**SCHOOL OF ENGINEERING AND TECHNOLOGY**

**ASSIGNMENT / PROJECT SUBMISSION FORM**

**PROGRAMME : BSc (Hons) in Computer Science**

**SEMESTER : Jan / Apr / Aug 2023**

**SUBJECT : WEB1201 / WEB2014 Web Fundamentals**

**DEADLINE : 3August 2023 23:59 MYT**

**INSTRUCTIONS TO CANDIDATES**

* This is a(n) ~~individual~~ / group project.

**IMPORTANT**

# The University requires students to adhere to submission deadlines for any form of assessment. Penalties are applied in relation to unauthorized late submission of work.

# Coursework submitted after the deadline but within 1 week will be accepted for a maximum mark of 40%.

# Work handed in following the extension of 1 week after the original deadline will be regarded as a non-submission and marked zero.

**Lecturer’s Remark** (Use additional sheet if required)

List down the name of the group members and the student IDs here.

**21042692**

**Tham Jian Hao**

I...................................................................................... (Student’s Name) ................... (Student ID) received the assignment and read the comments.

**7/7/2023**



....................................... (Signature/Date)



**Academic Honesty Acknowledgement**

**Tham Jian Hao**

“I .........................................(Student’s Name) verify that this paper contains entirely my own work. I have not consulted with any outside person or materials other than what was specified (an interviewee, for example) in the assignment or the syllabus requirements. Further, I have not copied or inadvertently copied ideas, sentences, or paragraphs from another student. I realize the penalties *(refer to page 16, 5.5, Appendix 2, page 44 of the student handbook diploma and undergraduate programme)* for any kind of copying or collaboration on any assignment.”

**7/7/2023**



….................................. (Student’s signature / Date)

**Lecturer’s Remark** (Use additional sheet if required)

List down the name of the group members and the student IDs here.

**21045596**

**Lim Xiwei**

Shape

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**7/7/2023**

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**Lim Xiwei**

“I .........................................(Student’s Name) verify that this paper contains entirely my own work. I have not consulted with any outside person or materials other than what was specified (an interviewee, for example) in the assignment or the syllabus requirements. Further, I have not copied or inadvertently copied ideas, sentences, or paragraphs from another student. I realize the penalties *(refer to page 16, 5.5, Appendix 2, page 44 of the student handbook diploma and undergraduate programme)* for any kind of copying or collaboration on any assignment.”

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List down the name of the group members and the student IDs here.

I...**NG JIA WEN**......... (Student’s Name) ...**21057146**... (Student ID) received the assignment and read the comments.



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…..............**7/7/2023** (Student’s signature / Date)

**Lecturer’s Remark** (Use additional sheet if required)

List down the name of the group members and the student IDs here.

I...**Ng Zhi-Yi**... (Student’s Name) ...**21053020**... (Student ID) received the assignment and read the comments.

.............A black line drawing of a bird

Description automatically generated...........**7/7/2023** (Signature/Date)

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“I ...**Ng Zhi-Yi**...(Student’s Name) verify that this paper contains entirely my own work. I have not consulted with any outside person or materials other than what was specified (an interviewee, for example) in the assignment or the syllabus requirements. Further, I have not copied or inadvertently copied ideas, sentences, or paragraphs from another student. I realize the penalties *(refer to page 16, 5.5, Appendix 2, page 44 of the student handbook diploma and undergraduate programme)* for any kind of copying or collaboration on any assignment.”

….........A black line drawing of a bird

Description automatically generated.............**7/7/2023** (Student’s signature / Date)

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**1. Introduction**

The BLACKPINK website is an engaging and visually appealing platform that commemorates the remarkable journey and achievements of one of the world's most renowned K-pop groups. With K-pop's global cultural effect developing, BLACKPINK has played an important part in popularising the genre globally, leaving an enduring impression on the music industry. This website has been meticulously curated to give users an in-depth understanding of the group's history and career, allowing fans to look deep into the lives of its four incredibly gifted members: Jisoo, Jennie, Rosé, and Lisa.

The website's aims are multifaceted, with the goal of creating an entertaining and user-friendly experience for both die-hard BLACKPINK fans and interested newcomers to the K-pop industry. The website's scope consists of many parts that cater to various aspects of BLACKPINK's journey. The "Bio" section details the group's growth from their debut to their current status as global superstars. Individual member profiles display their various backgrounds, skills, and critical contributions to the group's success. The "Album" section contains a full library of BLACKPINK's musical discography, full with audio samples or streaming links for fans to enjoy.

The visually appealing "Gallery" contains stunning photographs of BLACKPINK's exciting performances, music videos, and behind-the-scenes experiences, providing fans with a deeper experience into the group's dynamic world. The "Merch" area allows fans to interact even further by exploring and purchasing authentic BLACKPINK products including as clothes, accessories, records, and collectibles.

The website's concept nicely complements BLACKPINK's vibrant and active persona. Bright colours, images, high-quality photography, and modern layouts combine to produce an aesthetically beautiful and engaging experience that genuinely captures the spirit of BLACKPINK's music and global influence. The cheery and dynamic tone reflects the group's fun-loving personality, immersing visitors in BLACKPINK's universe from the minute they come on the website. Because the website is mobile-friendly, fans may simply access it from their smartphones and tablets, suiting current browsing patterns and improving user accessibility.

In conclusion, this website is the definitive destination for all things BLACKPINK, offering fans and K-pop lovers an immersive and helpful experience that honours the group's incredible journey. Whether you're a die-hard Blink (BLACKPINK fan name) or someone new to the world of K-pop, this platform provides a fun way to learn about, celebrate, and engage with one of the world's most known and influential K-pop groups. BLACKPINK's effect on the worldwide music landscape is evident, from their catchy songs to their mesmerising performances, and this website pays respect to their remarkable skill and achievements.

**2. Design Concept**

The design concept of the website is centred around the popular South Korean girl group "BLACKPINK ," aiming to reflect their modern, trendy, and bold image while prioritizing a user-friendly and responsive experience. In addition, the website adopts a responsive layout with media queries to ensure a seamless user experience across different devices, including desktops, tablets, and mobile phones. Furthermore, we have implemented accessibility features by adding titles and alt text for icons and alt text for images. This ensures that users with disabilities or using assistive technologies can have a more inclusive browsing experience and understand the context of the visual elements on our website. By incorporating these accessibility practices, we aim to make our website more user-friendly and welcoming to all users, regardless of their abilities or preferences.

A screen shot of a computer

Description automatically generated

**Figure 1.** “Hamburger” Icon on Mobile

A computer screen with a hand cursor and word

Description automatically generated

**Figure 2.** Nav Bar Hover Effect

To improve accessibility and ease of use, a sticky top navigation bar is implemented, allowing users to access main sections (home, bio, album, gallery, merch) regardless of their scroll position. The navigation bar features a responsive "hamburger" menu icon that appears on smaller screens to improve accessibility (Figure 1). Active links are highlighted in #EB97BB colour. Originally, the website's hover effect was designed to change the background to the same colour as the active link, while keeping the font colour unchanged. However, after careful consideration, the design was modified to its current state, where the hover effect changes the background to a light pink (#FFE5FD) with black text (Figure 2). This change was made to enhance user interactivity and improve readability. By using the new style, there is a better contrast in text colour, making it easier for users to identify the active link and hover link during navigation, resulting in a more user-friendly experience.

The footer section contains links to key pages presented in a list format with white text against a dark background (#0B0819). The BLACKPINK logo is aligned left, occupying around 12% of the footer width, accompanied by our group number and an explanation stating that we designed this website for an assignment. For fans wishing to stay connected with BLACKPINK, the "contact" section on the right side of the footer provides links to BLACKPINK's official social media accounts (Instagram, Facebook, Twitter, YouTube). We have customized the scrollbar on our website to match the BLACKPINK image. The scrollbar track background is nearly pure black, while the thumb is in pink. Additionally, we have added a hover effect that changes the thumb colour to light pink when users mouse over it, offering visual feedback for a more engaging experience. These design choices are purposefully tailored to cater to the target audience, who are fans of BLACKPINK and appreciate a contemporary and trendy aesthetic.

The initial design submitted has been refined to improve mobile responsiveness and enhance user experience. Changes were made to accommodate various screen sizes, aligning with our overall goal of providing an accessible and visually pleasing experience for all users. By incorporating media queries, the website ensures a consistent experience across different devices. These media queries effectively adjust the layout and font sizes based on the screen size, enhancing readability and usability across all platforms.

**2.1 Home**

The BLACKPINK website homepage design idea is around producing a visually attractive and engaging experience that connects with the group's target audience, who are largely BLACKPINK fans and K-pop lovers. The objective is to immerse visitors in BLACKPINK's environment, exhibiting the group's vibrancy and brilliance while delivering a smooth user experience.

The use of colours, especially the dominant pink (#EB97BB) associated with BLACKPINK's brand, immediately captures fans' attention and develops a strong visual identity. This colour scheme complements the group's image wonderfully, resulting in a consistent and recognisable theme through the website. The layout is user-friendly, allowing users to effortlessly browse across various parts of the webpage. Clear and clear titles, such as "Albums," "Gallery," and "Upcoming Tours," give a rapid summary of the material, making it easy for users to access the information they desire.

Every part is meticulously organised with HTML elements such as <article>, <img>, and <h1>/<h2> headings. The floating feature is used strategically to visually separate headers from supporting paragraphs, improving readability, and giving the page a clean and professional appearance. The usage of pictures is important in catering to the visual preferences of the target audience. Large, high-quality photographs of BLACKPINK members and concerts not only offer aesthetic appeal, but they also build an emotional connection with fans, bringing them closer to their favourite group.

The addition of interactive parts, such as play and share buttons for album tracks, increases user engagement and creates a sense of involvement. The "More" links, which can be found in many places, encourage users to explore deeper, satisfying fans' demand for more BLACKPINK information and material. The countdown timer for coming performances increases fan excitement and anticipation, improving the sense of community and shared passion for the group's events.

A screenshot of a contact us form

Description automatically generated

**Figure 3.** Contact Form

In addition, the BLACKPINK website also has a vital "Contact Us" form that can be found at the bottom of the home page. By using this form, users may contact the website's administrators or management team, providing as a crucial communication channel. The contact form, which was created using HTML and CSS, collects crucial user data including name, email address, and message.

A screenshot of a login screen

Description automatically generated A screenshot of a sign up form

Description automatically generated

**Figure 4.** Sign-in and Sign-up form

Users may enter their accounts and access personalised features like remembered preferences, order history, or premium content by using the "Sign In" form. Two input fields are normally included on a form: one for the username or email address and one for the password. The entered credentials are checked against the user database when the form is submitted to guarantee authentication. The users may click the sign-up link if they do not have an account.

For new users who want to register an account on the BLACKPINK website, there is a "Sign Up" form. To create a new user profile, this form often asks for more information than the sign-in form. Users are asked for a special username and strong password within the form, which will be used to enter the website later. Overall, the sign-in and sign-up forms are shown as pop-ups in the BLACKPINK website. Users may safely input their credentials in a pop-up box that displays on the screen when they click the buttons.

Beside from that, the decision to omit the use of <section> element in the final code was driven by several consideration. The website's specified layout and visual requirements were efficiently fulfilled utilising other HTML elements and CSS styling, making the need of <section> components unnecessary. This gave the website's visual look additional flexibility and modification choices. Finally, due to the minimal number of unique content parts on the homepage, different <section> components were judged unnecessary for content organisation.

Overall, the design decisions are ideal for the target demographic of BLACKPINK fans and K-pop lover. By generating an eye-catching, well-organized, and engaging experience. BLACKPINK's lively and dynamic image is reflected in the usage of the group's characteristic colour, colourful imagery, and interactive components. The structure and clear headlines respond to fans' need for simply accessible information, while enticing graphics and a countdown metre increase overall excitement and engagement.

The addition of the contact and Sign In/Sign Up forms was done to meet the assignment requirements while ensuring a seamless and engaging interaction for users. If any changes were made to the original design, they would have been done to improve the user experience and better relate with BLACKPINK's brand. To guarantee that it matches the expectations of the target audience, the design idea went through multiple versions, including feedback from focus groups and user testing. Based on fan feedback and user behaviour research, changes were made to the colour palette, layout, and addition of interactive parts. Finally, the final design perfectly reflects the values of BLACKPINK, providing a visually beautiful and user-friendly homepage that resonates with fans and accomplishes the overall aims of the project.

**2.2 Bio**

The Bio page design concept revolves around crafting a visually captivating and immersive experience that connects deeply with the group's target audience, comprising BLACKPINK fans and K-pop enthusiasts. The objective of this page is to showcase BLACKPINK’s vibrant and brilliant persona as well as ensuring a seamless and delightful user experience.

The website layout is thoughtfully designed to be user-friendly, allowing visitors to navigate seamlessly across different sections of the homepage. Clear and concise headers, such as "Achievements," "Meet the Members," and "The History of BLACKPINK," offer a quick overview of the content, enabling users to access the information they desire effortlessly. The organization enhances readability and provides a clean and professional appearance. Classes such as “meaning”, “achievement”, and “member” helps group and organize the content to be more appealing to the eyes.

The first section of the page is divided into two parts. The first part, "The Meaning Behind BLACKPINK," explains the significance of the group's name, emphasizing their strength and empowerment beyond beauty. The second part, "Achievements," showcases the group's success and recognition in the music industry through a list of prestigious awards they have won, establishing their authority in the K-pop world. We decided to have this information on our webpage to provide fans and visitors with a deeper understanding of BLACKPINK's identity and journey. By sharing the meaning behind their name and highlighting their achievements, we aim to strengthen the emotional connection between the group and their fans. It also showcases BLACKPINK's talent and success, building credibility and attracting more fans and K-pop enthusiasts to support and appreciate the group's artistry. The use of pink for the heading "BLACKPINK" and the award titles in the "Achievements" section aligns with the group's branding and creates visual appeal. It establishes a clear hierarchy, draws attention to important elements, and highlights their achievements, while adding vibrancy to the overall design.

A screenshot of a video game

Description automatically generated

**Figure 5.** Zig-zag Arrangement

The "Meet the Members" part follows a visually engaging zigzag arrangement. It starts with Lisa's image and corresponding details, followed by Rosé's image and details in the next row (Figure 5). This pattern continues for Jennie and Jisoo as well. High-quality and eye-catching photographs of BLACKPINK members plays a pivotal role in catering to the visual preferences target audience. The font size for each member's Instagram link is smaller, ensuring it stands out but does not overpower the main details. The use of pink colour for the Instagram links adds visual consistency with BLACKPINK's branding and creates a cohesive and visually appealing design. By arranging the content in this zigzag pattern, the page offers a dynamic and captivating visual experience, keeping the users' attention focused on each member's information. The inclusion of Instagram links allows fans to connect directly with their favourite members. The design for the "History" section incorporates the use of pink colour to highlight the years in each subsection, providing a clear visual timeline of BLACKPINK's journey. The pink colour serves as a visual element to emphasize and distinguish each era or period in the group's history.

**2.3 Album**

The web page showcases six BLACKPINK albums in an organized layout. It features a grid-based display that uses Flexbox to ensure a balanced presentation of album covers and relevant information. Each album cover is presented within a designated container, along with relevant details such as the album name and release year. The image container ("imgCont" class) is enhanced with a captivating hover effect, enticing users to click on the album cover and explore further. This effect slowly fades out the album cover, revealing a centred label with the text "Enter Album Playlist" (Figure 6). To achieve this, the label is styled with the "middle" class, which positions it at the centre of the album cover. For contrast purposes, the label has a white text (#FFFFFF).

A screenshot of a music album

Description automatically generated

**Figure 6**. Dummy Album Cover Link

The decision to only create the album playlist for "The Album" is justified by time limitations. Implementing interactive and fully functional album playlists requires significant effort, including downloading audio files and updating the track list. Given these limitations, a small addition was made by including the text "A Link to Nowhere" in a smaller font size below the "Enter Album Playlist" label (Figure 6). This subtle notice serves to inform users that currently, only "The Album" has a functional playlist.

The design of the album entries is responsive, adapting gracefully to different screen sizes. As the screen size decreases, the "divCont" elements adjust their width to ensure they fit well within the available space. The album titles and release years maintain a readable font size, contributing to a pleasant user experience across devices.

A screenshot of a music album playlist

Description automatically generated

**Figure 7.** On Mobile Screen

In addition, the "break2" divisions are strategically utilized with flex-basis set to 100% and initially hidden (display: none) to improve responsiveness. These divisions will become visible (display: block) on mobile screens, allowing the albums to stack vertically (Figure 7). As a result, each album occupies its own row, creating a user-friendly layout for smaller screens. The use of "flex-wrap" on the main container contributes to this arrangement. Moreover, the hover effect is modified for smaller screens as the hover effect will not work on tablets and smartphones. This change ensures that the labels are constantly visible, allowing users to interact with them without relying on hovering actions (Figure 7).

**2.4 Album Playlist**

The web page layout is organized into sections, making it easy for users to navigate and understand the content. The "header" section includes the main and secondary titles, providing context for the album playlist. The "wrapper" section centrally houses the album cover, music player interface, and track list, maintaining centre alignment regardless of the screen width. This layout ensures that users can quickly find and interact with the music player and explore the available tracks.

A screenshot of a music player

Description automatically generated

**Figure 8.** Soundwave Animation

The display of an album cover image with a gradient background border adds visual appeal. Adjacent to the album cover is the "interface" division, displaying essential album information, such as the current album name and the total number of songs. The main change made to this web page from the initial design was the addition of a soundwave animation beneath the information to introduce dynamic elements and convey the presence of music (Figure 8). The animated soundwave adds a sense of movement and rhythm, enhancing the overall music-focused theme.

The "interface" division includes the current song name and a music player progress bar with real-time song time updates positioned to the right. The progress bar is created using the <input> element with a type of "range" and is customized using CSS pseudo-elements such as ::webkit-slider-thumb (Figure 8). By setting the webkit-appearance property to none, the default styling for the <input> element is removed. The usage of the "-webkit-" vendor prefix ensures a consistent appearance across popular WebKit engine-based browsers such as Chrome, Opera, and Edge. However, to address compatibility with Firefox, the pseudo-elements moz-range-track and moz-range-thumb are utilized instead. This customization ensures that the design of the progress bar blends with the overall website theme and displays consistently across various web browsers.

A black and white play button

Description automatically generatedA screenshot of a music player

Description automatically generated

**Figure 9.** Active Icons and Soundwave Default State

Furthermore, the icons used for shuffle, loop, play, backwards, forward, and volume controls enhance the user experience, as these familiar symbols are intuitive and easily recognizable to most users. These controls allow users to interact with the music player effectively. To enhance usability, the icons for loop, shuffle, and volume controls change to bright pink with full opacity when interacted with, clearly indicating their active functionality (Figure 9). When the volume icon is hovered over, a volume slider appears, allowing users to adjust the volume, with the volume value displayed for accessibility. After a brief delay, the slider disappears when the user moves the mouse away. This effect is achieved using the setTimeout method in JavaScript.

For further accessibility considerations, clicking the volume icon mutes the volume, and clicking again restores the volume to its original value. When the volume is muted, the animation is removed to signify the change, and when the player is paused, the animation is paused using the animation-play-state attribute (Figure 9). This helps to maintain visual consistency and provide visual cues to the user about the current state of the music player. Additionally, when the shuffle button is triggered, the current playing song continues playing and moves to the top of the list for clarity.

CSS animation is also utilized to animate the movement of the gradient background and dynamically adjust the opacity of the divisions (soundwave bars) based on the progress percentage of the animation duration. This is achieved through the implementation of keyframes attribute, enabling smooth and synchronized visual effects that complement the music player's functionality.

In the track list division, the song names and durations are displayed in white font on a clean and organized layout. The currently playing song stands out visually with a distinctive background, black text, and a play icon as a bullet point. The division is made scrollable to facilitate easy browsing of the entire track list, but the scrollbar is hidden to maintain a minimalist appearance. A transparent linear gradient with to top direction is applied to indicate scrollability.

The web page design takes mobile responsiveness into account, with media queries adjusting layout and font sizes for different screen sizes. On mobile screens, the album image and music player interface are stacked using the "break2" class division, and the track list font size is decreased to avoid horizontal overflow.

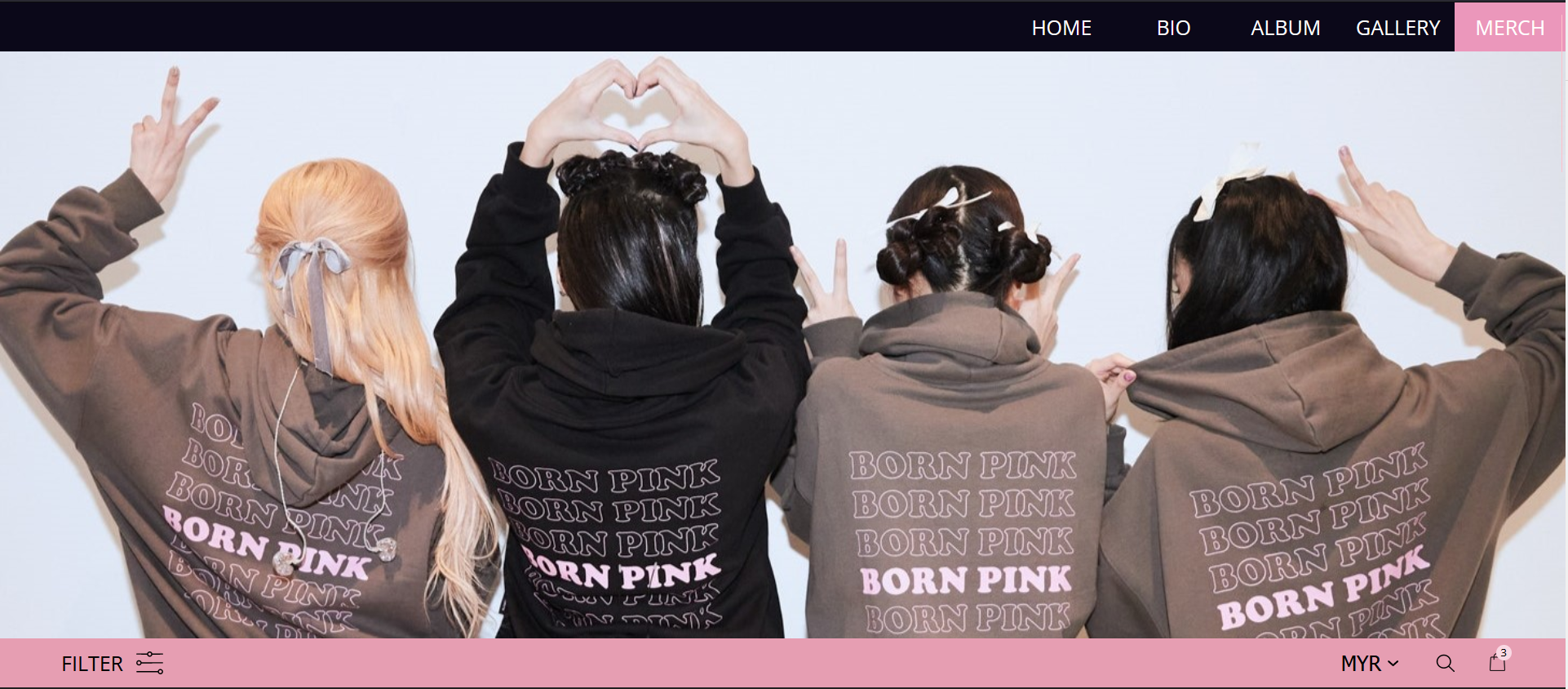
**2.5 Gallery**

The gallery page for BLACKPINK is thoughtfully designed, featuring curated images that capture the group's electrifying performances and candid moments. The page consists of 5 images and a central video, providing a balanced and engaging experience. Embracing a minimalist approach, the page displayed a captivating mix of black and pink-coloured images, adding to its aesthetic appeal. This layout ensures easy navigation, allowing fans and K-pop enthusiasts to explore a diverse collection of high-quality visuals.

The gallery starts with a wrapper called “box”, organizing the first three images with a taller picture on the left and two others on the right. To ensure the images are aligned correctly, “display: flex”, “flex-wrap: wrap” and “justify-content: center” are used. The centre spot is reserved for one of their past performance videos. The <video> tag contains the ‘controls’ attribute, allowing the user to play, pause, control volume, and enter and exit full screen mode. The last two images are encased using earlier division class. This allows the bottom two images to be aligned properly with the other images. The gallery page design remains mostly unchanged, except for the absence of the video thumbnail in the video tag.

**2.6 Merch**

The Merch page starts with a strikingly large banner taking centre stage, proudly showcasing an image of the BLACKPINK members donning their exclusive merchandise. This picture was specifically chosen to forge an immediate visual and psychological bond between the fans and their beloved idols, as they can envision themselves embracing the same style and essence as their favourite artists. This powerful connection resonates throughout the entire shopping journey, making it an unforgettable and heartwarming experience for every devoted fan.



**Figure 10.** Banner and Toolbar

In order to ensure a seamless browsing experience, an interactive and intuitive toolbar has been strategically placed right below the banner. This thoughtfully designed toolbar serves as an indispensable tool for users, offering essential elements such as a versatile filter, a currency selection feature to cater to diverse preferences, a powerful search functionality for effortless exploration, and a swift, one-click link to the shopping bag page for quick access. Designed with user-centricity in mind, this sticky toolbar will remain affixed at the top of the page, effectively replacing the navigation bar to ensure effortless accessibility even as users scroll down the page. While the initial design phase may not have explicitly highlighted the toolbar's functionalities, it was deemed paramount to imbue it with responsive actions when clicked. This deliberate decision was taken to uphold the website's completeness and to provide users with a comprehensive and engaging platform for their online activities.

Upon activating the filter icon, a visually appealing popup elegantly slides in from the left side of the screen. The popup is configured to span 30% of the current viewport width dynamically. Its captivating pink (#FFC0CB) background exudes an elegant aura, while a subtle semi-transparent overlay is cleverly applied to the right side of the popup. This gently guides the users’ attention while ensuring the background context remains visible. The popup elegantly caters to user expectations by allowing them to swiftly close it through the dedicated X button or by merely clicking outside the popup area. This intuitive behaviour offers users a natural and effortless way to regain an unobstructed view of the underlying product listings.

A screenshot of a computer

Description automatically generated

**Figure 11.** Filter Popup

As an indispensable tool for efficient product exploration, the filter popup offers three essential categories, empowering users to sort and narrow down their desired products effectively. The “Sort By” category presents a thoughtfully designed set of radio buttons, providing a seamless and straightforward way for users to choose from the available sorting options: price and name in ascending and descending orders. The “Price Range” category empowers users to personalize their search by allowing them to input their desired minimum and maximum budget values, ensuring the displayed products align perfectly with their financial preferences. Lastly, the “Product Type” category allows users to quickly filter products based on their specific type, streamlining the browsing process, and enabling users to find relevant items effortlessly.

The toolbar also includes a currency selection option prominently positioned on the left-hand side, affording users the convenience of choosing from a diverse range of five major currencies, thereby catering to the needs of a truly global audience. Moreover, the intuitive search functionality empowers users to swiftly locate their desired products with precision and ease by entering specific product names. Furthermore, the platform's attention to detail is evident with the addition of a subtle yet highly practical feature—a small indicator thoughtfully overlaid on the shopping bag icon. This ingenious design choice theoretically enables users to obtain an instant snapshot of the current number of items in their shopping bag. Such a visual cue streamlines the shopping process, allowing customers to keep track of their selections effortlessly and make informed decisions.

The page's focal point revolves around the product listings, which are skilfully arranged using the CSS Grid layout. This strategic choice offers two significant advantages. Firstly, it streamlines the alignment process, requiring only the configuration of column width, column gap, justify-content, and align-items properties, thereby facilitating ease of maintenance and scalability. The second advantage stems from the layout's responsiveness, automatically adapting to various viewport sizes. This dynamic adjustment enhances user experience and ensures optimal presentation across diverse devices and screen dimensions. Each product is also thoughtfully designed with an appealing hover effect, causing it to subtly enlarge when interacted with. This creative enhancement aims to entice users, making them more likely to click on the products and explore further.

**2.7 Merch Info**

The Merch Info page presents a meticulously curated and comprehensive view of the selected product, empowering customers to make well-informed decisions with utmost ease. The intuitive design offers a seamless experience, allowing customers to effortlessly add the product to their shopping bag. The web page is thoughtfully divided into two equal sections, with an interactive image slider positioned on the left. This captivating slider showcases a larger, crystal-clear image of the product, enticing customers to take a closer look. Moreover, it offers the freedom to explore various angles of the product with just a click, ensuring that customers can make an informed decision with confidence. As users scroll down, the image slider intelligently sticks to the middle of the viewport, guaranteeing an unobstructed and persistent view of the product. This strategic design choice keeps the focus firmly on the product, elevating the overall browsing experience and engrossing customers in the enticing details of the merchandise.

A black sweatshirt with pink writing

Description automatically generated

**Figure 12.** Image Slider

The well-designed right division of the product page thoughtfully encompasses all essential details required for customers to make a convenient purchase. A prominent and eye-catching text prominently displays the product name, accompanied by its price positioned just below, recognizing the utmost importance of price information for most people. Subsequently, a user-friendly section empowers customers to select their preferred size through easily navigable radio buttons, tailored for products like apparel that are available in multiple sizes.

Following this, customers are invited to determine their desired quantity of products, facilitated by intuitive add and subtract buttons for seamless increment and decrement of the quantity count. To ensure fair access to all customers and account for limited stock availability, each item is subject to a maximum purchase limit, ensuring an equal opportunity for everyone to acquire their cherished merchandise.

A screen shot of a black and white website

Description automatically generated

**Figure 13.** Product Details

Right after that, a prominent call-to-action button, designed with a captivating (#FFC0CB) pink background and strategically occupying 48% width of the right column, irresistibly draws the customers' attention, ensuring its prominent visibility and enticing users to take immediate action. To ensure clarity and transparency, the well-crafted ‘Add to Bag’ button effectively communicates the primary action required from customers—simply click to add the product to their shopping bag. Subsequently, the page gracefully scrolls down to reveal a comprehensive array of concise yet detailed product information. This section serves as a repository of essential product details and potential disclaimers, providing customers with a holistic understanding and realistic expectations of the offering. By strategically placing the call-to-action button ahead of the product details, the design adeptly stimulates user engagement, urging them towards swift checkout. Recognizing that different users may have varying levels of interest in product specifics, the information is thoughtfully presented below the button, catering to the needs of all users and facilitating a seamless shopping experience.

**2.8 Shopping Bag**

The Shopping Bag page serves a vital purpose by offering users a comprehensive and efficient overview of their intended purchases before proceeding to checkout. To ensure a seamless shopping experience, the design philosophy behind this page focuses on minimalism and user-centricity. Extraneous colours and unnecessary information are purposefully removed, leaving behind only the most pertinent details essential to each product.

By employing a clean and uncluttered layout, the web page creates an atmosphere of simplicity and ease of use. A pristine white background mimics the format of a professional invoice, guaranteeing optimal contrast between the product information and the surrounding space, thus enhancing readability and visual appeal. Each individual product is thoughtfully organised, with a clear separation between items using horizontal lines. This meticulous arrangement enhances visual hierarchy and ensures that users can easily distinguish between different products in their shopping bag.

A white background with black text

Description automatically generated

**Figure 14.** Summary of Product Details

Within each section, a comprehensive summary of vital product details, including the product name, size, price, and quantity ordered, is thoughtfully provided to empower customers in making informed decisions about their chosen items. This insightful summary equips shoppers with all the essential information they need to proceed with their purchases confidently. However, we understand that preferences may change, and to accommodate this, we have placed convenient edit and delete buttons right before the start of the following product, allowing customers the flexibility to modify their selection choices or seamlessly remove products from their shopping bag as they desire.

A screenshot of a computer

Description automatically generated

**Figure 15.** Total Section

Advancing to the lower section of the shopping bag, this vital component computes and displays the total amount payable by the customer. Ideally, the backend should be able to efficiently calculate the sum of each product item, taking into account their respective quantities, and showcase it in the clear and concise subtotal area. The shipping cost is also dynamically calculated based on the customer’s address, ensuring an accurate and transparent shopping experience. However, these functionalities had to be hardcoded directly into our website as they require an external database to ensure smooth and efficient calculation management. Stepping into the final stage of the purchasing journey, our well-crafted call-to-action button, boldly labelled ‘Proceed to Checkout (3)’ with the total number of items in parentheses, stands out strikingly against the pristine white background, expertly capturing the users’ attention and guiding them effortlessly towards finalising their purchase. Upon clicking this button, users should be promptly directed to our secure and seamless vendor payment system. However, in our case, a reassuring ‘Payment Successful!’ alert box appears to instil confidence and satisfaction in our valued customers.

A screenshot of a computer

Description automatically generated

**Figure 16.** Payment Successful Alert Box

**3. Challenges and Solutions**

The first significant challenge we encountered during the project was effectively managing the substantial workload that needed to be accomplished within the given timeframe. The team was initially taken aback by the unexpected inclusion of additional requirements, particularly the implementation of the sign-in/sign-out and contact form functionalities. Moreover, the concurrent existence of various tests, quizzes, and assignments from other subjects added considerable weight to our already burdened shoulders. In response to this daunting situation, we proactively devised a comprehensive plan to divide and conquer the assignment, breaking it down into manageable parts.

Through thoughtful discussions, we wisely allocated approximately 2 weeks from the assignment release date for the completion of all the web pages. As a team, we committed to meeting up again when the 2-week deadline approached to assess each other's progress and provide support where needed. As a result of our collective efforts, we were gratified to find that around 70% of the web pages were completed within this time frame. During this process, it became evident that certain team members were facing additional external responsibilities, which naturally influenced varying completion rates among us.

To ensure continuous progress and sustained productivity, a strategic decision was made during this crucial period. Capitalizing on the diverse skill sets within the team, members who had already completed their coding tasks seamlessly transitioned into working on their reports, maximizing the efficiency of their time and resources. Meanwhile, the dedicated efforts of those still refining the website allowed the project to steadily inch closer to its envisioned fruition. This astute and pragmatic approach enabled the team to effectively navigate the demanding workload and ensured steady progress towards the timely completion of the project. The team's cohesive and collaborative spirit, remarkable adaptability, and synchronized effort proved to be the driving force behind successfully managing challenges and achieving significant milestones in the flawless execution of the project.

The second significant challenge our team encountered was the formidable learning curve transitioning from theoretical knowledge to practical application, which demanded a concerted effort to overcome. Due to varying levels of proficiency in web programming among team members, there were apparent struggles while attempting to build an interactive and responsive web page from scratch. However, undeterred by these challenges, we adopted a proactive approach to tackle this obstacle by engaging in self-directed learning, diligently exploring online tutorials, and harnessing our collective knowledge to transform our innovative ideas into tangible reality. This fostered a highly collaborative and supportive environment, wherein every member made valuable contributions, propelling us towards the accomplishment of our shared website objectives.

**4. Implementation and Results**

**4.1 Hyperlinks Functionality Test**

This test aim to ensure that all links on the website are working correctly and accurately directing users to their intended destinations.

**4.1.1 Navbar Links**



**Figure 17.** Nav Bar Links

Expected Outcomes

* Home Link: The user should be redirected to the homepage when clicked.
* Bio Link: The user should be redirected to the bio page when clicked.
* Album Link: The user should be redirected to the album page when clicked.
* Gallery Link: The user should be redirected to the gallery page when clicked.
* Merch Link: The user should be redirected to the merch page when clicked.

Test Cases

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Accessible? | | | | |
| Home | Bio | Album | Gallery | Merch |
| Home | - | Yes | Yes | Yes | Yes |
| Bio | Yes | - | Yes | Yes | Yes |
| Album | Yes | Yes | - | Yes | Yes |
| Gallery | Yes | Yes | Yes | - | Yes |
| Merch | Yes | Yes | Yes | Yes | - |

**4.1.2 Home Page Links**

A black background with white text and pink letters

Description automatically generated

**Figure 18. “**More” Link for Bio Page

Expected Outcomes

* Each "More" link in its respective section should lead to the corresponding page.
* “Shop Now” link should direct user to the Merch Page

Test Cases

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Accessible? | | | |
| Bio | Album | Gallery | Merch |
| Bio More | Yes | - | - | - |
| Album More | - | Yes | - | - |
| Gallery More | - | - | Yes | - |
| Shop Now | - | - | - | Yes |

**4.1.3 Bio Page Insta Links**

A screenshot of a computer

Description automatically generated

**Figure 19.** Insta Link for Lisa and Rosé

Expected Outcomes

* Each Instagram link should redirect to the respective member's Instagram profile.

Test Cases

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Accessible? | | | |
| Lisa Insta | Rosé Insta | Jennie Insta | Jisoo Insta |
| @lalalalisa\_m | Yes | - | - | - |
| @roses\_are\_rosie | - | Yes | - | - |
| @jennierubyjane | - | - | Yes | - |
| @sooyaaa\_\_ | - | - | - | Yes |

**4.1.4 Album Page to Album Playlist**

A screenshot of a music album

Description automatically generated

**Figure 20.** Enter Album Playlist Link (currently the only one set up)

Expected Outcomes

* When the user clicks on "The Album" album cover image, they should be directed to the corresponding album playlist.

Test Cases

|  |  |
| --- | --- |
|  | Accessible? |
| Album Playlist |
| Album | Yes |

**4.1.5 Merch Page Links**

A black sweatshirt with pink writing

Description automatically generated

**Figure 21.** Product Link (currently the only one set up)

A screen shot of a computer

Description automatically generated

**Figure 22.** Shopping Bag Link

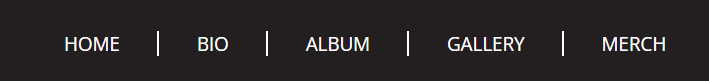
Expected Outcomes

* When the "Puff Print Pullover Hoodie" product is clicked, it should redirect the user to its merchandise information page.
* When the shopping bag is clicked, it should direct the user to the shopping bag page.

Test Cases

|  |  |  |  |
| --- | --- | --- | --- |
|  | Accessible? | | |
| Merch | Merch Info | Shopping Bag |
| Merch | - | Yes, through product link | Yes, through shopping bag link |
| Merch Info | Yes, through nav or footer link | - | Yes, through shopping bag link |
| Shopping Bag | Yes, through nav or footer link | - | - |

**4.1.6 Footer Social Media Links**



**Figure 23.** Footer Links

Expected Outcomes

* Home Link: The user should be redirected to the homepage when clicked.
* Bio Link: The user should be redirected to the bio page when clicked.
* Album Link: The user should be redirected to the album page when clicked.
* Gallery Link: The user should be redirected to the gallery page when clicked.
* Merch Link: The user should be redirected to the merch page when clicked.

Test Cases

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Accessible? | | | | |
| Home | Bio | Album | Gallery | Merch |
| Home | - | Yes | Yes | Yes | Yes |
| Bio | Yes | - | Yes | Yes | Yes |
| Album | Yes | Yes | - | Yes | Yes |
| Gallery | Yes | Yes | Yes | - | Yes |
| Merch | Yes | Yes | Yes | Yes | - |

**4.2 Responsive Nav Bar Hover Effect**

This test is performed to verify that the "hamburger" icon's colour changes according to the background colour, ensuring adequate contrast.

Expected Outcomes

* By default, the "hamburger" icon should appear in white.
* When the navigation menu is not displayed, and the home link is hovered, the "hamburger" icon should be in white.
* When the navigation menu is displayed, and the home link is both hovered and active, the "hamburger" icon should be in white.
* When the "hamburger" icon is hovered, it should change to black.
* When the navigation menu is displayed, and the home link is hovered (but not active), the "hamburger" icon should be in black.

Test Cases

|  |  |
| --- | --- |
| **Test Case** | **Condition** |
| Case 1 | Default state |
| Case 2 | Navigation menu not displayed, and home link is hovered |
| Case 3 | Navigation menu displayed, home link hovered, and active |
| Case 4 | "Hamburger" icon hovered |
| Case 5 | Navigation menu displayed, and home link hovered (not active) |

Test Results

\* The hover effect was light pink, but due to a bug in the snipping app, it appears white.

|  |  |
| --- | --- |
| Case 1: | Case 2: |
| Case 3: | Case 4: |
| Case 5: |  |

**4.3 Form Functionality Test**

This test will focus on assessing the functionalities of the forms, as required by the assignment. The forms should allow for successful submissions and effective error handling.

**4.3.1 Login Form**

Expected Outcomes

* Display the Sign-In form when the User icon is clicked.
* Display the Sign-Up form when the "Sign Up" link is clicked.
* Revert to the Sign-In form when the "Login" link is clicked.
* Close the form when the "Cancel" button is clicked or when the user clicks anywhere outside the modal.
* If the user input is less than 5 characters or leaves the username field blank, display an alert with the message: "Please enter your username (5 to 30 characters)."
* If the user input is less than 8 characters or leaves the password field blank, display an alert with the message: "Please enter your password (at least 8 characters)."
* Upon form submission:

1. If the username and password are the same, show an alert with the message "Username and password cannot be the same," and prevent form submission.
2. If the username and password are different:
   * + - If it's a Sign-In form, show an alert with the message "Login successfully!" and reload the page.
       - If it's a Sign-Up form, show an alert with the message "Sign up successfully!" and reload the page.

Test Cases

|  |  |
| --- | --- |
| **Test Case** | **Condition** |
| Case 1 | User icon is clicked |
| Case 2 | “Sign Up” link is clicked |
| Case 3 | “Login In” link is clicked |
| Case 4 | "Cancel" button is clicked or user clicks anywhere outside the form |
| Case 5 | Username field is less than 5 characters or empty |
| Case 6 | Password field is less than 8 characters or empty |
| Case 7 | Submit form with username and password being the same |
| Case 8 | Submit Sign-In form with username and password being different |
| Case 9 | Submit Sign-Up form with username and password being different |

Test Results

|  |  |
| --- | --- |
| Case 1: | Case 2: |
| Case 3: | Case 4: |
| Case 5: | Case 6: |
| Case 7: | Case 8: |
| Case 9: |  |

**4.3.2 Contact Form**

Expected Outcomes

* If the "Name" field is empty, an alert should display "Please fill out this field."
* If the "Email" field is empty or does not match the email pattern, an alert should display "Please enter a valid email address." The form submission should be prevented.
* If the "Message" field is empty, an alert should display "Please fill out this field."
* If all the fields (Name, Email, and Message) are valid, and the "Submit" button is clicked, an alert should display "Form submitted!" The form fields should be cleared.

Test Cases

|  |  |
| --- | --- |
| **Test Case** | **Condition** |
| Case 1 | Name field is empty |
| Case 2 | Email field is empty |
| Case 3 | Email field contains an invalid email format |
| Case 4 | Message field is empty |
| Case 5 | Name, Email, and Message fields are valid, and the "Submit" button is clicked |

Test Results

|  |  |
| --- | --- |
| Case 1: | Case 2: |
| Case 3: | Case 4: |
| Case 5: |  |

**References**

Auto, H. (2019, December 18). Blackpink fans on warpath after agency fails to release new album from hit Korean girl group. *The Straits Times*. <https://www.straitstimes.com/lifestyle/entertainment/blackpink-fans-on-warpath-after-agency-fails-to-release-new-album-from-hit>

Auto, H. (2019, December 18). Blackpink fans on warpath after agency fails to release new album from hit Korean girl group. *The Straits Times*. <https://www.straitstimes.com/lifestyle/entertainment/blackpink-fans-on-warpath-after-agency-fails-to-release-new-album-from-hit>

BLACKPINK - Topic. (2020, October 2). *Pretty savage* [Video]. YouTube. <https://www.youtube.com/watch?v=F8c8f2nK82w>

BLACKPINK - Topic. (2020a, October 2). *Crazy over you* [Video]. YouTube. <https://www.youtube.com/watch?v=u7rKGj13pAs>

BLACKPINK - Topic. (2020b, October 2). *Love To Hate Me* [Video]. YouTube. <https://www.youtube.com/watch?v=wlzGXcTzdzU>

BLACKPINK - Topic. (2020d, October 2). *You never know* [Video]. YouTube. <https://www.youtube.com/watch?v=4Kk_iaaHd_Y>

*BLACKPINK | SHOP*. (n.d.). BLACKPINK | SHOP. <https://shop.blackpinkmusic.com/>

*Blackpink 2023 Athletic Puff Print Pullover Hoodie*. (n.d.). BLACKPINK | SHOP. <https://shop.blackpinkmusic.com/products/blackpink-2023-athletic-puff-print-pullover-hoodie>

*BLACKPINK ARENA TOUR 2018 “SPECIAL FINAL IN KYOCERA DOME OSAKA” by BLACKPINK*. (n.d.). Apple Music. <https://music.apple.com/au/album/blackpink-arena-tour-2018-special-final-in-kyocera/1455720702>

*BLACKPINK for Vogue Korea magazine July 2019 issue*. (2023, July 5). Kpopping. <https://kpopping.com/kpics/BLACKPINK-for-Vogue-Korea-magazine-July-2019-issue>

*BLACKPINK Jadi Girl Group K-Pop Pertama yang Puncaki Chart Album di Inggris*. (2022, September 26). <https://hiburan.dreamers.id/article/107581/blackpink-jadi-girl-group-k-pop-pertama-yang-puncaki-chart-album-di-inggris>

*Blackpink Logo and symbol, meaning, history, PNG, brand*. (2022, July 4). 1000LOGOS. <https://1000logos.net/blackpink-logo/>

*Blackpink Logo and symbol, meaning, history, PNG, brand*. (n.d.). <https://1000logos.net/blackpink-logo/>

BLACKPINK Records. (2020a, October 22). *BLACKPINK - “Bet You Wanna (with Cardi B)” M/V* [Video]. YouTube. <https://www.youtube.com/watch?v=kQ3Lflwar0A>

*Blackpink, once a novelty, returns to Coachella as the headliner*. (2023, April 16). Blackpink, Once a Novelty, Returns to Coachella as the Headliner | the Peninsula Qatar. <https://thepeninsulaqatar.com/article/16/04/2023/blackpink-once-a-novelty-returns-to-coachella-as-the-headliner>

*Blackpink, once a novelty, returns to Coachella as the headliner*. (2023, April 16). Blackpink, Once a Novelty, Returns to Coachella as the Headliner | the Peninsula Qatar. <https://thepeninsulaqatar.com/article/16/04/2023/blackpink-once-a-novelty-returns-to-coachella-as-the-headliner>

BLACKPINK. (2020, August 28). *BLACKPINK - “Ice Cream (with Selena Gomez)” M/V* [Video]. YouTube. <https://www.youtube.com/watch?v=vRXZj0DzXIA>

BLACKPINK. (2020, June 26). *BLACKPINK - “How You Like That” M/V* [Video]. YouTube. <https://www.youtube.com/watch?v=ioNng23DkIM>

BLACKPINK. (2020c, October 2). *BLACKPINK - “Lovesick Girls” M/V* [Video]. YouTube. <https://www.youtube.com/watch?v=dyRsYk0LyA8>

BLACKPINK. (2023, July 5). *BLACKPINK members kpop profile (2023 updated)*. Kpopping. <https://kpopping.com/profiles/group/BLACKPINK>

*BORN PINK HOODIE*. (n.d.). BLACKPINK | SHOP. <https://shop.blackpinkmusic.com/products/born-pink-hoodie>

*BORN PINK SWEATS*. (n.d.). BLACKPINK | SHOP. <https://shop.blackpinkmusic.com/products/born-pink-sweats>

*BORN PINK Vinyl*. (n.d.). BLACKPINK | SHOP. <https://shop.blackpinkmusic.com/collections/vinyl/products/born-pink-vinyl>

Davis, M. B. (2020, March 14). *Sound Wave Loading Animation in CSS*. Codepen. <https://codepen.io/yomateo/pen/ypbNrJ>

Elevendigits. (n.d.). *Reddit - Dive into anything*. <https://www.reddit.com/r/BlackPink/comments/xfih0i/220916_blackpink_2nd_album_born_pink_itunes/>

Emi. (2021, December 10). *blackpink ot4*. Pinterest. <https://www.pinterest.com/pin/853361829401722903/>

*Fall 23*. (n.d.). Balenciaga. <https://www.balenciaga.com/en-my/new-arrivals/discover/fall-23>

Fandomz, S. M. (2021, June 3). *Ot4 Blackpink Wallpaper💕*. Pinterest. <https://br.pinterest.com/pin/608900812123503112/>

Fonticons, Inc. (2017, December 15). *Circle Play Icon*. Font Awesome. <https://fontawesome.com/icons/circle-play?f=classic&s=solid>

Fonticons, Inc. (2022, August 16). *Facebook F Icon*. Font Awesome. <https://fontawesome.com/icons/facebook-f?f=brands&s=solid>

Fonticons, Inc. (2022a, August 16). *Twitter Icon*. Font Awesome. <https://fontawesome.com/icons/twitter?f=brands&s=solid>

Fonticons, Inc. (n.d.). *angle-up*. Font Awesome. <https://fontawesome.com/icons/angle-up?f=classic&s=solid>

Fonticons, Inc. (n.d.). *bars*. Font Awesome. <https://fontawesome.com/icons/bars?f=classic&s=solid>

Fonticons, Inc. (n.d.). *Instagram Icon*. Font Awesome. <https://fontawesome.com/icons/instagram?f=brands&s=solid>

Fonticons, Inc. (n.d.). *play*. Font Awesome. <https://fontawesome.com/icons/play?f=classic&s=solid>

Fonticons, Inc. (n.d.). *share-from-square*. Font Awesome. <https://fontawesome.com/icons/share-from-square?f=classic&s=regular>

Fonticons, Inc. (n.d.). *User Icon*. Font Awesome. <https://fontawesome.com/icons/user?f=classic&s=solid>

Fonticons, Inc. (n.d.). *volume*. Font Awesome. <https://fontawesome.com/icons/volume?f=classic&s=solid>

Fonticons, Inc. (n.d.). *volume-xmark*. Font Awesome. <https://fontawesome.com/icons/volume-xmark?f=classic&s=solid>

Fonticons, Inc. (n.d.). *YouTube Icon*. Font Awesome. <https://fontawesome.com/icons/youtube?f=brands&s=solid>

Gowman, P., & Gowman, P. (2019). May events 2019 | London Korean Links. *London Korean Links | Covering Things Korean in London and Beyond Since 2006*. <https://londonkoreanlinks.net/2019/05/01/may-events-12/>

GreatStack. (2022, December 26). *How To Make A Music Player Using HTML CSS And JavaScript* [Video]. YouTube. <https://www.youtube.com/watch?v=JtrFzoL1joI>

Gumiel, A. (2020, April 12). ˗ˏˋblackpinklockscreensˎˊ˗. Pinterest. <https://www.pinterest.com/pin/594404850808127505/>

Jia-Lin. (2020). BLACKPINK look stunning in individual posters for PUBG Mobile game collaboration | allkpop. *Allkpop*. <https://www.allkpop.com/article/2020/09/blackpink-look-stunning-in-individual-posters-for-pubg-mobile-game-collaboration>

*JISOO FIRST SINGLE ALBUM PHOTOBOOK (BLACK)*. (n.d.). BLACKPINK | SHOP. <https://shop.blackpinkmusic.com/collections/jisoo/products/jisoo-first-single-album-photobook-black>

*Jisoo Flower Heart Tote Bag*. (n.d.). BLACKPINK | SHOP. <https://shop.blackpinkmusic.com/products/jisoo-flower-heart-tote-bag>

*Jisoo Me Bucket Hat*. (n.d.). BLACKPINK | SHOP. <https://shop.blackpinkmusic.com/products/jisoo-me-bucket-hat>

KProfiles. (2023, July 3). *BLACKPINK Members Profile (Updated!)*. Kpop Profiles. <https://kprofiles.com/black-pink-members-profile/>

*KRUNK X BLACKPINK In Your Area Pouch*. (n.d.). BLACKPINK | SHOP. <https://shop.blackpinkmusic.com/products/krunk-x-blackpink-in-your-area-pouch>

Leela. (2018, June 16). *BLACKPINKOFFICIAL*. Pinterest. <https://www.pinterest.com/pin/727401777289692846/>

Leela. (2018, June 16). *BLACKPINKOFFICIAL*. Pinterest. <https://www.pinterest.com/pin/727401777289692846/>

Lier, B. (2021, February 19). *Free Rewind Forward icon - download in glyph style*. IconScout. <https://iconscout.com/icon/rewind-forward-3315756>

*Material symbols and icons - Google Fonts*. (n.d.). Google Fonts. <https://fonts.google.com/icons?selected=Material+Symbols+Rounded:pause_circle:FILL@1;wght@400;GRAD@0;opsz@48&icon.query=pause&icon.style=Rounded>

Mie.Karl. (2022, October 17). *BLACKPINK 🖤💗*. Pinterest. <https://www.pinterest.com/pin/1101763496315626082/>

Mie.Karl. (2022, October 17). *BLACKPINK 🖤💗*. Pinterest. <https://www.pinterest.com/pin/1101763496315626082/>

Mojeed, I. (2023, April 10). *Creating a custom CSS range slider with JavaScript upgrades - LogRocket Blog*. LogRocket Blog. <https://blog.logrocket.com/creating-custom-css-range-slider-javascript-upgrades/>

Moon, K. (2019, April 4). Everything to Know About K-Pop Group BLACKPINK. *Time*. <https://time.com/5562946/blackpink-k-pop-everything-to-know/>

Natty. (2022, August 7). *JENNIE STAN 😍😍 on Twitter*. Pinterest. <https://www.pinterest.com/pin/663506957616589138/>

News, T. (2023, March 23). *Live Nation Taiwan in hot water with Blackpink fans after controversial IG post | Taiwan News | 2023-03-23 15:53:00*. Taiwan News. <https://www.taiwannews.com.tw/en/news/4844434>

News, T. (2023, March 23). *Live Nation Taiwan in hot water with Blackpink fans after controversial IG post | Taiwan News | 2023-03-23 15:53:00*. Taiwan News. <https://www.taiwannews.com.tw/en/news/4844434>

Niemvuilaptrinh. (2022, January 4). 23 Javascript Countdown Timer For Website - Geek Culture - Medium. Medium. <https://medium.com/geekculture/23-javascript-countdown-timer-for-website-273efc2f5618>

*Pantip - Learn, Share & Fun*. (n.d.). <https://pantip.com/topic/39591593>

Refsnes Data. (2011, February 28). *HTML DOM Document Object*. W3schools. <https://www.w3schools.com/jsref/dom_obj_document.asp>

Refsnes Data. (2013, October 22). *CSS Animations*. W3schools. <https://www.w3schools.com/css/css3_animations.asp>

Refsnes Data. (2014, June 23). *HTML DOM Element addEventListener() Method*. W3schools. <https://www.w3schools.com/jsref/met_element_addeventlistener.asp>

Refsnes Data. (2014, March 5). *HTML DOM Image Object*. W3schools. <https://www.w3schools.com/JSREF/dom_obj_image.asp>

Refsnes Data. (2014, October 1). *HTML DOM Element innerHTML Property*. W3schools. <https://www.w3schools.com/jsref/prop_html_innerhtml.asp>

Refsnes Data. (2014, September 28). *HTML DOM Audio Object*. W3schools. <https://www.w3schools.com/jsref/dom_obj_audio.asp>

Refsnes Data. (2014, September 30). *onloadedmetadata Event*. W3schools. <https://www.w3schools.com/jsref/event_onloadedmetadata.asp>

Refsnes Data. (2014a, September 28). *HTML DOM Event Object*. W3schools. <https://www.w3schools.com/jsref/dom_obj_event.asp>

Refsnes Data. (2017, February 13). *How To Create Image Hover Overlay Effects*. W3schools. <https://www.w3schools.com/howto/howto_css_image_overlay.asp>

Refsnes Data. (2017, February 13). *How To Create a Login Form*. <https://www.w3schools.com/howto/howto_css_login_form.asp>

Refsnes Data. (2017, February 14). *How To Create a Contact Form with CSS*. <https://www.w3schools.com/howto/howto_css_contact_form.asp>

Refsnes Data. (2017, February 6). *How To Create a Responsive Top Navigation Menu*. W3schools. <https://www.w3schools.com/howto/howto_js_topnav_responsive.asp>

Refsnes Data. (2017, February 7). *How To Create a Scroll To Top Button*. W3schools. <https://www.w3schools.com/howto/howto_js_scroll_to_top.asp>

Refsnes Data. (2017, November 13). *How To Create a Custom Scrollbar*. W3schools. <https://www.w3schools.com/howto/howto_css_custom_scrollbar.asp>

Refsnes Data. (2019, June 26). *JavaScript Arrow Function*. W3schools. <https://www.w3schools.com/jsref/met_element_addeventlistener.asp>

*Repeat icon - Free Download PNG, SVG*. (2017, May 23). Icons8. <https://icons8.com/icons/set/repeat>

*Shuffle icon - Free Download PNG, SVG*. (2017, May 18). Icons8. <https://icons8.com/icons/set/shuffle>

sooyammy. (2020, May 9). *BLACKPINK - KILL THIS LOVE + DON’T KNOW WHAT TO DO (DVD TOKYO DOME 2020)* [Video]. YouTube. <https://www.youtube.com/watch?v=PZ8G_9-dfpM>

sooyammy. (2020b, May 9). BLACKPINK - KILL THIS LOVE + DON’T KNOW WHAT TO DO (DVD TOKYO DOME 2020) [Video]. YouTube. <https://www.youtube.com/watch?v=PZ8G_9-dfpM>

*These Are Blackpink's 12 Most Memorable Moments So Far*. (2022, December 2). Vogue Hong Kong. <https://www.voguehk.com/en/article/celebrity/blackpink-milestones/>

*Website Maker Editor*. (n.d.). Website Maker Editor. <https://www.renderforest.com/website-maker/new/lang/preview-project/template/90?backUrl=websites%2Fmusic>

Wikipedia contributors. (2023). Kill This Love. *Wikipedia*. <https://en.wikipedia.org/wiki/Kill_This_Love>

Wikipedia contributors. (2023a). Blackpink (EP). *Wikipedia*. <https://en.wikipedia.org/wiki/Blackpink_(EP>)

Wikipedia contributors. (2023b). Blackpink in Your Area. *Wikipedia*. <https://en.wikipedia.org/wiki/Blackpink_in_Your_Area>

Wikipedia contributors. (2023c). Born Pink. *Wikipedia*. <https://en.wikipedia.org/wiki/Born_Pink>

Wikipedia contributors. (2023d). The Album (Blackpink album). *Wikipedia*. <https://en.wikipedia.org/wiki/The_Album_(Blackpink_album>)

Wikipedia contributors. (2023e). Square up. *Wikipedia*. <https://en.wikipedia.org/wiki/Square_Up>

鄒紫. (2019, August 9). *BLACKPINK - KILL THIS LOVE (ALT 2) by itzyxcx on DeviantArt*. Pinterest. <https://ru.pinterest.com/pin/543246773801715993/>

**Appendix**

MEETING RECORDS

|  |  |  |
| --- | --- | --- |
| **DATE** | **ATTENDED BY** | **ITEM DISCUSSED** |
| **7/7/2023** | Lim Xiwei, Tham Jian Hao, Ng Zhi-Yi, Ng Jia Wen | All members were briefed on the folder organization and standard coding elements.  Tasks were divided among team members as follows:   * Jia Wen will work on the Home Page. * Zhi Yi will handle the Bio and Gallery. * Xiwei will take charge of the Album and Album Playlist. * Jian Hao will be responsible for the Merch, Merch Info, and Shopping Bag.   Workflow involves coding in Visual Studio first, then transferring to Replit for progress tracking and testing.  Deadline set: 22nd July 2023. |
| **20/07/2023** | Lim Xiwei, Tham Jian Hao, Ng Zhi-Yi, Ng Jia Wen | Decided to include login and contact form on the homepage. |
| **27/07/2023** | Lim Xiwei, Tham Jian Hao, Ng Zhi-Yi, Ng Jia Wen | Discussed the approach for creating the demonstration video.  Webpage Demonstration Video Tasks:   * Xiwei will showcase the laptop version of the webpage using Google Chrome, providing detailed explanations of its functionalities. * Xiwei will also demonstrate how our webpage renders for Firefox and Microsoft Edge to ensure compatibility across different browsers. * Jia Wen will showcase the mobile and tablet versions of the webpage. * Jian Hao will present the desktop version of the webpage. |

ACTIVITY LOG

|  |  |  |
| --- | --- | --- |
| **DATE** | **PROGRESS** | **RECORDED BY** |
| **06/07/2023** | **Code Standard Elements and their Responsive Design.**  Standard elements were coded from scratch to ensure consistency across webpages, and responsive design was prioritized to seamlessly adapt to various devices. | Lim Xiwei |
| **07/07/2023** | **Individual Design and Documentation Phase**  Team members were individually assigned to code the web pages they designed, using our Canva design plan as a reference.  Code template with consistent elements used for uniformity.  Every team member is also responsible for documenting their work in a report. | Tham Jian Hao |
| **20/07/2023** | **Reviewed Assignment PDF**  Reviewed the assignment briefing PDF to ensure the requirements stated are met. | Ng Jia wen |
| **27/07/2023** | **Preparing Demonstration Video**  Identified key features and functionalities to showcase. | Ng Jia wen |
| **31/07/2023** | **Finalizing Demonstration Video** Recorded the demonstration video, showcasing the selected functionalities of the webpage.  Demonstrated the compatibility of the webpage with different browsers, including Firefox, Microsoft Edge, and Google Chrome.  Highlighted the responsiveness of the webpage across different devices, such as laptops, mobiles, and tablets.  Edited and refined the video for a professional and seamless presentation. | Lim Xiwei |
| **03/08/2023** | **Final Touches**  Proof-read all web pages and the report to correct any grammar, spelling, or formatting errors. | Ng Zhi-Yi |