Human-Computer Interaction INFR11017

Week 8: People and Layout

7th November 2023

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Content

About the Course:
- Weekly schedule
- Assessment

Activities on:
- Mental models
- Affordances and metaphors
- Gestalt Principles

Q&A

About the course

Course overview and status

- **Lectures**
  - This week (Week 8) People and Layout

- **Coursework**
  - This week (Week 8)

    1: Look at CW2 reports

    2: Select the mock-up to refine
  - Deadlines
    - CW3 – group work - 30/11/2023 12 Noon
    - Quiz 3 – individual work – 1/12/2023 12:00 AM - 11:59 PM

Mental Models

This is not a pipe (Rene Magritte)

Mental Models– Activity 1

- https://edin.ac/3tT5Lr5

Mental Models

- One of usability's big problem is the common **gap between designers' and users' mental models**

- In case of a mental-model mismatch, you basically have two different options:
  - **Make the system conform** to users' mental models — assuming most models are similar. For example, if people look for something in the wrong place, then move it to the place where they look for it. ***Card sorting*** is a useful way to discover users' mental model of an information space so that you can design your navigation accordingly.
  - **Improve users' mental models** so that they more accurately reflect your system. You can do this by, for example, explaining things better and making labels clearer to make the UI more transparent (even though the underlying system remains unchanged).

(from Mental Models by Nielsen Norman Group)

Affordances and Metaphors

What does the red sign tell you?

- Note: This is a sign at the entrance of a car parking.

Good Affordances – Activity 2

Think – Pair –Share

■ How could you design good affordances?

How to design for the best affordance?

- Follow conventions

- Follow the design principles

- Get familiar with [Material Design](#)

- Understand your users

Affordances– Activity 3

- https://edin.ac/46T6ebm

False affordances – Activity 4

Think –Pair – Share

- Look at the buttons in the image below. What affordances these buttons indicate?

- Can you think of examples of false affordances (that convey a capability but affords a different capability or none)?

Metaphorical affordances – Activity 5

Think – Share - Pair

■ Look at the buttons in the images below.

■ Which ones are strong and which are weak metaphorical affordances? Why?

Gestalt Principles

Gestalt Principles

- Proximity

- Similarity

- Continuity

- Closure

- Symmetry

- Figure/Ground

- Common Fate

Gestalt Principles – Activity 6

Think – Pair - Share

Look at the image on the right. What Gestalt principle is violated?

Gestalt Principles – Activity 7

Visit on the padlet below and add a design example (a screenshot) which applied or violated each Gestalt principle.

- https://edin.ac/3FL5Pvt

Q&A

Next Week (Week 9)

- Week 9 pre-recorded lecture – Design Patterns

- Coursework 3 steps:
    3: Revise the identified problem, design goals, and task 4
    4: Revise your design
    Start 5: Select two screens (and revise their designs)

Any questions...

- Post to the Piazza
- Ask the TA during the TA open hour
- Aurora Constantin: aurora.constantin@ed.ac.uk
- John Vines: john.vines@ed.ac.uk