

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

### SnapPapers Team

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The Engineering and Humanities Special Interest Group (SIG) of the Canadian Engineering Education Association (CEEAA) is interested in revitalizing their website with a fresh design that emphasizes ease of use and networking. This document contains the information on people-centric design topics that were taken when the prototype was designed by SnapPapers.

SnapPapers has created Low-fidelity prototypes for the initial concept design as it gives the flexibility to structure the layout of the design components without the complexity of color schemes and typography.

#### **Affordances:**

According to Norman's (2013) explanation, affordance is the “relationship between the properties of an object and the capabilities of the agent that determines just how the object could be used”. In the context of UI and UX, affordances can be used in assisting users in understanding the actions they can take and the resulting outcome for each possible action.

These can be visualized in the prototype using different elements such as,

- Field labels: Username and password,
- Metaphorical Icons: A letter image to represent a message, a pencil to represent editing, etc.
- Clear call-to-action buttons: The *Contact Us* button redirects the user to the *Contact Us* section, and
- Patterns: The design by SnapPapers follows the general concepts used by websites for navigation. Therefore, the user does not need to learn new navigation queues.

#### **Gestalt Principles:**

Different Gestalt Principles can be found in the design of websites. SnapPapers particularly follows three (3) clear principles put into practice,

- Symmetry: As users tend to focus at the center of the component first, symmetric components can reduce the time users have to spend on identifying and understanding the information. SnapPapers' designs follow symmetric components to offer a delightful experience to the user,
- Pragnanz: Large objects that seem like a single big object but is actually multiple sub-elements that are combined together is the Pragnanz principle. SnapPapers adopts Prgnanz design concepts using the elements hierarchy,
- Similarity: Elements grouped by similarities allow users to understand the information easily. The website is therefore designed by placing components that share common features and functionalities close to one another.

**Constraints:** Constraints are the limitations to the number of choices a user can act upon. They can be broken down into four categories: physical, cultural, logical, and semantic. Following are some of the constraints in the design by SnapPapers,

- Login Flow: To successfully log in, the user needs to have the correct credentials.
  - The user must always be given some feedback after an input when there is a constraint.
  - In the Login Flow, the feedback could be as simple as “Invalid Credentials”.
- Creating an Account: To successfully create a user account, the user is required to complete all the required fields to avoid data incompleteness. The constraint is that the submit button will be inactive until all required fields are completed.
  - As for feedback, clicking on the submit button before completing the required fields would result in a message highlighting the incomplete field with the message “This is a required Field” or “The first name can only have alphabetical characters”.

**References:**

Norman, D. (2013) The design of everyday things. Chapter 1, pp. 27. ISBN 978-0-465-07299-6 (ebook)