

Usability and User Experience

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Contextual Design of Interactive Systems



Assignment 11.1: Everyday Interactions

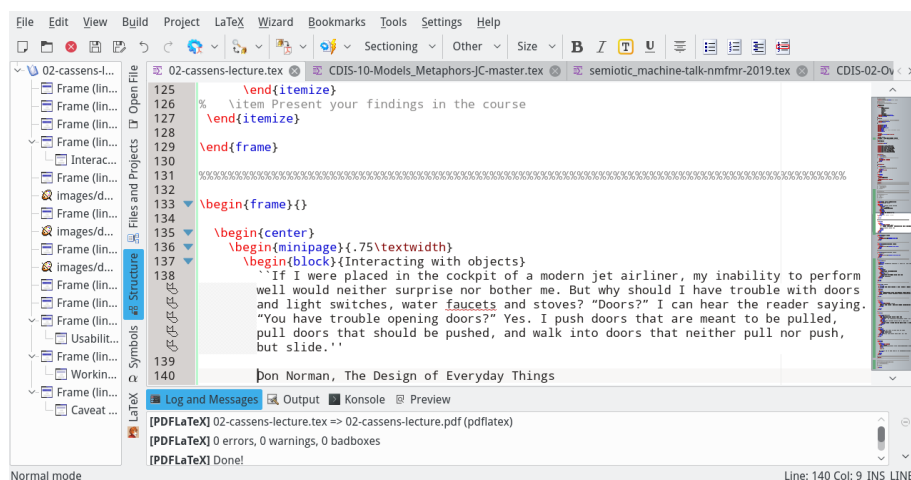
- Think of an electronic device or Applications
 - In the “real world”
 - In software you regularly use
- Write down
 - One to three things that annoy you
 - One to three things that you like

Interacting with objects

“If I were placed in the cockpit of a modern jet airliner, my inability to perform well would neither surprise nor bother me. But why should I have trouble with doors and light switches, water faucets and stoves? “Doors?” I can hear the reader saying. “You have trouble opening doors?” Yes. I push doors that are meant to be pulled, pull doors that should be pushed, and walk into doors that neither pull nor push, but slide.”

Don Norman, The Design of Everyday Things

Presentation Software



Presentation Software



Salzburger Dult 2019



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Question

Can we distinguish the different aspects that contribute to the different users' perception of the quality of the product?

In particular: can we identify features that contribute to the perceived quality?

Can we differentiate between the features that help us achieving a goal and features that define our experience of use?

Usability

The official ISO 9241-210 definition of usability is the "extent to which a system, product or service can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use."

- Three measures
 - Effectiveness, efficiency and satisfaction
- Highly contextualised
 - Specified user, specified goals, specified context of use
- Focused on task achievement

User Experience

In ISO 9241-210, we also read that user experience is a "person's perceptions and responses resulting from the use and/or anticipated use of a product, system or service."

- This includes all the users' emotions, beliefs, preferences, perceptions, physical and psychological responses, behaviours and accomplishments that occur before, during and after use.
- User experience is a consequence of brand image, presentation, functionality, system performance, interactive behaviour and assistive capabilities of the interactive system, the user's internal and physical state resulting from prior experiences, attitudes, skills and personality, and the context of use.

Usability and User Experience

ISO 9241-210 further states that "Usability, when interpreted from the perspective of the users' personal goals, can include the kind of perceptual and emotional aspects typically associated with user experience. Usability criteria can be used to assess aspects of user experience."

Working Definition

- We talk about Usability when we focus on pragmatic aspects
 - Accomplish a task, with minimal effort, without negatively affecting the user.
- We talk about User Experience when we focus on hedonic and affective aspects
 - Includes aesthetic and emotional factors, like appealing design or “joy of use”.
- Not the only factors affecting the perceived quality of an artefact
 - Speed, reliability, safety
- We do not focus on such here, but will recognise them as “other” factors

Assignment 11.1: Everyday Interactions

- Take your notes from the last activity
 - A “real world” application you regularly use and...
 - * one to three things that annoy you
 - * one to three things that you like
- Form groups of 3-6
- Try to group your annoyances and sources of joy
 - Usability
 - User Experience
 - Other
- Present your findings in the course

Caveat

You will find different definitions in different textbooks. Sometimes both concepts are used interchangeably. Sometimes usability is subsumed under user experience.

When we separate them, it is to make it easier for us to understand the interaction with certain artefacts, and to be able to focus on different aspects when designing objects.

Challenge

We have found out that there are pragmatic and hedonic aspects that affect our interaction with artefacts. The questions now are, can we measure aspects like usability or user experience? An is there a way to design artefacts in a way that thy are both usable and provide the desired experience?

Are there methods, tools or principles that help us?

Summary

- We have looked into two important concepts within Human-Computer Interaction
 - Usability
 - User Experience
- We have seen that they are related, but focus on different aspects
- What we still need to find out is whether there is a way to ensure that we both achieve good usability and the desired user experience