Design Diary

Introduction and Association with the Literature

An example of a mobile banking application interface that enables users to conduct financial activities, such fund transfers, is shown in the screenshot that has been supplied. The interface appears to violate a number of Human-Computer Interaction (HCI) standards that are crucial for enabling an intuitive user experience. The interface's purpose is to simplify the intricate banking procedures into a mobile experience that is easy to use. These flaws, which affect user control and freedom, system-to-real-world match, and visibility of system status, have the potential to cause errors and user discontent, which raises serious HCI concerns.

Based on Don Norman's theories, specifically the visibility principle, the screenshot highlights a deficiency in signaling interactive or dynamic aspects inside the user interface. For example, the 'Proceed' button is inconspicuous in the navigation flow because it is blending in with the background of the website. Furthermore, the interface underrepresents Norman's concept of feedback. User mistake is more likely and control is lessened in the absence of clear, prompt indications from the system in response to user activities. The Eight Golden Rules of Shneiderman further support the requirement for unambiguous feedback and a decrease in the user's memory burden, which seems to be hampered by the way the information is presented and organized on the interface.

The interface shortcomings that have been described align with the theories and tenets of Norman and Shneiderman. When analyzing the observed interaction design problems, Norman's Seven Stages of Action and Shneiderman's guidelines for consistency and error prevention are very useful frameworks. These theoretical frameworks help identify the shortcomings and help develop a plan to address them so that the interactive system is in line with well-established HCI research on good design.



Recommendations and Proposed Solution

After comparing the user interface to HCI standards, a number of suggestions are made to improve the user experience and reduce mistake risk. The 'Proceed' button, which is the main call-to-action, ought to have a more pronounced design and stand out with a unique hue. Moreover, adding an interactive progress bar would help users understand the transaction process by orienting them in the flow and providing them with a clear indication of where they are in the process. Norman's visibility and feedback principles are directly addressed by this visual signal, which makes it evident what has been done and what still needs to be done.

According to Shneiderman's rule of lowering short-term memory burden, it might be advantageous to streamline the transaction start procedure by reducing the number of input fields and using a step-by-step guided method. The recognition rather than recall' technique suggested by Shneiderman would be possible with such an incremental design, which would also prevent information overload and scaffold the user's task.

IBAN numbers and other entered data could have real-time validation incorporated to further strengthen error prevention. Norman's error recovery concept states that in the event of an error, the system should provide recommendations and remedies. This could be accomplished by using in-line error messages that are both instructive and unobtrusive. By teaching users on the correct input format and preventing errors before they happen, this approach strengthens users' understanding of the program and boosts their confidence in its use.

The interface should provide clear, responsive messaging that recognizes user inputs in order to guarantee the visibility of system status. An example of this would be a confirmation message that appears when data entry is successful. Incorporating recognizable icons or other visual components that reflect reality can further enhance the system's resemblance to the outside world, which satisfies another of Norman's ideas.

Redesigning the current interface with consideration is necessary to implement these recommendations. The proposed usage of Figma for prototyping will enable an iterative design process wherein these suggested modifications can be more effectively communicated graphically and improved to better adhere to HCI design guidelines.

References:

Norman, D. (2013). The Psychology of Everyday Actions. In D. Norman, *The Design of Everyday Things* (Vol. 2). New York: Basic Books.

Shneiderman, B. et.al. (2016). *Guidelines, principles, and theories*. Ch.3 pp. 81-120. Designing the User Interface: Strategies for Effective Human-Computer Interaction, 6th Edition. Pearson.

Figma link:

 $\underline{https://www.figma.com/file/ZJBTagmFTylIz1wzBVXHIH/Untitled?type=design\&node-id=1\%3A349\&mode=design\&t=zxvxrQGN0GUuc0fD-1$