

Desain Interaksi

Definisi, Usability & User Experience

IF3151 Human Computer Interaction

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Tujuan Perkuliahan

2

01

Desain Interaksi

Memahami apa itu desain interaksi, lingkup, karakteristik, dan tujuannya

02

Usability

Memahami apa itu Usability dan kriterianya

03

User Experience

Memahami apa itu user experience

What is Design

“**Design is a plan** for arranging elements in such a way as best to accomplish a particular purpose”

Charles Eames

What is interaction design?

Designing **interactive products** to support the way people **communicate** and **interact** in their everyday and working lives. ”

Sharp, Rogers, and Preece
(2019)

” The design of spaces for human **communication** and **interaction**.

Winograd
(1997)

”

” The design of **the interaction** between **users** and **product**.

Involve elements like **aesthetics, motion, sound, space**, and many more. ”

What to design



Need to take into account:

- **Who** the users are
- **What** activities are being carried out
- **Where** interaction is taking place

Need to optimize the interactions users have with a product:

- So that they match the users' **activities** and **needs**

Goals of interaction design

desain interaksi

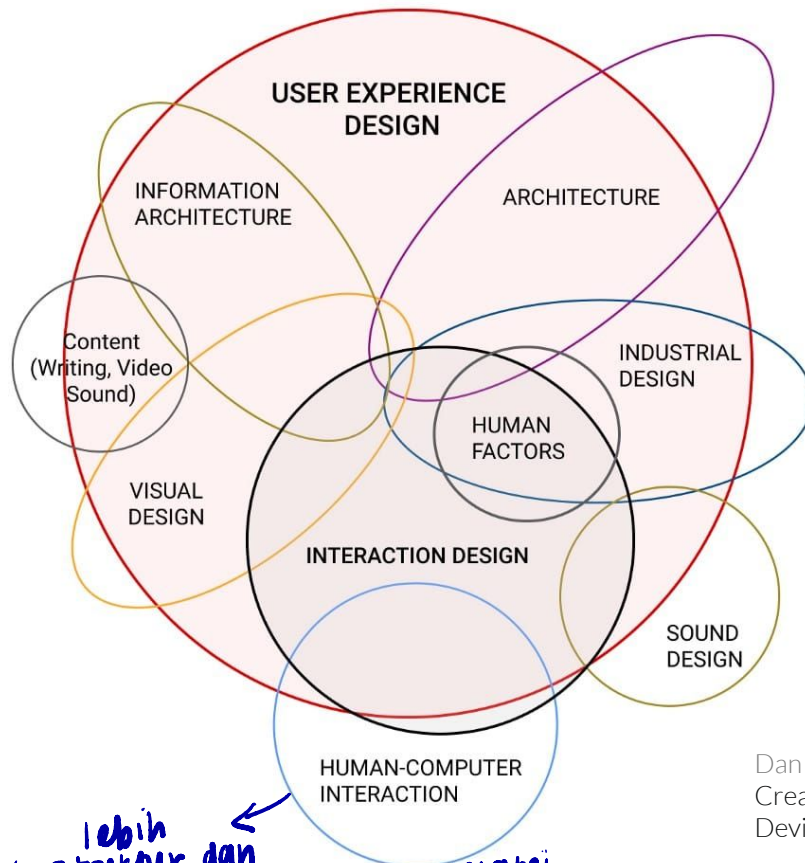
usability.

user experience

① Develop usable products

- Usability means easy to learn, effective to use, and provides an enjoyable experience
- Involve users in the design process

② To create product that enable the user to achieve their objectives in the best way possible



hal² yg terlibat
dalam desain
interaksi



lebih
terstruktur dan
bisa di eval,
berhubungan ke
science

design interaksi
berhubungan ke art
Program Studi Teknik Informatika
Institut Teknologi Bandung.

Dan Saffer, Designing for Interaction:
Creating Innovative Applications and
Devices (Voices That Matter) 2nd Edition

The user experience (UX)

User experience (UX) refers to any interaction a user has with a product or service

- The way people **feel** about it and their **pleasure** and **satisfaction** when using it, looking at it, holding it, and opening or closing it
- Encompasses all aspects of the end-user's interaction with the company, its services, and its products. (Nielsen and Norman, 2014)
- “Every product that is used by someone has a user experience: newspapers, ketchup bottles, reclining armchairs, cardigan sweaters.” (Garrett, 2010)

Cannot design a user experience—only can design for a user experience

User Experience is not about technology, industrial design, or interfaces. It is about creating a meaningful experience through a device. (Marc H.)

Defining user experience

apa yg dirasakan pengguna
ketika menggunakan aplikasi
(feeling). bukan fitur²nya.
ux ini dampak/efek dari usability.
contoh: apple sm android mungkin
usability nya sama, tapi ux
nya mungkin beda.



How **users perceive a product**, such as whether a smartwatch is seen as sleek or chunky, and their emotional reaction to it, such as whether people **have a positive experience** when using it.



Hornbæk and Hertzum
(2017)

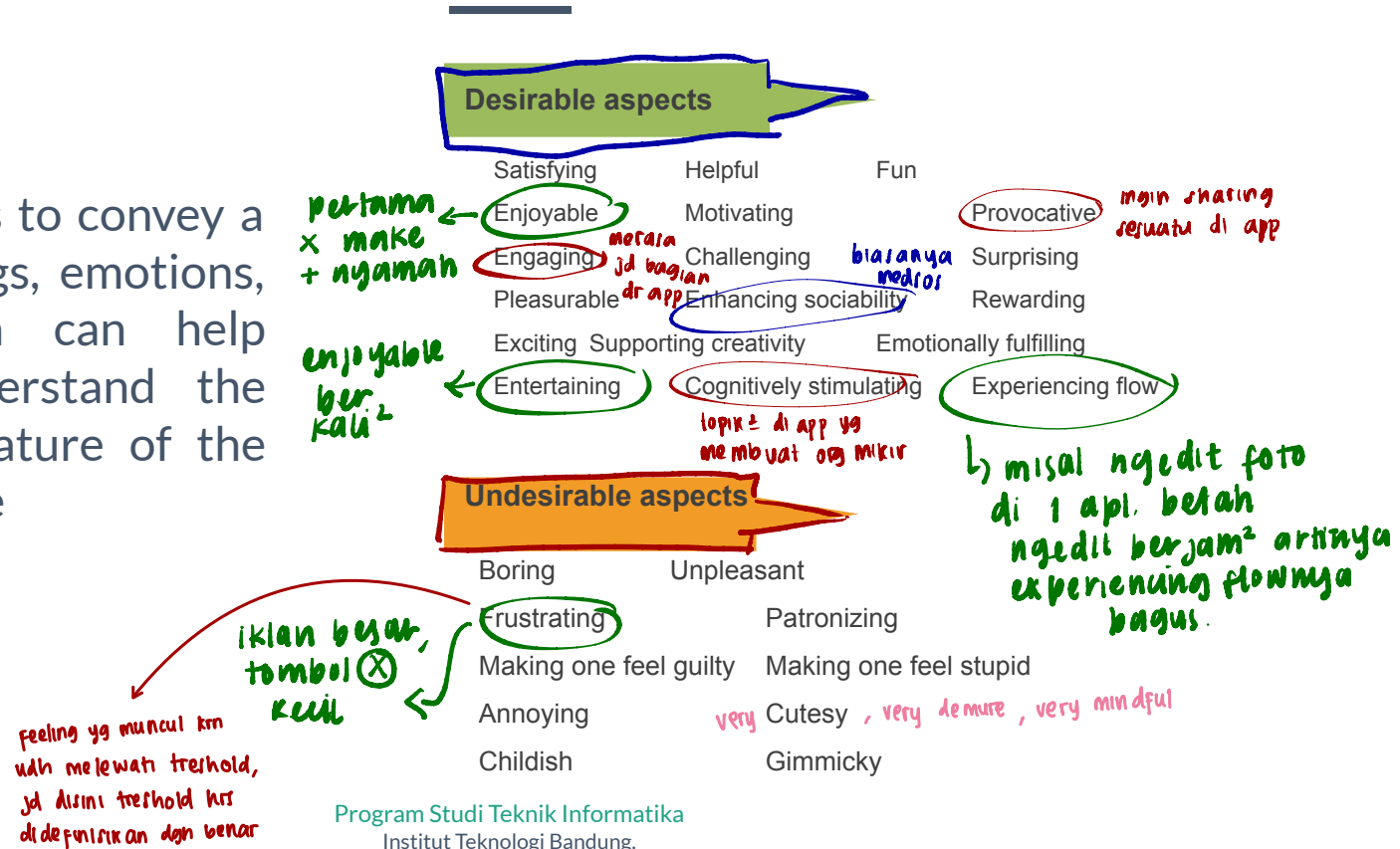
Hassenzahl's (2010) model of the user experience

Pragmatic: how **simple, practical, and obvious** it is for **the user to achieve** their goals

Hedonic: how **evocative** and **stimulating** the interaction is to users

User experience goals

Selecting terms to convey a person's feelings, emotions, and so forth can help designers understand the multifaceted nature of the user experience



Usability goals

“**Usability** *is* a measure of how well a specific user in a specific context can use a product/design to achieve a defined goal.”



10 Usability Heuristics



Visibility of system status



Recognition rather than recall



Match between system and the real world



Flexibility and efficiency of use



User control and freedom



Aesthetic and minimalist design



Consistency and standards



Helps users recognise, diagnose, and recover from errors



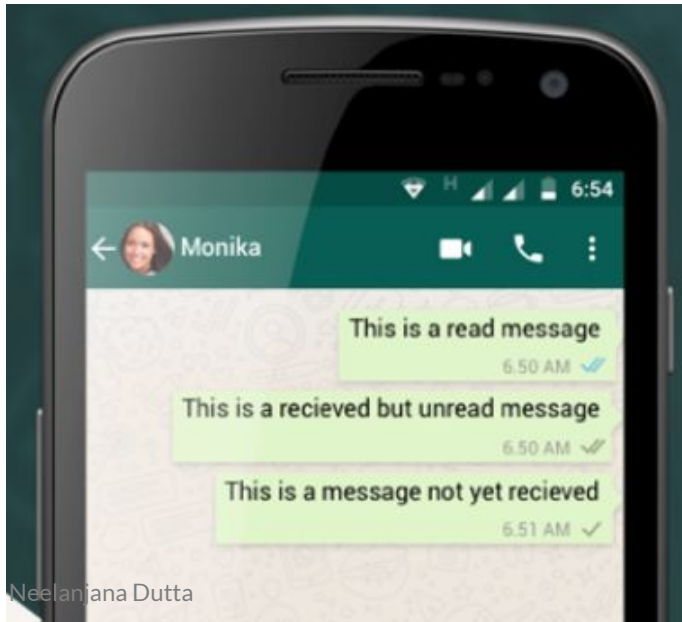
Error prevention



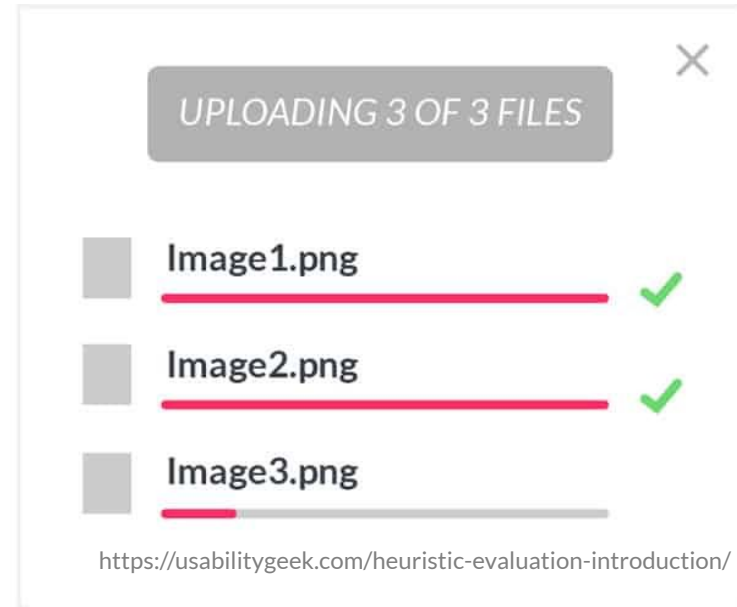
Help and documentation

Visibility of System Status

The user should know what's going on inside the system.



Neelanjana Dutta



Match Between System and Real Worlds

Systems should speak the users' language with familiar words, phrases, and concepts rather than system-oriented terms.



Neelanjana Dutta

Add title

Event

Focus time

Out of office

Task

Reminder

Sunday, August 21 10:00pm – 11:00pm

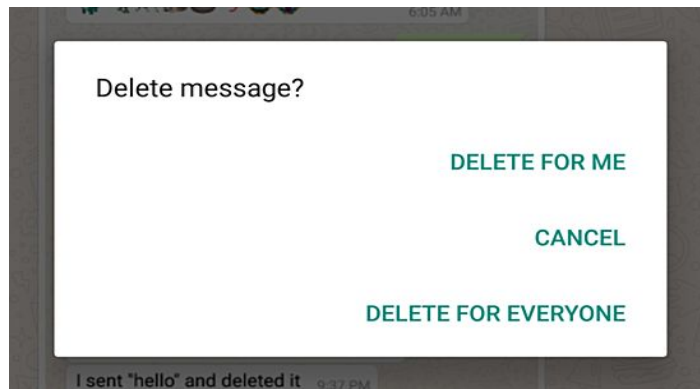
August 2022

S	M	T	W	T	F	S
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

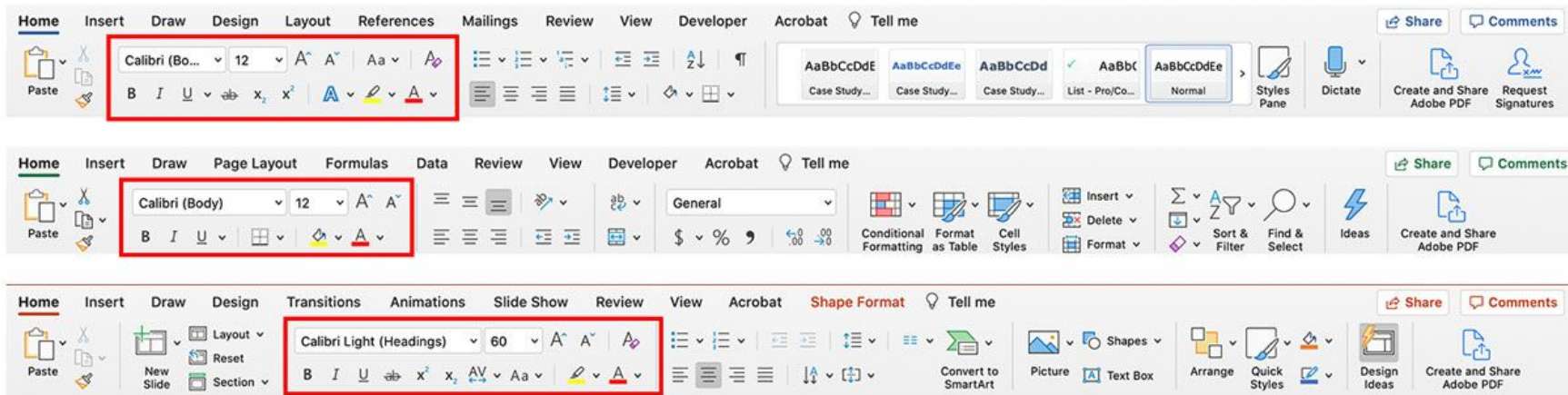
Add description or attachments

User Control and Freedom

Giving the user the freedom to navigate and perform actions.

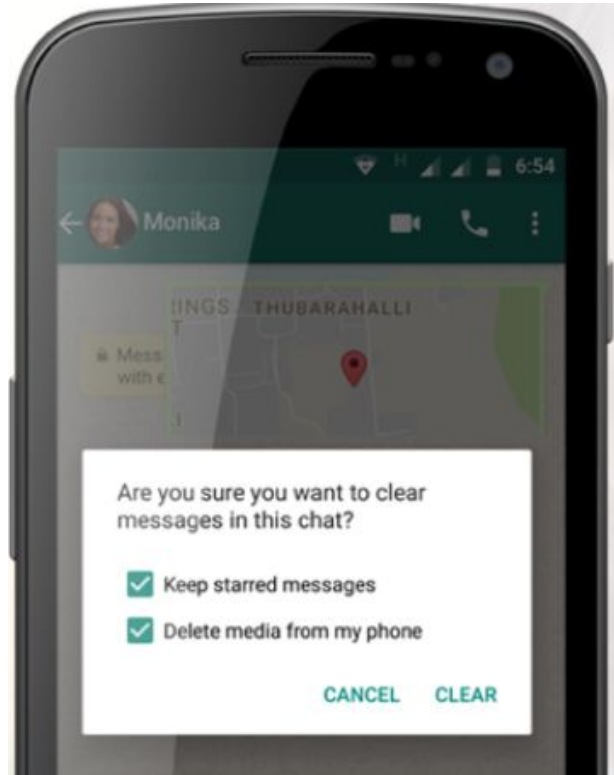


Consistency and Standards



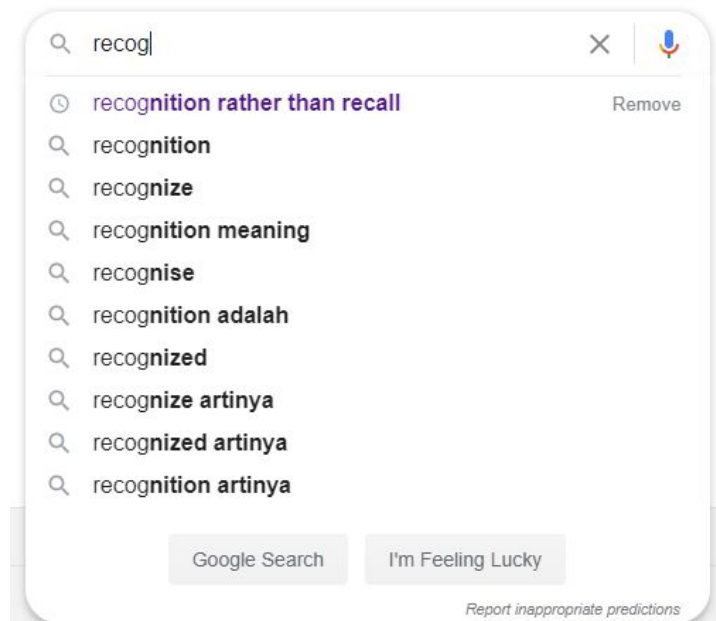
Word (top), Excel (middle), and PowerPoint (bottom).

Error Prevention



Neelanjana Dutta

Recognition rather than Recall

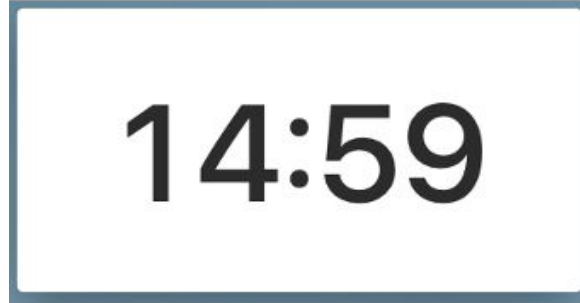


Aesthetic and Minimalist Design

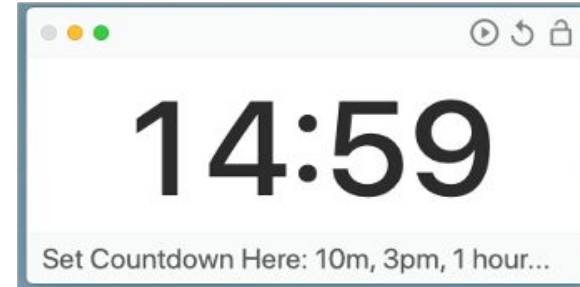
Aesthetically pleasing designs can provide memorable experiences that differentiate a brand.

However, interfaces should only include necessary elements, with high informational value.

Clarity will always win over visual flourish.



idle



On hover

<https://www.nngroup.com/articles/aesthetic-minimalist-design/>

Help Users Recognise, Diagnose, and Recovers from Errors



Create your Google Account

First name test	Last name test
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Username trest123533435353535	@gmail.com
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You can use letters, numbers & periods

[Use my current email address instead](#)

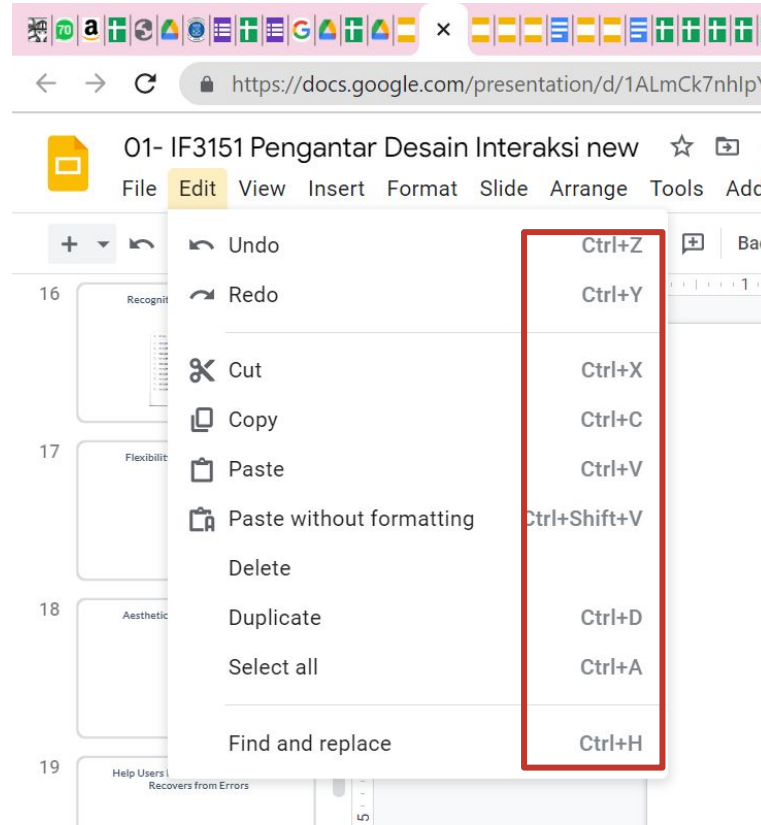
Password	Confirm	
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! Use 8 characters or more for your password

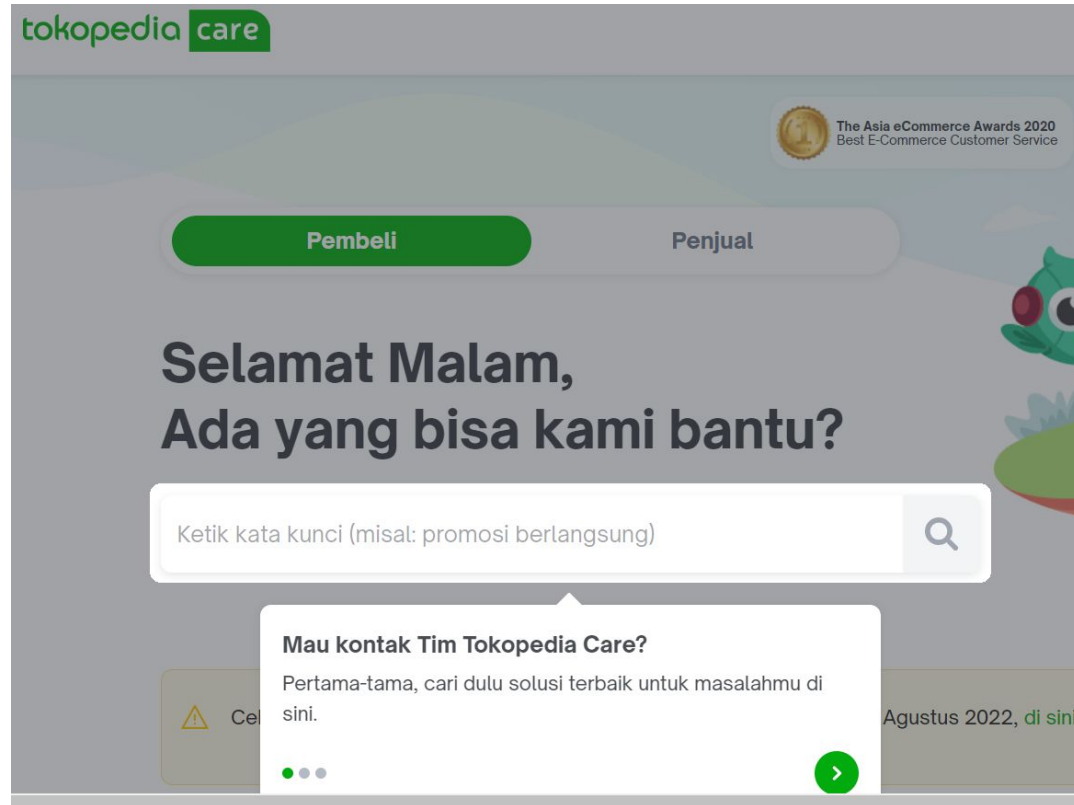
[Sign in instead](#)

Next

Flexibility and Efficiency of Use



Help and Documentation

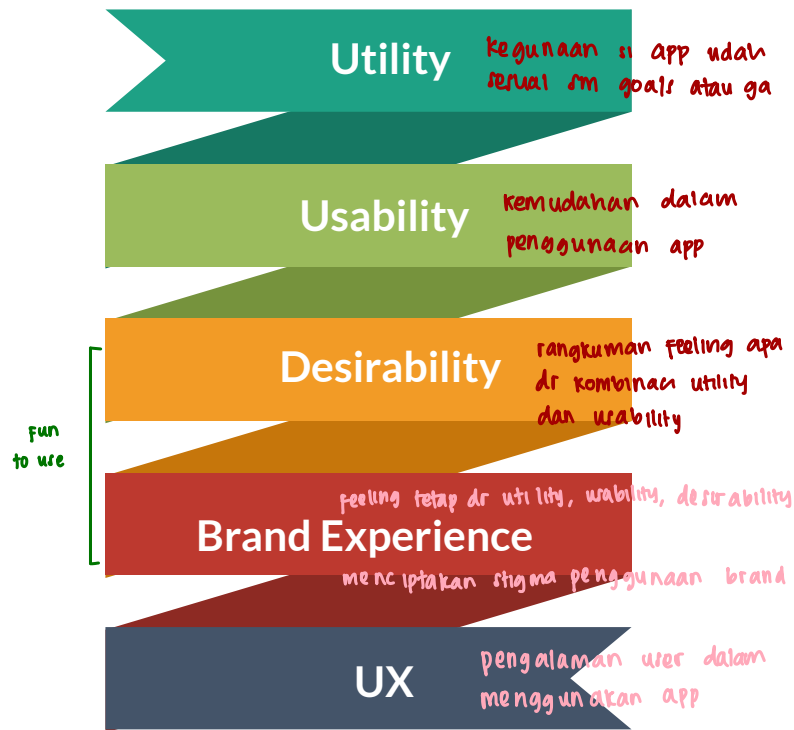


Usability goals & User Experience goals

Usability is a component of user experience (UX) design.

Are there trade-offs between the two kinds of goals?

For example, can a product be both *fun* and *safe*?



Interaction Design Methods (1)

Activity-centered Design

- Good for intense, focused, complex activities
- Refining task flows
- Making actions more efficient
- Not good for big picture rethinking

System Design

- Good for large-scale designs
- Models for large teams
- Not good for small project
- Very analytical

Interaction Design Methods (2)

Genius Design

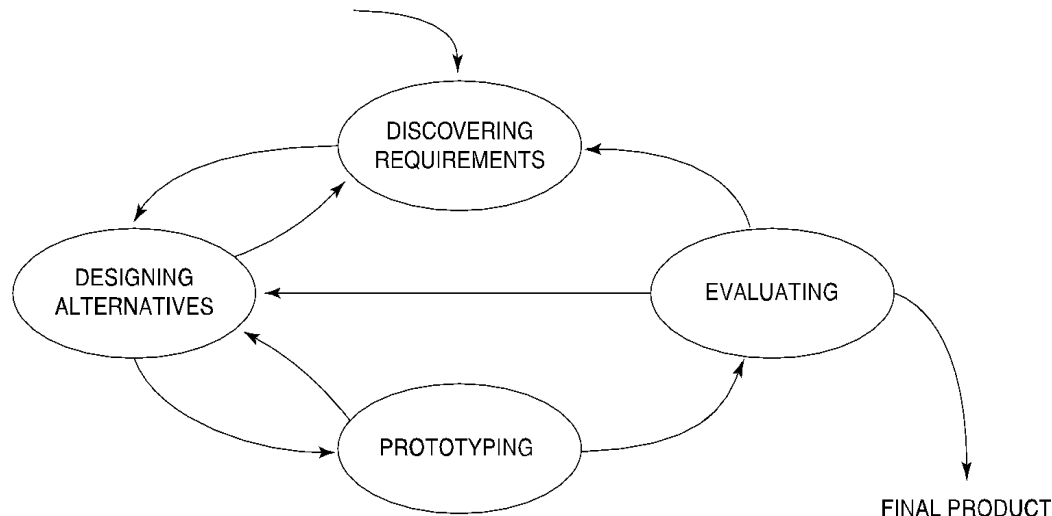
- Good for rapid project
- Possible to get a “purer” vision and more radical jumps in products
- Flexible
- Not good for inexperienced designers
- Need domain knowledge
- Can be very, very wrong

User-centered Design

- Understand unfamiliar domains
- Empathy with users-focus on people
- Can catch problems (and opportunities) up front
- Hard for people to evaluate (and generate) new product ideas
- Are you focused on the RIGHT users?
- User goals can be slippery
- Does it scale?

Basic Activities of Interaction Design

- 01** Discovering requirements
- 02** Designing alternatives
- 03** Prototyping alternative designs
- 04** Evaluating product and its user experience throughout



Core characteristics of interaction design

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01



Users should be involved



Specific usability and user experience goals need to be identified, clearly documented, and agreed to **at the beginning of the project**

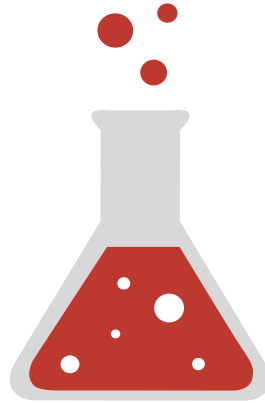
03



Iteration is needed through the core activities

Help designers

- ① Understand how to design interactive products that fit with what people want, need, and may desire
- ② Appreciate that one size does not fit all (for example, teenagers are very different to grown-ups)
- ③ Identify any incorrect assumptions they may have about particular user groups. (for example, not all old people want or need big fonts)
- ④ Be aware of both people's sensitivities and their capabilities



*Creativity is the key to success
in the great education*

Terima Kasih

Sama-sama ☺