

Midterm Review

Human-Centered Design (HCD) and why it matters – design approach that prioritizes needs, prefs, behaviors of end-users throughout the design process to address:

1. **User expectations:** anticipations and assumptions users have when interacting with a product or service and meeting these expectations ensures user satisfaction and enhances user experience.
2. **Competitions:** understanding and analyzing what rival products or services offer. Being aware of the competition helps designers make informed decisions and stay ahead in the market.
3. **Cost effectiveness:** designing solutions that not only meet user needs, but are also economically viable for production and maintenance, ensuring a design provides value for both the user and the business.
4. **Risks:** potential problems or challenges that might arise from a design decision. Identifying and mitigating these risks early on can prevent costly mistakes and ensure the safety and well-being of users.
5. **Innovation:** introduction of new ideas, methods, or solutions. In HCD, innovation is driven by the goal to improve the user's experience and meet their evolving needs in unique ways.
6. **Ethics and inclusivity:** Ethics in design relates to making decisions that are morally right, while inclusivity ensures that products or services are accessible and usable by as many people as possible, regardless of their abilities, age, gender, or other factors.

HCD Critique Methods

1. **Visual design critique:**
 - **Definition:** The evaluation of the aesthetic elements and overall appearance of a design.
 - **Positive example:** A website with a harmonious color scheme, balanced typography, and clear visual hierarchy.
 - **Negative example:** A cluttered poster with mismatched fonts, jarring colors, and no clear focal point.
2. **Visual design principles:**
 - **Definition:** Fundamental guidelines that dictate the arrangement and visual impact of design components.
 - **Positive example:** A mobile app interface that utilizes a grid system, consistent spacing, and alignment for a clean look.
 - **Negative example:** A magazine spread with erratic spacing, no alignment, and inconsistent typography.

3. Interaction design critique:

- **Definition:** The assessment of how users interact with a product and the overall usability and functionality of the design.
- **Positive example:** A navigation menu that is intuitive, with clear labels and predictable behavior.
- **Negative example:** A website where clickable buttons are not clearly indicated, leading to user confusion.

4. Definitions of UI vs UX:

- **Definition:** UI (User Interface) relates to the tangible elements a user interacts with, while UX (User Experience) concerns the overall feel and experience a user has with a product.
- **Positive example (UI):** Clean, intuitive buttons and sliders on a music app.
- **Negative example (UI):** Tiny text and unclear icons on a web interface.
- **Positive example (UX):** A smooth checkout process on an e-commerce site that leaves the user feeling satisfied.
- **Negative example (UX):** A booking website that requires repetitive information, causing user frustration.

5. Interaction design principles:

- **Definition:** Guidelines that ensure a product's interactions are intuitive, user-friendly, and enhance usability.
- **Positive example:** A progress bar that indicates the status of a file upload, giving the user clear feedback.
- **Negative example:** A mobile game with unresponsive gestures, causing gameplay interruptions and user annoyance.

Principles and Guidelines for VISUAL Design

1. Visual consistency

- **Definition:** Maintaining a uniform appearance across all elements of a design.
- **Positive example:** A website using the same font and color scheme on all its pages.
- **Negative example:** A brochure with varying font styles and sizes on every page.

2. Minimal design and clutter

- **Definition:** Design that's simplistic and devoid of unnecessary elements.
- **Positive example:** A clean landing page with a clear call to action and minimal distractions.

- **Negative example:** A webpage filled with pop-ups, banners, and excessive text.

3. Color choices

- **Definition:** The selection and combination of hues used in design.
- **Positive example:** A muted, complementary color palette used in a professional website.
- **Negative example:** Bright, clashing colors used on a presentation slide.

4. Grid & layout structure

- **Definition:** The organization and arrangement of design elements in a consistent and logical manner.
- **Positive example:** A magazine layout where text and images align neatly in columns.
- **Negative example:** A flyer where elements are placed haphazardly, lacking alignment.

5. Typeface and typography

- **Definition:** The style and appearance of printed matter, including font selection, size, spacing, and layout.
- **Positive example:** A report using a legible serif font with consistent sizing and spacing.
- **Negative example:** An advertisement using multiple, conflicting fonts.

6. Proximity & use of whitespace

- **Definition:** The spacing between design elements and the strategic use of blank space.
- **Positive example:** An infographic with ample space around each section, enhancing readability.
- **Negative example:** A business card crammed with text and graphics, leaving no breathing room.

7. Common region

- **Definition:** Grouping related design elements together within a distinct boundary or area.
- **Positive example:** A menu where related items are grouped under a clear heading and separated from other groups.
- **Negative example:** A form where fields are scattered without clear grouping.

8. Images or visuals used

- **Definition:** The selection and incorporation of graphics, photos, or illustrations in a design.
- **Positive example:** A travel brochure with high-quality, relevant images showcasing destinations.

- **Negative example:** A product website using pixelated, unrelated stock photos.

Principles and Guidelines for INTERACTION Design

1. Consistency

- **Definition:** Maintaining uniformity in design elements and interactions across different parts of a product.
- **Positive example:** Using the same icon for settings in all sections of an application.
- **Negative example:** Changing the location and design of the "save" button on different pages of a website.

2. Minimalism

- **Definition:** Emphasizing simplicity in design by including only essential elements.
- **Positive example:** A clean watch face with only hour and minute hands.
- **Negative example:** A dashboard cluttered with numerous buttons, many of which have redundant functions.

3. Discoverability

- **Definition:** The ease with which users can find and access features or functions in a product.
- **Positive example:** A camera app with a prominently placed shutter button.
- **Negative example:** A word processing software where basic formatting options are hidden in sub-menus.

4. Learnability

- **Definition:** How quickly and easily users can understand and become proficient with a product or interface.
- **Positive example:** A user interface with intuitive icons and clear labels.
- **Negative example:** A remote control with ambiguous buttons requiring reference to a manual.

5. Mental Model

- **Definition:** The user's internal representation of how a product or system works, based on prior experiences and knowledge.
- **Positive example:** A digital book app mimicking the flipping of physical pages.
- **Negative example:** A digital thermostat that doesn't resemble or operate like traditional thermostat controls.

6. Visual Hierarchy

- **Definition:** Organizing and prioritizing design elements to guide users' attention and actions.
- **Positive example:** A landing page with a prominent headline, followed by a subheading and a call to action button.
- **Negative example:** A poster where all text and images are of the same size, making it hard to determine importance.

7. Affordances and signifiers

- **Definition:** Affordances are design elements' potential actions, and signifiers indicate how to use them.
- **Positive example:** A door handle designed for pulling (affordance) with a "PULL" label (signifier).
- **Negative example:** A swipe-only interactive screen with a button-like design suggesting it can be pressed.

8. Constraints

- **Definition:** Limitations set in design to guide user actions and prevent errors.
- **Positive example:** Graying out a "submit" button until all required fields are filled in a form.
- **Negative example:** A number input field that allows non-numeric characters without any restriction.