## USER WALK-THROUGH

The user starts at the home page, here the user will be welcomed to a nice and simplistic design, giving the user a general overview of what the site is about. In order for the user to create posts, forums and comments they must first login in the top right of the website, if they do not have an account they must sign up instead.

New users will see a form when they click the sign up button. The form will require a valid looking email, username, a password that meets the restrictions, and a confirmation of the password. Once the user has made a valid account they must click login to be directed to the login page, which also has a form requiring an input of an existing username and password.

Once successfully logged in the user is directed to the home page, but this time with unlocked features to create posts, forums, and comments.

Say a user wants to create a new forum, all they have to do is click on the orange "create a forum" button under "join or create your own community". The user is then directed to the create forum page where they can type in what they want their forum to be called, once they have typed in a name and checked the confirm forum creation box they can click create, and will be notified of the successful creation of the post. After a successful forum creation the user can visit the forum.

In order for the user to add a post to the newly created forum, they can click the create post button in blue. The user will then see a form requiring to specify what forum they want to add a post to, the title of the post, description, and an image. Description and image is optional. Once the user clicks submit they will be notified of a successful post and can go visit it. Note when going back to the homepage now the post will pop up under 'all activity', as well as under 'recent posts'.

Notice the user can also create posts and forums by hovering over to the profile circle in the top right of the website by clicking the down arrow and choosing an option from a drop down table. The user can also logout, or click on profile to make any changes.(Assume you click on profile)

At the profile page you will be able to see all your posts, your profile image, username and email. The user may click edit profile, to change email, username or, upload an image, note the file cannot be greater than 1mb. From the profile page the user can also click on any one of their posts or go to the forum that includes that post.

Let's say you choose to go to a forum and click on any post, you can add a comment by typing in the box where it says 'share your thoughts!'. The latest comment will be added to the bottom of the comment thread, and users will also be notified of a successful comment.

If the user wants to know more information about the website, they may choose to click on any of the links under 'quickscope information'. Once you click on any of the links it will provide the appropriate information and the user can proceedingly check out the other pages as well under 'quickscope information'.

Lastly the user can search up forums and posts in the search bar for easy navigation. All the user has to do is type in the forum name or post title, it does not have to be exact as the search bar will see if whatever letters are being typed can be found in a forum or post.

## Developer's perspective

We found it easiest to explain the software per feature.

**Styling** - We found it easiest to use bootstrap and choose a color palette to make the website look professional and clean.

**Smoothness** - We use AJAX so our website can run without interruptions.

**Signup** - the signup feature is implemented with a simple form that takes in input of email, username, and password. The email is validated by verifying there is an '@' sign, that there are no funky characters, and that the top-level domains are between 2-3 characters. The username can be a combination of any letters and numbers. The password must have one lowercase letter, one uppercase letter, and one number, it must also be 8 characters long, all this verification is done using regular expressions. Lastly the password must be confirmed by inputting it again. Note the code does not allow any whitespace either. Much of this checking is done with if else statements by comparing values and displaying the appropriate style on change of the inputs. Once an acceptable input is verified the email, username, and password are stored as variables and the database is queried to see if anyone with those parameters exists, if the result comes in as negative then the user is added to the database and can proceed to the login page.

**Login** - The login feature takes in 2 inputs (username and password). The login button has an on click function linked in the custom.js file. The function prevents file submission, and posts the input values to loginprocess.php in the server folder. The username is queried to find an associated password. If a record exists, the input password is verified against the encrypted password stored in the database. If the records matched, the user is logged in and redirected to the home page. Session variables for userid, avatar, and isAble (account enabled/disabled) are set. If the username or password entered are incorrect, feedback will be displayed to the user letting them know login has failed.

Create Forum - If a user attempts to view this page without being logged in, it will redirect to the login page(checked with user session variable). This page takes a title input, and a checkbox to confirm submission. The forum title input has a keyup function associated with it that ensures forum titles do not have spaces (if so, feedback will be displayed). The create button has an on submit function that prevents submission, and will display feedback if left empty. Both functions are contained in the custom.js file. The forum title is posted to forumProcess.php, where it is first checked if a forum with that name already exists (whether or not an SQL query with that title returns any rows). If not, the forum is inserted into the forums table. Upon successful creation, feedback is shown to the user, with a button link to the newly created forum.

**Create Post** - If a user attempts to view this page without being logged in, it will redirect to the login page(checked with user session variable). This page has a drop down of all forums using a foreach loop, from an SQL query returning all rows in the forums table. There is also a post title, description, and file uploads for a photo. Only the forum title and post title is required. (Feedback is posted if left blank). The create button has an on click function which makes the post.

**Comments** - Logged in users can comment on any posts, we have a designated table for just comments. The comment is inserted into the table based on the user that is logged in, and fetched to list it on the post based on the post\_id.

**Admin Panel** - Our users table has a column called isAdmin, 0 indicating not an admin and 1 indicating they are. The creators of the website are the only admin. When

logged into an admin account the profile page will show an admin panel based on if the isAdmin value is 1 or not. The admin can query any user and their posts. The database also has a column called isAble, which an admin can change to 0 to disable the user from posting, commenting, and creating forums. Admin also holds the ability to simply delete the post of any user. All this is done from querying for the appropriate properties of a table and updating the table.

**Profile forums and posts** - This feature shows the logged in user their forums in a dropdown table, and the option to go to that specific forum page. This is done by querying the user id associated with the forum. Likewise, posts can also be seen made by that user, by similarly querying where post and user have the same userid.

**Edit-Profile** - This feature allows the user to change their email and username linked to their account. This is done by first seeing if the chosen email and username don't already exist, and then updating the information in the database. Our website allows the user to upload an image as well with the restriction that it is under 1mb. The column 'avatar' in the user's table is where the image would be stored.

**Menu** - This is the side pop up table when the down arrow by the profile is clicked. This menu has reference links to profile, create post, create forum, and logout.

**Take Me Home Buttons** - Our website has two of these buttons, one is the quickscope logo itself and the other a home icone right beside it. Both work with a reference link to home.

**Recent Posts** - This feature shows the top 5 most forums that got posted on by descending the order from the forums table.

**Quickscope information** - This is a div that has a bunch of references to pages listed within the div.