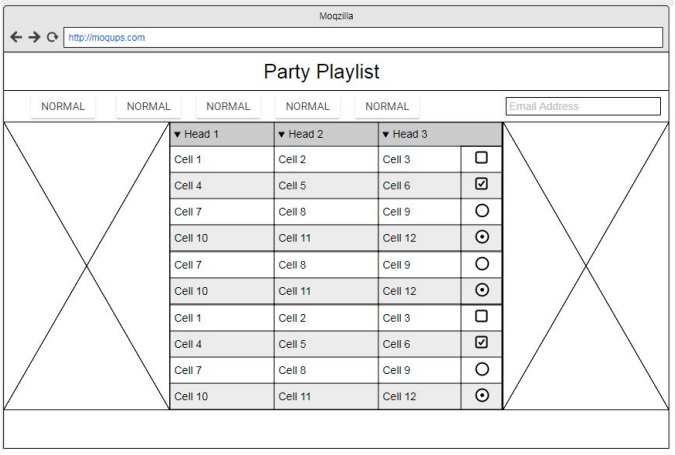

HTML 5: Used in programming the web pages, it can create divs, text and call up images. Html creates the layout that is used throughout the whole website. I used it in creating headings, divs for different elements and for formatting different elements.

CSS 3: Used in designing the website, creates styles, colours, formatting of text and images. Which provides life to the website through aesthetics. I've added Gif's such as the add a song moving wave, Or background images for different pages.



Moqups/Draw.io: Used in the planning of the web page and database, non-essential. Provides details for what I designed and guided through the creation phase.

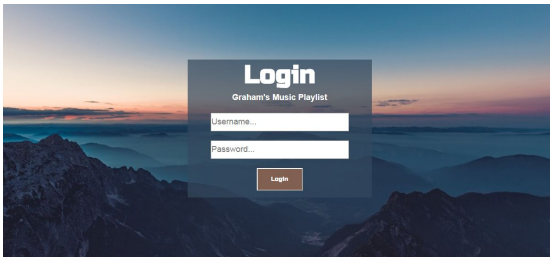



Photoshop CS6: Used in the creation of the background image, it contains multiple squares with a blue filter i put on top. Photoshop was also used in creating the music note graphic. All resources from photoshop do not contribute to the functionality of the website but have made it more visibly appleasing. Images such as the background are saved as JPEGs and graphics are saved as PNGs.

## Formatting Techniques Used (How and Why)

I have maintained the same format throughout each page on my website, this is to reduce confusion when browsing multiple pages on the site (If a user were to enter a new page and the format changes they would find it incredibly difficult to navigate). All headings and paragraph text have maintained same fonts and sizes, different sizes for different headings (eg: H1 is 60px used in titles, H2 is 40px used in headers). I have also maintained the same color scheme throughout the website, of blue black and white (with a hint of



orange in the buttons/login page image). The colour pallet was chosen for colours that compliment each other and contrast to make features on the website more clearly visible. Alignment/Padding/Margins are also used heavily throughout the website where every element is padded from one another, this is to avoid confusion between elements and to fit elements into columns to be easily read(in the playlists). All the titles are center-aligned to force the reader to look at them as they read down the page, fulfilling the titles purpose.

## Notes on How I Saved Time/improve accuracy with Techniques Used

When testing elements and functions on my website I would edit everything solely on Awardspace, this not only saves time but keeps me from discovering errors (improving accuracy) in my code if I use a different version of HTML,CSS or PHP. I would also use the SQL service that Awardspace offers to create the queries that I would want to use on my website, This would save me time from trial and erroring the code until it works on the actual website. SQL gives errors which we can then use to find and correct code, the webpage doesn't give and error, but just crashes and wastes time. I also used Moqups to construct a wire frame of my website before creation. This meant I had a plan to follow instead of spending time deciding upon each element along the way, it also improved accuracy of my design aesthetics, allowing me to decide my design earlier on and making the design a lot clearer in the final product.

## Database Tools and Techniques

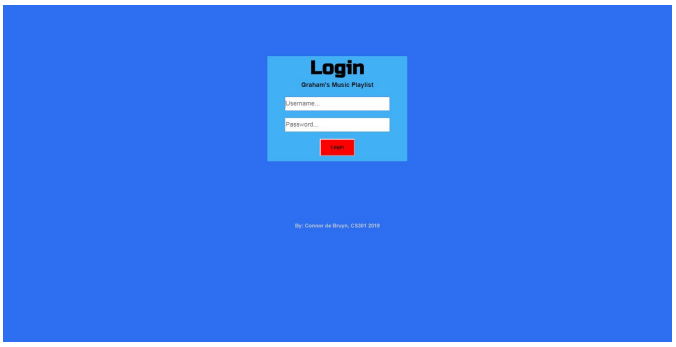
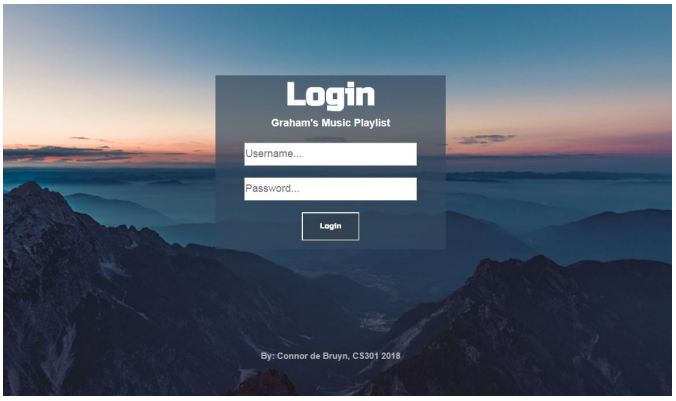
I would use the same naming format on all my names for my database, this would save me time when I was inputting names of tables for queries. I would also create a query in SQL before inputting that query to be used in awardspace, having made any mistake SQL would throw back an error of what I did wrong. This saves me the trouble of trying to find out the error on my own so I can perfect the query quickly and then paste it into Awardspace. In the PHP code I would put a record inside a div, where i would format each of the variables (Title, artist, etc…), the PHP query would then reprint throughout the loop for each record. Giving a more cleaner look and fitting each of the variables into their individual columns to make the data identifiable.

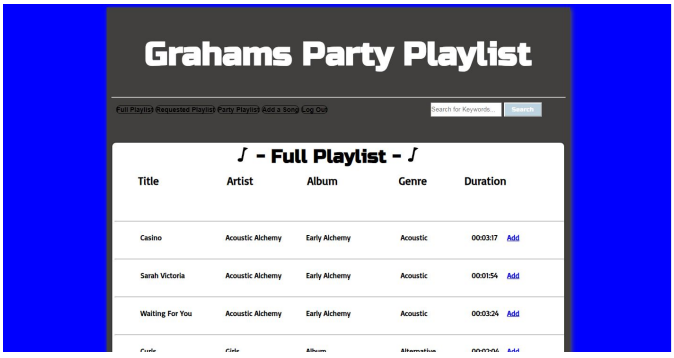
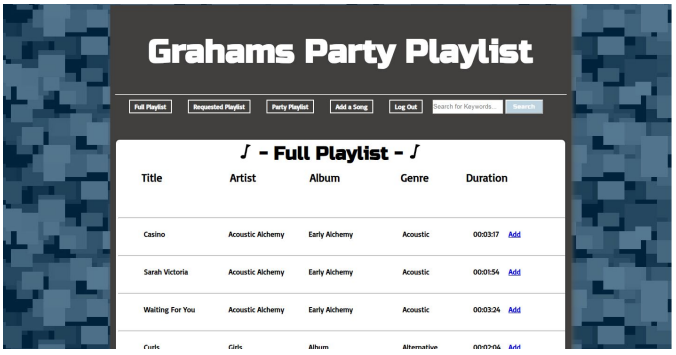
| Title | Artist |
|---|---|
| Casino | Acoustic Alchemy |
| Sarah Victoria | Acoustic Alchemy |
| Waiting For You | Acoustic Alchemy |
| Curls | Girls |

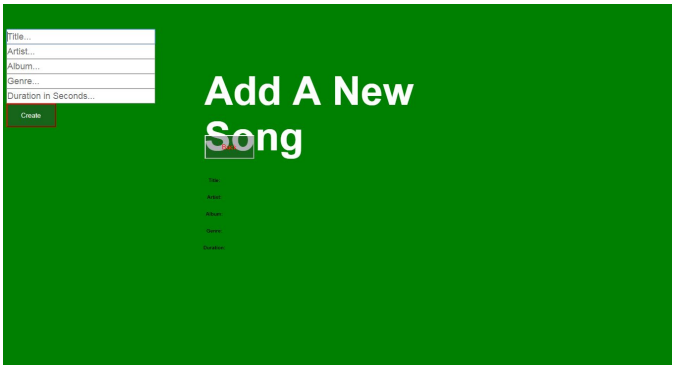
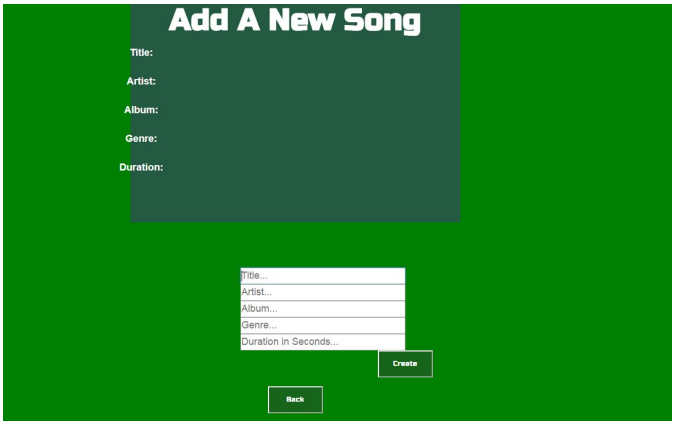
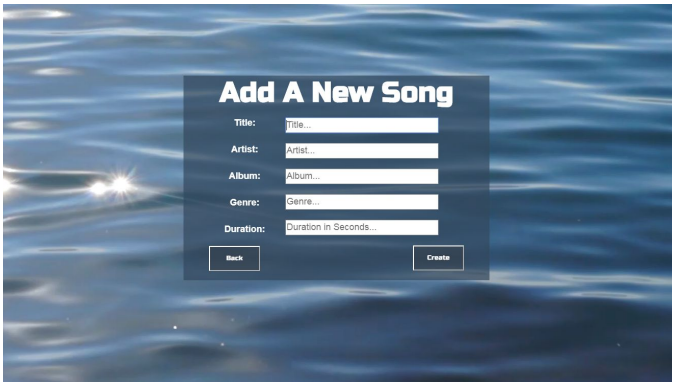
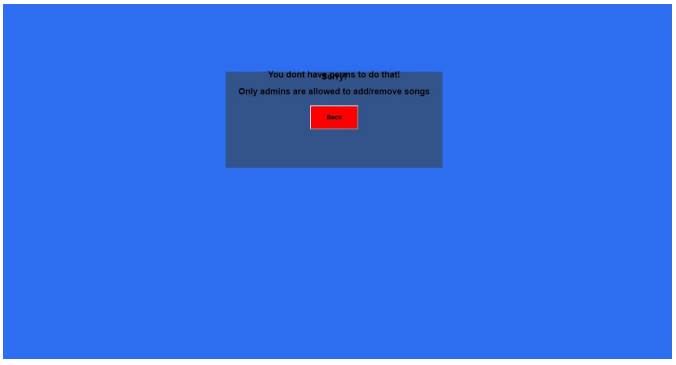
# Digital Diary

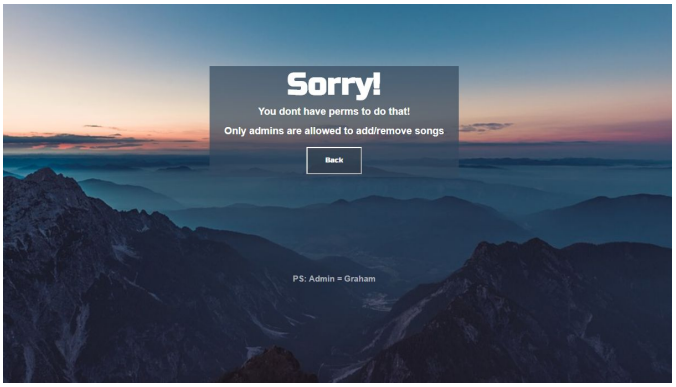
***(Research, design (UID, data, etc.) tools and techniques (colors, fonts, images, layouts, queries, etc.), testing (layout and functionality, queries, data integrity, CRUD permissions, validators, browsers, etc.), user feedback, etc.)***

| Progression of the website | |
|---|---|
| **Screenshot of Page** | **Layout/Functionality/Techniques** |

| | |
|---|---|
| | Creation of all the elements that is going to be used on the page, I have added a button and text inputs, alongside headings with a very clear colour pallet to see how each of the variables coincide with each other. Created functional login inputs that allow the user to enter the website once they input valid variables. |
|   | Formatted All the variables into a clear to see div. Applied margins, padding, fonts and sizes to the Headings and entry boxes. I have aligned the text to the center and have made the page symmetrical and easy to see. This should be the layout I will use for my final product with a few adjustments. |
|   | I have swapped in a background image for the blue html background, this looks a lot nicer to me. I have changed the font colour for all text apart from entry boxes to white, as this would help the user read it on the new background. I have applied opacity as a technique to my main div, this is purely a design choice and doesn't serve any function apart from aesthetic appeal. I have created an orange hover colour to match the background, along with 2 sides of the button being a different shade to give it the look of a shadow. |
| | Creating the 2 main divs and main text used in my main index page of the website, the container for the queries and the main div to contain ALL of the website. I picked contrasting colours to see the divs but I might add in a new set of colours to make the elements more visible during creation phase. |

| | |
|---|---|
| | Added the html background colour as blue purely as a placeholder to help me work, changed the main divs colour to a lighter shade of black(looks a lot better this way). Added in Placeholder buttons which don't take the user to any pages yet, as well as a heading rule to clearly see the separation of title and navigation. |
| | Added the query into the website for the full playlist, I had to change the margins to separate the columns of text. Query is working properly along with a side query that converts the duration in seconds to HH:MM:SS format. |
|  | Added a font for the headings and a separate font for the data in the playlist. Added headers so that the user would know which column of data is titles and which is albums. Added a search bar that does a query with the inputted data to a separate page with the same format. Also added buttons to add songs into a seperate playlist by running through a set of queries. A lot of functionality for the website is done from this point. |
|  | Removed the horrible blue background for a self made background, due to the layout any image would look horrible stretched so I added an image that repeats and looks natural (whilst still following the website style). Formatting has been applied to the buttons as well so they stand out and are margined away from each other. |

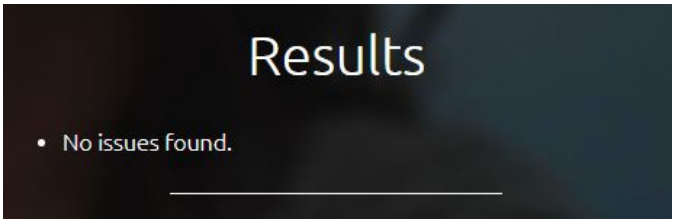
| | |
|---|---|
|  | Created all elements to be used on the page, copied the same code for the login page css, but have added it to a separate page for this. Created a div for the sub headings so they are all grouped. |
|  | Added a main div to fit all the content in. Aligned all the elements to the center (inside the div) but they all separate into layers so i need to apply a lot of margins to fix the problem. I also changed the buttons to look good. |
|  | After using margins to put everything evenly in the div and lined up the sub-headings with the entry boxes I added a water gif as a new media element for my website. This also allows the site to follow the blue theme I've been continuing with. |
|  | I decided to use the same styles page for this page as I had done for the Login page, as i intended for the pages to look similar and follow the same page layouts to fit the same style. The only major difference is the dimensions of the div to fit the text I put in. |

| | |
|---|---|
|  | Finished product basically matches my login page, this is a continuation of design throughout the website. I only added the image and formatted the text and button. The layout is kept the same. |

# Testing and Functionality

## Code Validator

I used the code validator https://phpcodechecker.com/ on each webpage for my php codes, and the code validator https://jigsaw.w3.org/css-validator/ for my css pages. The Validators are code assurers which check for syntax errors and unneeded code. This will improve my website by improving the mistakes as well as getting rid of code that would increase latency. ( I have tested all pages, but only showing examples of specific few as it decreases page count). There were only errors in the CSS pages where it said there can't be negative values for the padding/margins, however this is indeed possible and that the validator is out of date.

| **Code Validation** | |
|---|---|
| **Page:** | **Screenshot (Evidence):** |
| Connect page (PHP)<br>Enter Your Code<br>We'll perform a syntax check (lint) and a custom check for common errors.<br>`<?php`<br>`$con = mysqli_connect("pdb30.awardspace.net", "2448139_4cdebruyn", "dojustly01", "2448139_4cdebruyn");`<br>`if (mysqli_connect_errno())`<br>`{`<br>`echo "Failed to connect to MYSQL: " . mysqli_connect_error();`<br>`}`<br>`?>` |  |
| Login Page (PHP) | |

Enter Your Code

We'll perform a syntax check (lint) and a custom check for common errors.

```
                    </div>
                    <div class="Password">
                        <input type="password" name="pwd"
placeholder="Password..." required />
                    </div>

                    <div class="Login">
                        <input type="submit" value="Login" />
                    </div>
                </form>
            </div>
            <h4>By: Connor de Bruyn, CS301 2018</h4>
        </body>
    </html>
```

## Index Page (PHP)

Enter Your Code

We'll perform a syntax check (lint) and a custom check for common errors.

```
User) VALUES ('".$_GET["add"]."', '".$result->User."')");

                    header('refresh:1, url=musicplaylist.php');
                }

            ?>
            </div>
            <div id="footer">
                <h3>All resources by Gordon Hall and Graham, All rights
reserved © Tawa College 2018 - Connor de Bruyn</h3>
            </div>
        </div>
    </body>
```

# Results

- No issues found.

## Styles Page (CSS)

Validate by direct input

Enter the CSS you would like validated:

```
        background-size: cover;
        background-position: center;
        }

@keyframes slide {
        0% { left: 100%; width: 100%;}
        5% { left: 0%;}
        25% { left: 0%}
        30% { left: -100%; width 100%}
        30.0001% { left: -100%; width: 0%;}
        100% { left 100%, width: 0%}
        }
```

W3C CSS Validator results for TextArea (CSS level 3 + SVG)

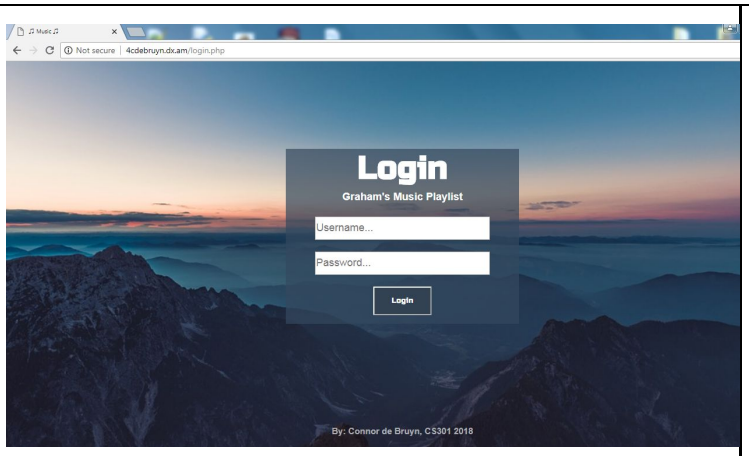
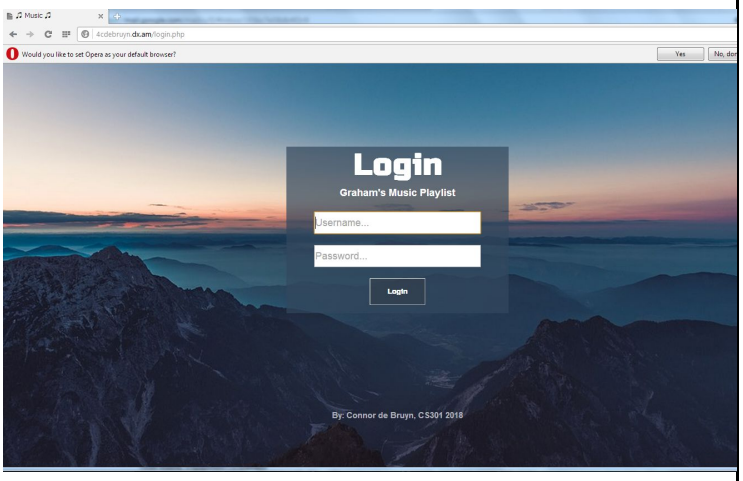
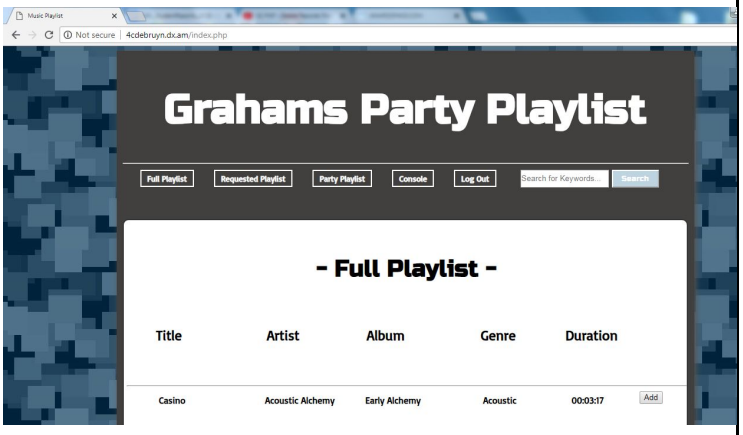
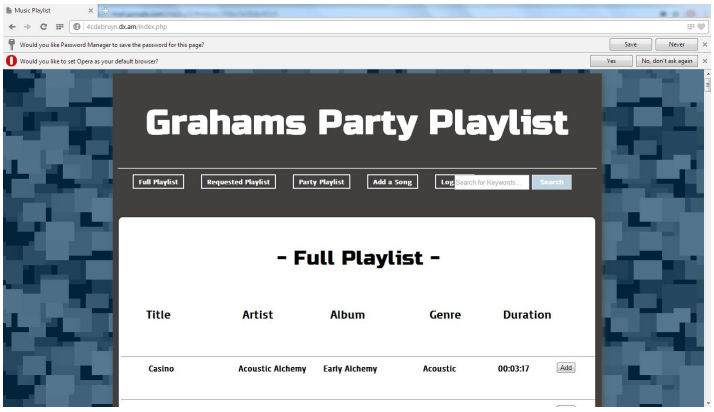
**Sorry! We found the following errors (14)**

*URI : TextArea*

| | | |
|---|---|---|
| 58 | Username | Property align doesn't exist : center |
| 156 | #HEADING5 | Value Error : padding -20px negative values are not allowed : -20px |
| 165 | #HEADING52 | Value Error : padding -20px negative values are not allowed : -20px |
| 174 | #HEADING53 | Value Error : padding -20px negative values are not allowed : -20px |
| 184 | #HEADING54 | Value Error : padding -20px negative values are not allowed : -20px |
| 193 | #HEADING55 | Value Error : padding -20px negative values are not allowed : -20px |
| 242 | #HEADING5a | Value Error : padding -20px negative values are not allowed : -20px |
| 251 | #HEADING52a | Value Error : padding -20px negative values are not allowed : -20px |
| 260 | #HEADING53a | Value Error : padding -20px negative values are not allowed : -20px |
| 270 | #HEADING54a | Value Error : padding -20px negative values are not allowed : -20px |
| 279 | #HEADING55a | Value Error : padding -20px negative values are not allowed : -20px |
| 288 | #HEADING56a | Value Error : padding -20px negative values are not allowed : -20px |
| 443 | | Value Error : width Parse Error 100% |
| 445 | | Value Error : left Parse Error 100%, width: 0% |

## Browser Functionality

| What SQL query is tested | What is the outcome | Comments/Description |
|---|---|---|

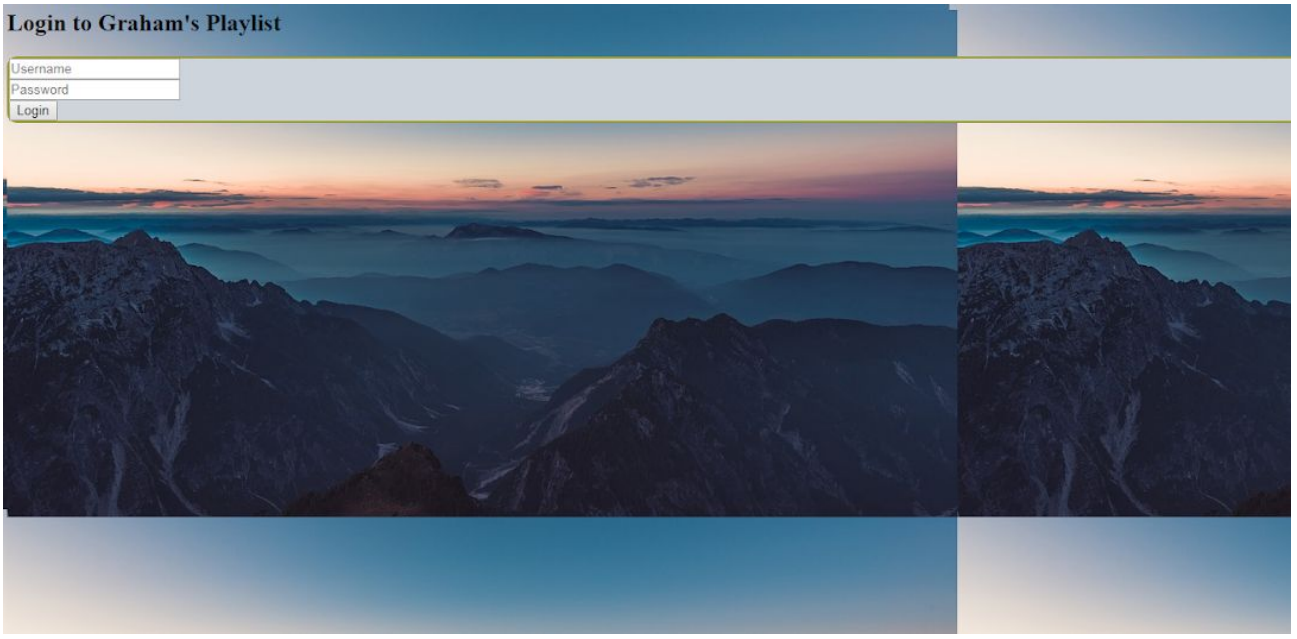
| | | |
|---|---|---|
| *Testing the Layout of the Login Page in chrome* |  | No further action required |
| *Testing the Layout of the Login Page in Opera* |  | No further action required |
| *Testing the Layout of the index/requested songs/party playlist pages in chrome* |  | No further action required |
| *Testing the Layout of the index/requested songs/party playlist pages in Opera* |  | No further action required |

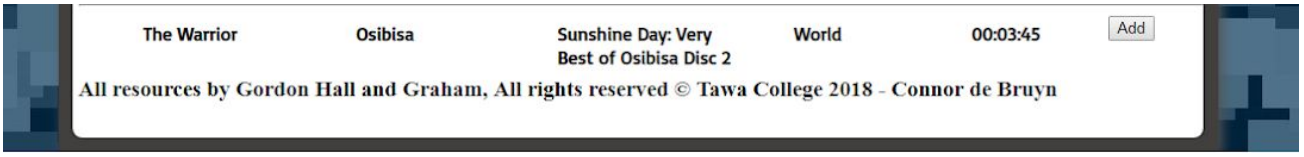
## Data Integrity and Testing at PHP level

- When deleting a record from a parent table the child tables associated record cascades, this does not affect either table significantly apart from not being able to use that data again, this also doesn't affect my website as well as all record created are forever kept in the 'full playlist table'.
- I tested the form by adding each record created into a "created table", if the data created isn't the correct data type (ie: putting in letters for duration) then it would fault at that stage, if the record is created successfully in the "created table" then the queries run to add it to the main table ensuring no faults.
- All the create read update delete queries work, and all have been used on the site except for the update queries, as users cannot edit any query already made

## Faults Identified at HTML/CSS level - (and corrected)

| | | | | |
|---|---|---|---|---|
| You Probably Couldn't See For The Lights, But You Were Staring Straight At Me | Arctic Monkeys | Live In Texas | Indie Rock | 142secs |
| Angelina Flashback | Earl Klugh | Miami Vice | Jazz | 207secs |
| Surfing With The Alien | Joe Satriani | Surfing With The Alien [1999 | Rock | 265secs |



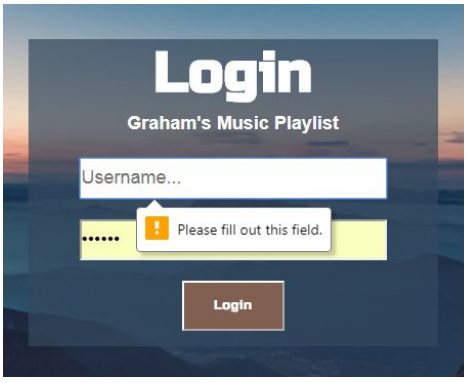
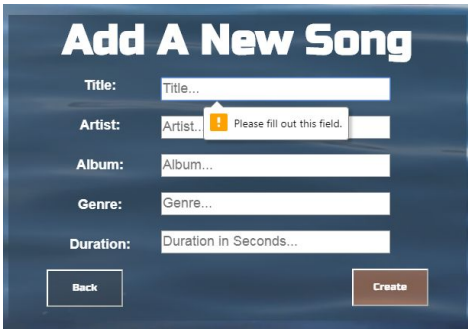
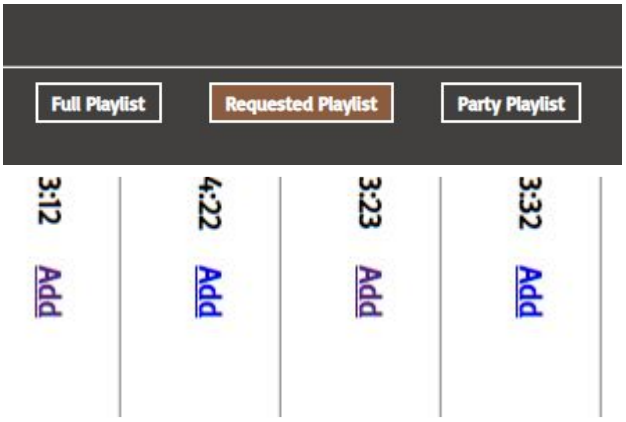
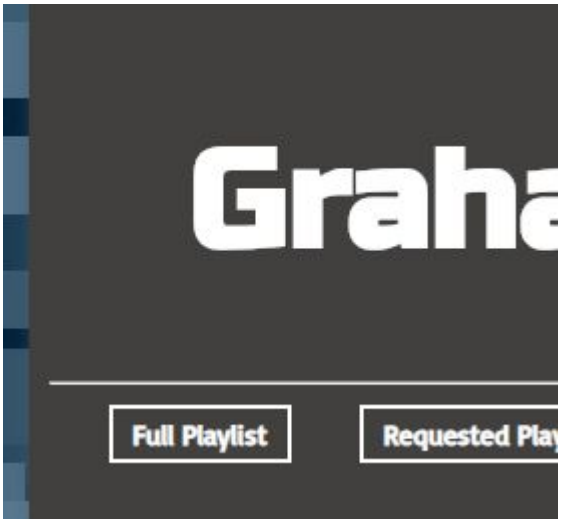



## PHP Query Testing

| What SQL query is tested | What is the outcome | Comments/Description |
|---|---|---|
| Pulling all the main table data by Music_ID descending | **- Full Playlist -**<br>Title / Artist / Album / Genre / Duration<br>Casino / Acoustic Alchemy / Early Alchemy / Acoustic / 00:03:17 Add<br>Sarah Victoria / Acoustic Alchemy / Early Alchemy / Acoustic / 00:01:54 Add<br>Waiting For You / Acoustic Alchemy / Early Alchemy / Acoustic / 00:03:24 Add<br>Curls / Girls / Album / Alternative / 00:02:04 Add<br>De l'Ab?me au Rivage... / Emma Shapplin / Carmine Meo / Alternative / 00:01:09 Add | No further action required |
| Pull all the music playlist data by Music_ID descending | **- Requested Songs Playlist -**<br>Title / Artist / Album / Genre / Duration / User<br>Lucifero, Quel Giorno... / Emma Shapplin / Carmine Meo / Alternative / 00:03:32 / graham Add Del<br>Marry Song / Band of Horses / Cease to Begin / Alternative / 00:03:23 / graham Add Del<br>Passchendaele / Sarah Slean / Passchendaele / Alternative / 00:04:22 / graham Add Del<br>You Were Mine / Dixie Chicks / Dixie Chicks / Country / 00:03:37 / graham Add Del<br>Lost For Words / Ronan Keating / 10 Years Of Hits / Dance / 00:03:48 / graham Add Del<br>The Sodom And Gomorrah Show / Pet Shop Boys / Fundamental / Dance / 00:05:19 / graham Add Del | No further action required |
| Pull all the party playlist data by genre ascending | Title / Artist / Album / Genre / Duration<br>Full Duration: 06:07:59<br>Casino / Acoustic Alchemy / Early Alchemy / Acoustic / 00:03:17<br>Casino / Acoustic Alchemy / Early Alchemy / Acoustic / 00:03:17<br>Sarah Victoria / Acoustic Alchemy / Early Alchemy / Acoustic / 00:01:54<br>Waiting For You / Acoustic Alchemy / Early Alchemy / Acoustic / 00:03:24<br>Casino / Acoustic Alchemy / Early Alchemy / Acoustic / 00:03:17<br>Curls / Girls / Album / Alternative / 00:02:04<br>Zombie / The Cranberries / Zombie / Alternative Rock / 00:04:12 | No further action required |

## Testing at HTML Level

| Element Tested | Screenshot (Evidence): |
|---|---|

| | |
|---|---|
| Error catching input elements such as the login page or the Add a song page, it will throw up an error to tell the user to input a variable. If variables such as these aren't error catched they could cause errors and prove potential frustration for the user. No further actions required. |   |
| All buttons and links work, they all redirect the user to the appropriate page or the appropriate action. No further actions required |  |
| All page formatting works. Titles, text, buttons and divs are margined with padding, this helps give the website a cleaner approach and doesn't distract the user from navigation and web use. No further actions are required. |  |

| | |
|---|---|
| All spelling has been tested along with Data integrity. Along each playlist, all songs follow the same format with no errors. All data is also visible. No further actions are required. | |

| | | | | | |
|---|---|---|---|---|---|
| Casino | Acoustic Alchemy | Early Alchemy | Acoustic | 00:03:17 | Add |
| Sarah Victoria | Acoustic Alchemy | Early Alchemy | Acoustic | 00:01:54 | Add |
| Waiting For You | Acoustic Alchemy | Early Alchemy | Acoustic | 00:03:24 | Add |
| Curls | Girls | Album | Alternative | 00:02:04 | Add |
| De l'Ab?me au Rivage... | Emma Shapplin | Carmine Meo | Alternative | 00:01:09 | Add |
| Exile | Enya | Watermark | Alternative | 00:04:22 | Add |
| Is There a Ghost | Band of Horses | Cease to Begin | Alternative | 00:02:59 | Add |

# Legal, Ethical and Moral responsibilities

## Data permission

For all resources used in my website I have been given all permissions for, The data is provided by Gordon Hall/Graham which i have full rights. The images are obtained via creative commons where anyone is allowed to reuse with modification as long as they select it. The only video in this website is provided by shutterstock in the royalty-free section.

I have only allowed the users access to basic permissions, so if their accounts have been hacked then they cannot change the database or website in any specific way. The only user with complete access is graham. I have also done some SQL injection hack measures so that if the php detects use of inputting code through a text input then it would stop the input.

I did this so that it would protect the users personal information, as to protect their privacy. Ensuring the comfort of the user and following the law/privacy acts on the users information.

## User Rights

- I have provided a username and password for each user to use so that they each have their own privacy in what they do on the website, The users information is stored on cookies during each web visit, but if they log out of the site or leave the browser for 15 mins all their information is deleted. So no one can see what they did on the website or if they even were there.
- Each user is ALLOWED to have their own privacy, it is my ethical responsibility to provide them with enough comfort to keep their privacy and to not spread any personal information that they have shared on my website. This also ensures that they don't feel anxious in any way in using my site so they can return more frequently.
- Privacy act Principles Examples: Principles 1/2/3/4 governs the way that private info may be collected, with their consent and their willingness to do so. Nothing is forced on them in this website so they get their free will to choose to provide the site with their private info. Principle 5 governs the way private info is stored, in my site ALL info is stored on a secure database where no info can be accessed by anyone else apart from graham, however graham is not allowed to access the usernames and passwords database. Principle 6 governs the way private info can be viewed, as stated before if any user provides info on this site they are full acknowledged that anyone can see their info and store their info unknowingly.

## Copyright

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- I feel as though showing where all the resources came from is appropriate copyright as well as putting the date to make sure it is valid.
- I included the copyright state at the end of each music page, this ensures that it is read as well as not getting shown too overwhelmingly, I included it so that I have shown where all resources are provided, and if anyone were to ask for permissions to use any resources they would contact Gordon Hall or Graham.
- I did not have to do copyright for any of the images/videos provided as they are all royalty-free with allowed perms for reuse.