Usability Evaluation Report

Aim: The aim of this report is to perform a **heuristic evaluation** of a low fidelity prototype with respect to Schneiderman's eight Golden Rules.

1.Strive for consistency: Designing "consistent interfaces" means using the same design patterns and the same sequences of actions for similar situations. This includes, but is not limited to, the right use of colour, typography and terminology in prompt screens, commands, and menus throughout the user's journey. The given design exhibits uniformity in some of the aspects like font, placement of icons, however it lacks uniformity in the placement of the **search bar**, that is, the search bar has been placed in the mid-section in **page-1**, but it has been placed in the **header area** in pages 2,3 and 4.

2.Cater to universal usability: According to this rule, the interface should be able to manage physical ability and workplace, cognitive and perceptual abilities, personality differences, cultural and international diversity, users with disabilities.

The design was successful in incorporating a variety of **languages** based on user's preference as well as the user's region. This feature makes the application capable of catering the needs of a variety of customers, speaking multiple languages, all over the world. However, the interface does not take into consideration, the **physical disability** of the user operating the application. Hence, the application should incorporate **natural language processing** or other such features in order to provide an additional option for the user to enter or edit their posts via **voice commands** rather than physically interacting with the interface. Considering the diversity of users, novice to expert, the application should possess an additional feature '**help'** that allows the user to look up for answers regarding a problem pertaining to the application as well as post his/her queries for the customer service team to solve. This will

3.Offer Informative Feedback: For every operator action, there should be some system feedback. For frequent and minor actions, the response can be modest, while for infrequent and major actions, the response should be more substantial. The interface does not adhere to the principle of offering informative feedback in **page 4**. The foresaid issue can be solved by providing a befitting feedback after **updating** or **deletion** of a post has been performed by the user. For example, the system should display a "**Post number 1 has been edited**" or '**Post number 2 has been deleted**' message as soon as the user edits or deletes a particular post .The same applies for creating a new post or a new discussion in the application. Providing a modest feedback stating the result of the user's action will instil a sense of accomplishment in the user's mind.

4.Design dialogs to yield closure: Sequences of actions should be organized into groups with a beginning, middle, and end. The design follows this rule by having 'Creating/editing/starting a post/discussion' heading while the user is performing any of those respective tasks. This feature not only enables the user to understand, at a first glance, the **exact task** he/she is performing but also removes the **hesitation** in the user's mind, especially a **novice** user.

5.Permit easy reversal of actions: Easy reversal of action relieves anxiety, since users know that their errors can be undone, and encourages exploration of unfamiliar options in the application.

The application encompasses options to **edit**, **delete** posts or discussions added by the user in the application. The interface also allows the user to **revisit** previous pages of the application with the help of a specific **'go back'** button. A feature allowing the user to **'go forward'** in the application can be added to further enhance the user's experience. Additionally, a feature allowing the user to clear his/her post, while writing, can be added as a shortcut, thereby allowing the user to clear his written post in just one click.

6.Support Internal Locus of Control: Experienced operators strongly desire the sense that they oversee the system and that the system responds to their actions. The interface should not act on its own by popping some advertisements, notifications unless given permission by the user. The application should permit the user to switch to other pages in between task. This interface fails to comply to this rule. For example, in order to access and create a post in another discussion group from 'viewing a post in detail' page, the user must click 'home' button or 'go back' button in order to access the 'create a new post' feature in the respective discussion group. This problem can be solved by providing some sort of a shortcut feature for the user to access all the discussion group he/she is a part of.

7.Reduce Short-term Memory Load: The limitation of human information processing in short-term memory requires that displays be kept simple, multiple page displays be consolidated, window-motion frequency be reduced, and enough training time be allotted for codes, mnemonics, and sequences of actions. The interface was unsuccessful in implementing this rule by keeping more than 7+/-2 chunks of information including icons, calendar, search bar in page 2. This problem can be solved by including a sidebar in the application and keeping additional features like 'view by popularity/ time' and search bar in that sidebar. This will **limit** the amount of **information** the users see at any given time, thereby reducing **anxiety** in their minds.

8. Prevent Errors: Generally, error rates are higher than expected. Hence, the number of errors can be reduced by improving the quality of organizing information displayed on the screen, menu-bars, consistency of actions (the order of Proceed/Cancel buttons). The interface made use of several distinct icons for different tasks but lacked a short description of what task the specific icon performs or where does the user get redirected to as soon as he/she clicks the icon. For ex, in page 2, the icons for 'Edit/Create a new Post' and 'reply 'appear to be ambiguous, this could potentially lead to suspicion in the mind of the user regarding the purpose of that icon and could add up to the error rate. In order to solve this issue, every icon in the interface should be assigned a name corresponding to the task it performs, that is, 'edit/create post' should be written under the respective icon. The same applies for the 'edit', 'delete' and 'home' icons used in page 2. This will aid the user in selecting the right icon for the right task, thereby reducing the error rate.

Additional Comments:

The following are the additional aspects where the design shows its excellence:

- 1. The application allows the user to **select part** of the messages he/she wants to **refer** in his/her post.
- 2.The application allows the user to **upload** posts on his/her preferred **timeline**, this feature will allow advanced users, especially **bloggers** and **marketing people** to plan and post their blogs or advertisements based on their **suited timeline**.
- 3. The creation of **dynamic discussion rooms** will be a key feature of this application as it will assist **project managers** in organising **agile scrum meetings**, at the same time allowing the **project managers** to keep a **leisure** of all their **scrum meetings**.

The following are additional improvements that can be considered in order to enhance the functionality of the application: -

- 1. The application should include a feature of displaying the posts that have been **frequently referenced** by the users involved in that discussion. This feature will allow **incoming** group members of a discussion group to get a **brief idea** regarding the **progression** of the discussion in that discussion group.
- 2. When the user edits a post, that post should be marked as **edited**, else it could trigger **arguments** in a discussion group. For ex, if a user makes a certain **inappropriate** comment, and other users accuse him of making that comment, then the user making that comment **edits** his post and claims he did not make such a post could **potentially trigger** an **unusual argument** in that discussion group.

Overall the interface design looked satisfactory and had most of the requisite features, however it can incorporate more functionality and user friendliness by considering the proposed solutions.