Layout Document

The plan of the website is to utilize a one column layout style on all the pages but the Discussion Posts page. The layouts have been chosen with one important aspect in mind, website usability. The one column layout helps the user focus on what matters at the moment, such as entering registration or login details. The two column layout for the Discussion Posts page is utilized to provide the users with accessible pathways to the profiles page, admin page and other pages.

Site Map / Page Organisation

Please follow the link below to the site map demonstrating the prospective site's page organization:

https://www.figma.com/file/2T9Vksvdw2ph6S4qiPidSE/COSC-360-Site-Map?node-id=0%3A1&t=K1PKlyoeUojFs39v-1

Logic Process

The first thing encountered when one visits the website initially, is the home page. From this page, one could choose to head over to the registration section of the website, or to login. On the registration page, the user is asked for the necessary details including but not limited to their email, password, name, and last name. On entering the user details, the user will be asked to confirm that the email used actually belongs to them through receiving an email detailing the confirmation process.

Once the user has confirmed email ownership, they will login and land on the home page. The home page will contain links which are pathways to the other sections of the website, such as the page for the Discussion Posts, the Admin Portal page, the Profiles page, and any other pages we could implement in the future.

On the Discussion Posts page, the logged in user is able to see the latest discussion posts on the website. They will be able to engage with those posts in various ways such as replying to the posts. The user will be able to see their own posts as well. When the user decides to create a Discussion Post, they can click on a Button, which will generate a form for the user that they can fill up with the relevant information. The form will request information such as: Title, and Discussion Body. In the Title section, the user could insert the Heading for their discussion and in the Discussion Body section, they could insert the main content of their discussion post. The content could be text or even links. The user will then be able to click on the "Create Discussion Post" button to create the discussion. Because of the integration of JQuery AJAX technologies, the page will load the newly created discussions without having to reload the pages manually. Luckily, the logged in user has the option of deleting a post should they have the need to do so.

When the logged in user decides to check out their profile settings, they could easily do so through heading over to the Profile Account Settings page where they

can easily change their account details, such as the first name, last name, email, password, and possibly their profile picture.

The administrators of course will have more authority, on top of the abilities that the day to day users have. The administrators will be able to take many actions through increased access to various resources such as access to the Admin Portal page, something that other users will not have access to. The administrators are able to see the registered users and to remove their access from the website when the need arises. This can be done through even deleting the user's forum account completely. The administrators will be able to see all Discussion Posts posted by all users. The administrators are able to see all the details of all accounts created on the site. This includes the users' names, email, and other information. When the need arises, the administrator can grant another user administering authority over the site.

Discussion Regarding the Design and Styles of all Pages

The design and styling of the entire website will be similar to the pages we have displayed here, such as the registration and login pages. The website's navigation bar will be kept simple throughout all the different pages. Moreover, like many websites and web applications, clicking on the logo (top left of the page) will redirect users to the initial landing page. The goal is to have a minimalist website design that is consistently applied to all the different pages throughout the website; This will be achieved by constantly reusing the components created where possible. Example, the buttons as well as its color scheme will be reused in the login, registration as well as the buttons associated with the creation of a discussion forum (create discussion button).

The dark color scheme was a bold choice that will offer an overall more pleasant experience, as dark colors are easier on the eyes and users will find it easier to spend more time on the website, creating and scrolling through the vast range of discussions. Overall, simplicity is one of the top priorities when it comes to design and as we stick to the same color scheme and reuse our existing components we are achieving that.

Client-side Security and Validation

The client-side validation will be implemented and handled using Javascript. It is extremely essential in order to improve the overall user experience as well as eliminate all possible errors before the user submits the form to the server; This allows the user to fix all the errors associated with their inputs.

Here are some of the JS client-side validation that is and will be implemented:
- Required fields checking: This will ensure that all the necessary fields are filled out by the users
- Email validation: This will ensure that the users input the correct email address format. The validation will check if the email contains the @ symbol. If the user did not use the correct format, an alert will pop up
- Password validation: This will ensure that a user is entering a strong password. Moreover, this will ensure that the user is entering a matching password that is above 8 digits, contains a mixture of upper and lowercase letters, numbers and symbols.
- Image validation: This ensures that users only use jpg and png. In the case that they do not, a pop up appears to show that they have to insert an image with the correct format

As per the client-side security, PHP will be in charge of that. We will further elaborate on that as we progress in the course and project.

Here are some screenshots that showcase the different validations we have implemented.
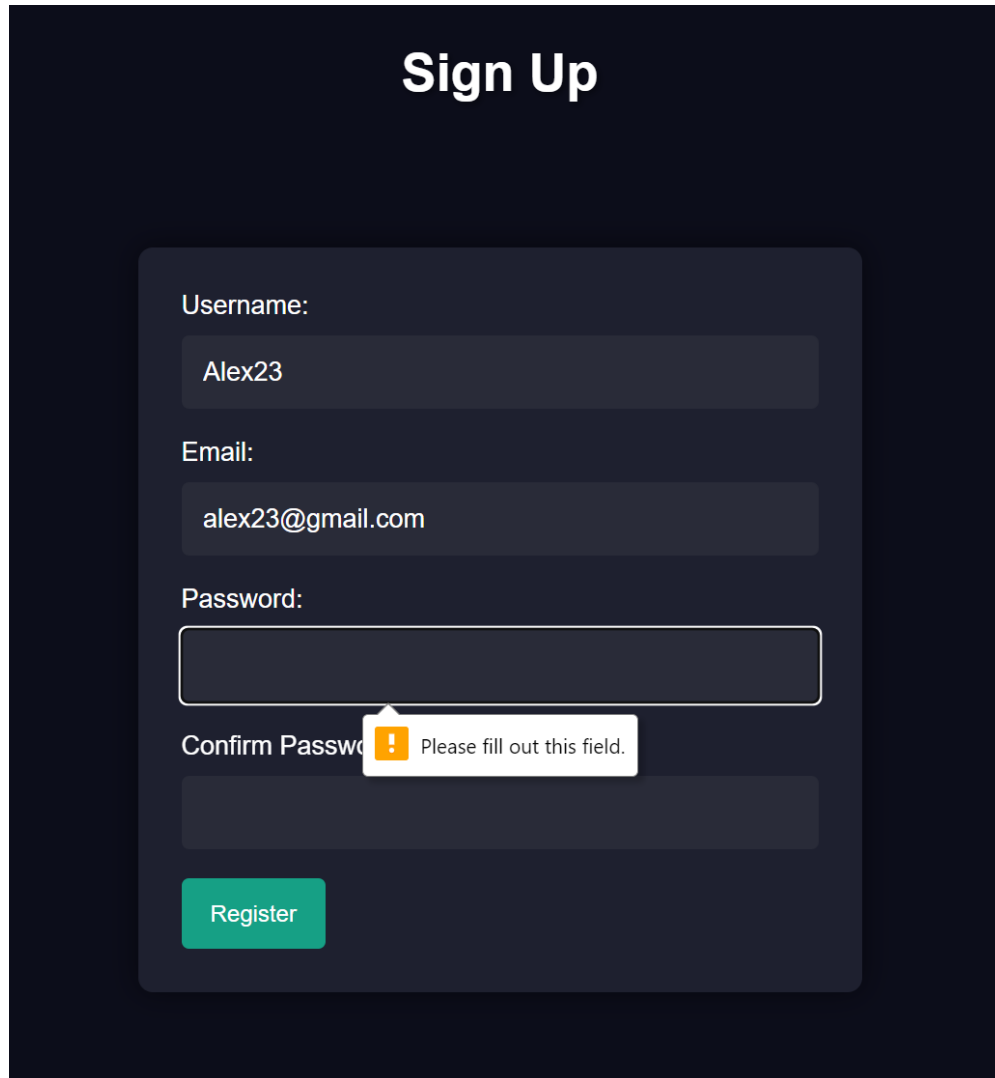
Register Page (1) - Email Validation:

Register Page (2) - Required fields checking

Respectively, a similar alert is shown when a user enters a non matching password or a password that is not strong enough (does not contain lower and upper case as well as a special character).