HCI&UX

he relationship between HCI and UX is essential to achieve success in the design and development of interactive products. HCI focuses on usability and user interaction with the system, while UX focuses on providing an engaging and satisfying user experience. Both disciplines work together to make systems easy to use and deliver satisfying experiences.

Although there are specific differences between HCI and UX, both are equally important. HCI focuses on the functionality and efficiency of the interactive system, while UX focuses on the user experience and how it feels to interact with the system. In other words, HCI focuses on "How does it work?" while UX focuses on "How does it feel to use it?".

One UX feature that our team could include in our project would be a real-time feedback system. This system would provide the user with immediate feedback on their interaction with the system, which would enhance their experience using it. The feedback could be visual, or auditory, depending on the type of interactive system. For example, in our system designed to improve university students' confidence in expressing themselves in English, if the system were a virtual assistant, it could produce audio for each conversation that was completed or it could somehow visualize that the conversation simulation was successful, by means of a pop-up box for example.

The proper integration of HCI and UX is critical to the success of interactive products. Both disciplines must work together to achieve systems that are easy to use and deliver satisfying user experiences. By considering the user experience and providing real-time feedback, interactive systems can be created that meet user needs and improve the overall user experience.

AITools

The use of artificial intelligence tools in user interface design has great potential due to their ability to automate tasks, reduce design time and provide data-driven information. However, despite its advantages, it is important to consider its limitations.

The quality of designs produced with AI tools depends on both the tool itself and the skill level of the designer. Therefore, it is critical to choose an AI tool that suits the designer's goals and aesthetic preferences. While my personal experience using AI Tools has been satisfactory, it is important to keep in mind that some people may have difficulty adapting to a new workflow.

My experience using AI Tools has been satisfactory, as I usually request simple things, so it has not generated any complications for me other than correctly crafting the request and putting a context. As for the general difficulty of use, Some designers find it easy, while others have a hard time adapting to a new workflow. The ease of use of AI tools also depends on the tool's user interface, which must be intuitive and easy to use.

Usability is a crucial attribute to consider when using AI tools in user interface design. While these tools can help evaluate the usability of designs, it is essential to keep in mind that they cannot replace user testing and feedback.

The development of AI tools can significantly change the role of UX designers. On the one hand, AI can automate routine tasks, allowing designers to focus on more strategic and creative work. On the other hand, this means that UX designers will have to develop new skills in areas such as data analytics, machine learning and natural language processing to remain relevant. In addition, the role of UX designers may shift toward creating more personalized and adaptive experiences that leverage AI capabilities to learn from user behavior and preferences.

while AI tools can be very useful in user interface design, it is important to be aware of both their advantages and limitations. Designers should be careful in choosing the right tools and not rely solely on them. Ultimately, the success of user interface design will depend on the combination of human creativity and the power of artificial intelligence.

Borrowed Techniques

Eye tracking is a research method used to measure eye movements and fixations while a person looks at visual stimuli, such as images, videos, or interfaces. Eye tracking was first used in psychology to study reading behavior, but has since been adopted by a variety of fields, including marketing, where it is used to investigate consumer behavior and attention to marketing stimuli.

Eye tracking has been adapted to the field of HCI to study visual attention and user behavior when interacting with interfaces. Eye tracking can provide valuable information about how users interact with interfaces and which elements they pay attention to or overlook. Eye-tracking is commonly used in usability testing, where it can help identify usability problems and design solutions that improve the user experience.

The eye-tracking technique offers several advantages in HCI. First, it can provide objective and quantitative data on users' visual behavior and attention, allowing statistical analysis of the results. Second, it can identify usability problems that might not be evident with other evaluation methods. In addition, it can help designers make informed decisions about visual design elements, such as layout, color and typography.

However, there are also limitations to consider. First, the eye-tracking technique can be costly and complex to set up and analyze, which may be an obstacle for some researchers. Second, the technique requires specialized equipment and analysis software, which may not be available to all researchers. Finally, it is important to note that the eye-tracking technique only provides information about the user's visual behavior and attention and does not capture other aspects of the user experience, such as emotions or cognitive processes.

Elicitation Methods

Surveys are a widely used elicitation technique in user research that involves collecting data from a large number of participants. Surveys can help collect quantitative data on users' opinions, preferences, behaviors and attitudes towards a given product or service. To obtain valid results, surveys must be well designed, with clear and concise questions that avoid biased or tendentious language.

We used surveys as an elicitation technique to find out if the lack of confidence that university students have when expressing their ideas in English is due to something personal or to the fact that they are expressing themselves in a language different from their mother tongue, and if so, what actions they have taken to improve this problem and they have not given them results, and we also collected information from those who were able to overcome this problem on their own. The survey was designed with closed questions, which allowed for a quantitative analysis of the responses. The survey was distributed to university students belonging to the Universidad Autónoma de Yucatán.

The resulting artifact was a data set that included the university students' responses to the survey questions. The data provided information on the reason for students' confidence presenting this problem and the factors influencing it. However, the survey had some limitations, such as the lack of qualitative data.

To improve the survey technique and the resulting artifact, we might consider incorporating more open-ended questions that allow students to explain in their own words their experiences and perspectives. This would provide richer qualitative data that could complement the quantitative analysis. In addition, the team might consider conducting follow-up interviews with a smaller sample of students to explore in depth their experiences and perspectives on the topic. This would help the team better understand the factors that influence students' confidence in expressing their ideas in English, and would provide valuable information for designing interventions aimed at improving students' language proficiency and confidence.

Referencias:

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https://www.interaction-design.org/literature/topics/human-computer-interaction

https://www.usability.gov/what-and-why/user-experience-vs-human-computer-interaction.html

https://www.cs.ru.ac.za/courses/honours/hci/readings/saffer.pdf

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https://dl.acm.org/doi/10.1145/355017.355028

http://alexpoole.info/wp-content/uploads/2010/02/Poole_et_al.pdf

https://engineering.futureuniversity.com/BOOKS%20FOR%20IT/Dix_HumanComputerInteraction.pdf