

People-centric design topics linked to low/high-fidelity prototypes.

Team - C

Introduction:

In the realm of human-computer interaction, the design process is a complex interplay of various principles and methodologies. As we journey through our ENSE 871 class, we've been exploring these dynamics, focusing on the synergy between user knowledge and system design. This note aims to encapsulate our understanding and application of these concepts, particularly how they influence our approach to prototyping and design.

Affordances:

Affordances refer to the potential actions that a user can take with an object or an interface. They provide cues about how an object should be used. For example, a button on a webpage affords clicking, suggesting to the user that they can interact with it. In our design, we've used intuitive icons and clear call-to-action buttons as affordances to guide users towards desired actions. For instance, a profile picture icon in the shape of a human being lets the user know that clicking it will open up their profile.

Gestalt Principles:

The Gestalt principles describes how humans typically see objects by grouping similar elements, recognizing patterns, and simplifying complex images. Designers leverage these principles to engage users' attention and improve usability. For instance, we've used the principle of similarity in our design, grouping related elements together to make it easier for users to find and use specific functionalities. For example, we've grouped all navigation-related elements together, allowing users to easily understand the site's navigation structure.

Constraints:

Constraints in design limit the actions that can be performed by a user. They guide user interactions and prevent errors. Constraints can be physical (e.g., a greyed-out option on a menu), logical (certain actions can only be performed when conditions are met), or psychological (based on users' expectations and prior experiences). In our design, we've used constraints to guide user interactions, such as making certain buttons inactive until all required fields are completed. For example, in our registration form, the submit button remains inactive until the user has filled out all the required fields, ensuring data completeness.

Prototyping:

Prototyping is a crucial step in the design process. It involves creating a preliminary version of the product that can be tested and refined. Prototypes can be low-fidelity (simple and easy to change) or high-fidelity (detailed and closer to the final product). We use both types in our design process. Low-fidelity prototypes help us structure the layout of design components, while high-fidelity prototypes offer a realistic representation of the final product. For example, our low-fidelity prototypes allow us to quickly sketch out our initial design ideas and gather early feedback, while our high-fidelity prototypes allow us to conduct more detailed usability testing.