



Design Principles

ISH4B3 – Sistem Informasi

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AGENDA

Week	Topic	Week	Topic
1	Human-computer Interaction & Design	9	Project 1 : Usability Testing
2	Human-computer Interaction & Design	10	Project 2: Design Thinking
3	Psychology 101	11	Project 2: Design Thinking
4	Design Principles	12	Project 2: Design Thinking
5	Interaction Styles and Devices	13	UI Design Tutorial
6	Project 1 : Usability Testing	14	Project 2 : Design Thinking
7	Project 1 : Usability Testing	15	Project 2 : Design Thinking
8	Mid Term Exam	16	Project Presentation



Home

Saya Bee.. akan membantu Anda mempelajari modul ini.

Silahkan pilih materi yang ingin Anda pelajari



Pokok Bahasan



Capaian



Bahasan



Video Animasi



Kuis / Latihan



Link



Kesimpulan



Pustaka





Pokok Bahasan



01 Affordance

02 Signifiers

03 Mapping

04 Discoverability

05 Feedback

06 Constraints.



Design Principles



Capaian Pembelajaran

P02

Kemampuan menganalisis permasalahan, melakukan identifikasi dan mendefinisikan kebutuhan komputasi Yang bersesuaian dengan solusi

P03

Kemampuan untuk merancang, melakukan implementasi dan mengevaluasi sistem berbasis komputer, proses, komponen, atau program untuk memenuhi kebutuhan yang diinginkan.

P07

Kemampuan untuk menganalisis dampak lokal dan global dari komputasi pada individu, organisasi dan masyarakat



1. Affordance



Affordance

Affordance is a relationship between the properties of an object and the capabilities of the agent that determine just how the object could possibly be used.



Affordance exist even if they are not visible.



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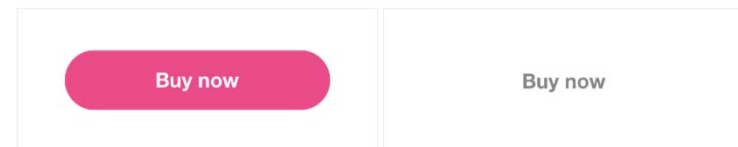
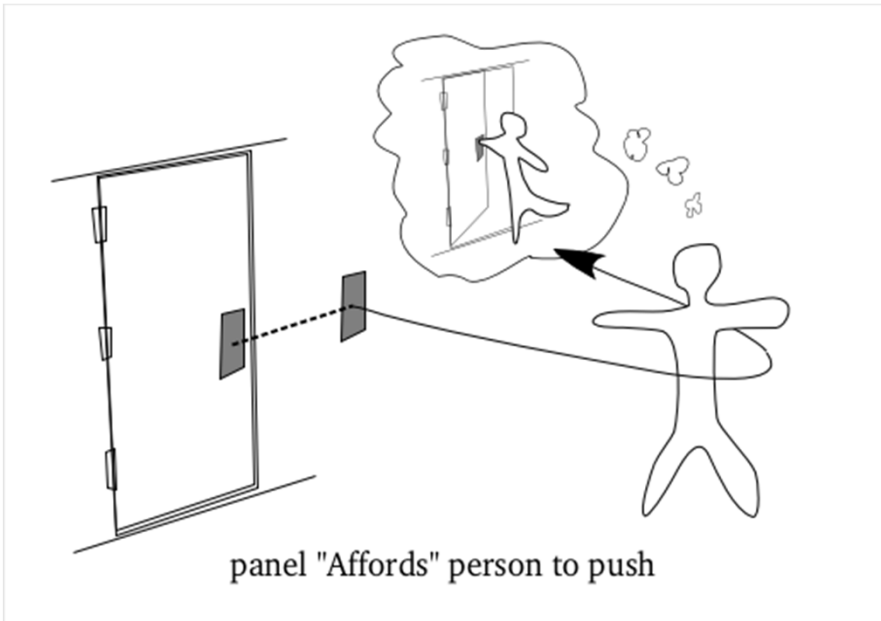


Affordance





Affordance

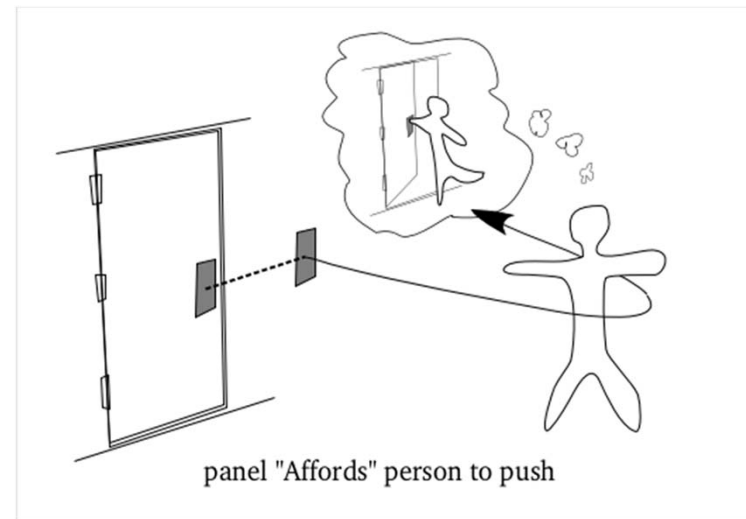




2. Signifier

Signifiers

Signifiers communicate where action takes place. Signifiers signal things, in particular what actions are possible and how they should be done.



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Signifiers



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Three signifiers reveal this object's enhanced affordance

1   Remove/Add (New)

2 Label

3  Draggable

Traveloka.com

The screenshot displays the Traveloka.com website interface. At the top, a navigation bar includes links for Flights, Hotels, Trains, Bus & Shuttle, Airport Transport, Flight + Hotel, Attractions & Activities, and Bills & Top-up. Below this, a large blue banner features a "Flight Discount Coupon" for up to Rp 600k, valid for all domestic destinations, with a "View promo" button. To the left of the banner, a greeting "Good Evening, Guest!" is followed by a prompt to "Log in or Register to enjoy" and a "Passenger Quick Pick" button. Below the banner, a "Recently Viewed Hotels" section is visible, along with a search interface. The search interface includes a dropdown menu for "Hotels" (with other options like Trains, Bus & Shuttle, etc.), a search input field for "City, destination, or hotel name", and a "Guests and Rooms" section set to "2 guests, 1 room". The search parameters are: Check-in: Sat, 09 Feb 2019; Duration: 1 night; Check-out: Sun, 10 Feb 2019. There is also a checkbox for "Show family-friendly accommodations" and a "Need help?" button. A tooltip above the "Guests and Rooms" section reads "Select the number of guest(s) & room(s)".

Traveloka.com

traveloka

Good Evening, Guest!

Looking to travel around the world with benefits?
[Log in](#) or [Register](#) to enjoy [TravelokaPay](#)

up to Rp 600k
ALL domestic destinations
[View promo](#)

Hotels

Trains

Bus & Shuttle

Airport Transport

Flight + Hotel

Attractions & Activities

Top-Up & Data Packages

Recently Viewed Hotels

Select the number of guest(s) & room(s)

City, destination, or hotel name
City, hotel, place to go

Guests and Rooms
2 guests, 1 room

Check-in
Sat, 09 Feb 2019

Duration
1 night

Check-out
Sun, 10 Feb 2019

Show family-friendly accommodations

Pay at Hotel

Traveloka Best Price Guarantee

[Search Hotels](#)



3. Mapping

Mapping

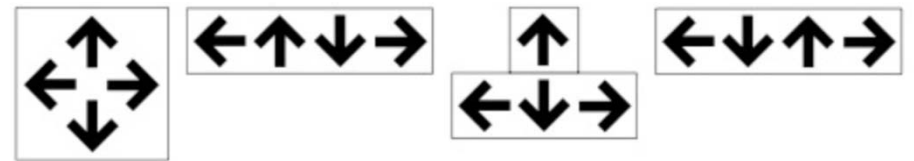
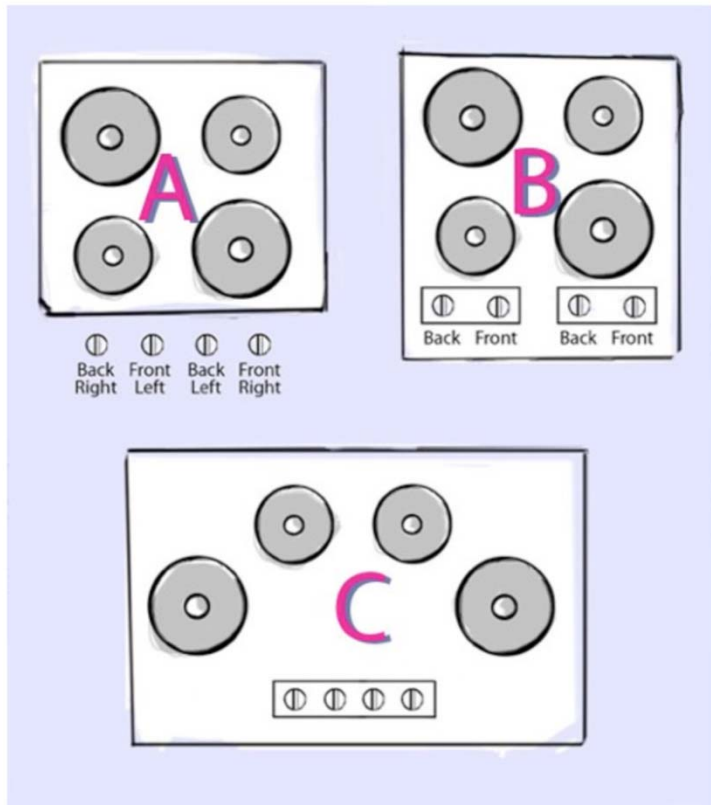


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The relationship between two things.

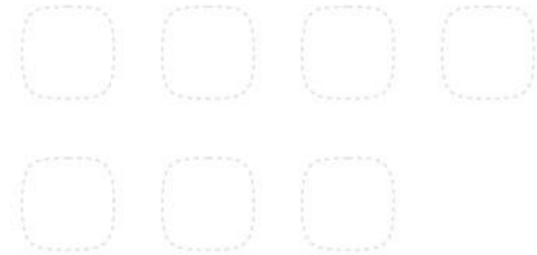
Relationship to controls and their effect.



 GO-RIDE	 GO-CAR	 GO-FOOD	 GO-SEND
 GO-MART	 GO-BOX	 GO-MASSAGE	 GO-CLEAN
 GO-GLAM	 GO-TIX	 GO-BUSWAY	 GO-PAY

Organize your home

Pick your top 7 GO-JEK services that will show on your home screen.



ALL SERVICES





4. Feedback

Feedback

Feedback is the communication of result of an action

Too much feedback can be annoying.

Too little feedback can be confusing



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✓ **Success!**
The form has been submitted successfully and a representative will get in touch with you.

Name

PELAJARAN	NILAI
AKHLAK	B

SEBAB, KAMU TERCATAT JARANG NGEBATALIN ORDERAN DI TAHUN 2018. 58 KALI.

PESAN GURU:

Jangan cepat puas. Karena B tidak melulu berarti Bagus, namun bisa juga berarti Biasa aja.

PELAJARAN	NILAI
MOBILITAS	A

TAHUN 2018, KAMU JALAN-JALAN PAKAI GOJEK 541 KALI, DAN MENEMPUH JARAK SEJAUH 3879.1 KM.

PESAN GURU:

Kamu tercatat sering berpindah dari satu tempat ke tempat lain di tahun 2018. Mantap, asal jangan sering pindah dari hati ke hati aja.

← GO-JEK

PERINGKAT KELAS


TERBAIQU! KAMU MENDUDUKI PERINGKAT KELAS KE...



DI JAGAKARSA, JAKARTA SELATAN

CATATAN UNTUK DIPERHATIKAN ORANG TUA / WALI :

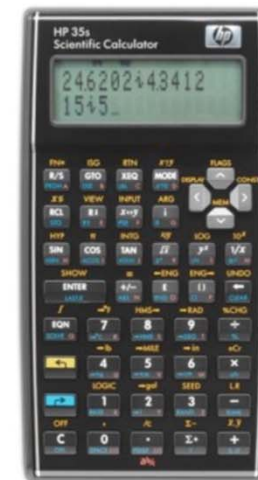
Prestasi murid sudah oke, tinggal diarahkan agar tahun depan lebih baik dari tahun ini.

BAGIKAN:  

Feedback



Design Principles





5. Discoverability



Design Principles

Discoverability

It is possible to determine what actions are possible.

Can see the state of a device



Discoverability

Problems arise when we cannot “see” how to do use a device

Sensor technology like auto faucets - not sure how to use - guess where to put hands

Visible knobs, dials and buttons have been replaced by invisible and ambiguous “active zones”





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Good Evening, Guest!

Looking to travel around the world with benefits?

[Log in](#) or [Register](#) to enjoy [Loyalty Points](#)

Flight Discount Coupon

up to **Rp 600k**

ALL domestic destinations

[View promo](#)



[See more deals](#)



Beranda > Fashion Wanita > Sepatu > Wedges > sepatu wedges wani...



sepatu wedges wanita sw022 coklat

★★★★★ 59 Ulasan

98.98% Transaksi Sukses Dari 393 Transaksi ⓘ

🔗 Bagikan

Rp 43.000

Jumlah

⊖ 1 ⊕

Catatan untuk Penjual (Opsional)

Contoh: Warna Putih, Ukuran XL, Edisi ke-2

0/144 karakter

📖 1,2rb Wishlist

Beli Sekarang

Tambah ke Keranjang

Cicilan bunga 0% mulai dari Rp 1.792 [Bandingkan Cicilan](#)

👁 Dilihat

📦 Terkirim

🏠 Kondisi

🏷 Min. Beli

🛡 Asuransi

Berhasil Ditambahkan



sepatu wedges wanita sw022 coklat

Lihat Keranjang

Mungkin Anda juga suka...



Harga Grosir
Sepatu...
Rp 160.000



Sepatu
Sneakers...
Rp 94.000



SEPATU
BOOTS...
Rp 155.000



Sepatu Boots
Wedges...
Rp 125.000



SEPATU
WANITA...
Rp 145.000

Cicilan bunga 0% mulai dari Rp 1.792 [Bandingkan Cicilan](#)

Dilihat

Terkirim

Kondisi

Min. Beli

Asuransi

Pilih semua produk

Hapus

 Penjual: pw_shop88 

sepatu wedges wanita sw022 coklat

Rp 43.000



3

[Tulis Catatan Untuk Penjual](#)

Ringkasan Belanja

Total Harga

Rp 129.000

[Checkout \(3\)](#)[Gunakan Kode Promo atau Kupon](#)

Terakhir Dilihat

[Lihat Semua >](#)

Checkout

Alamat Pengiriman

[Redacted] (Rumah) Utama

[Ubah Alamat](#) | [Ubah Pinpoint](#)

Kirim Ke Beberapa Alamat

Gunakan Alamat Baru

Pilih Alamat Lain

Penjual: pw_shop88 

Ringkasan Belanja

Total Harga (3 barang) Rp 129.000

Total Tagihan -

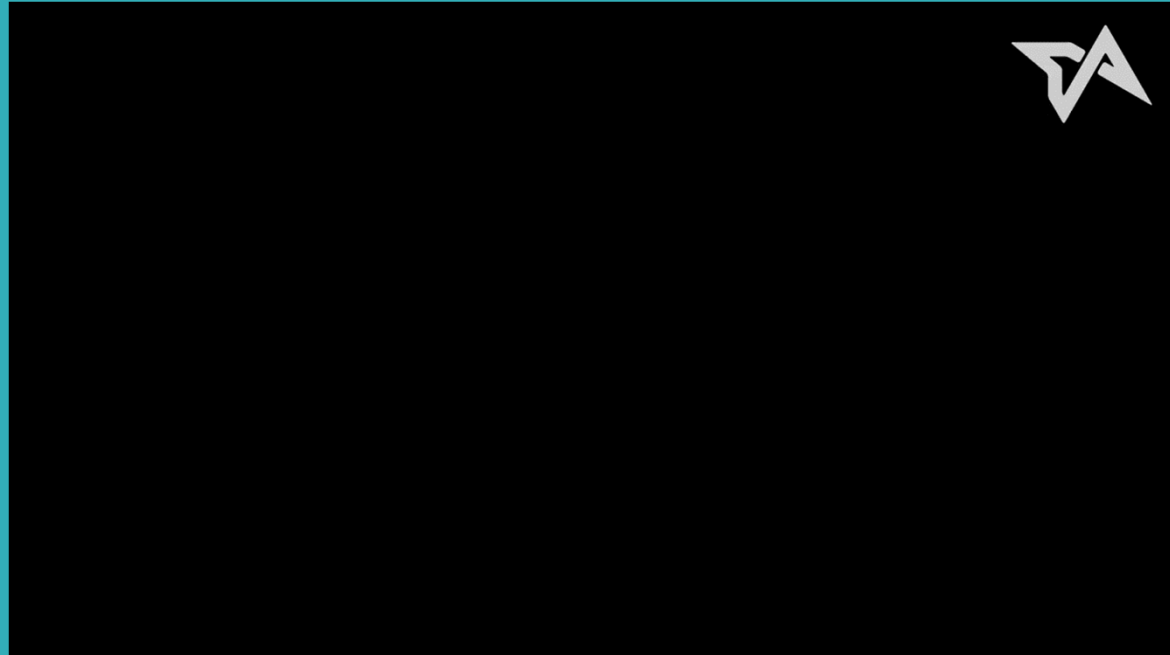
TopDonasi200 

Bayar

 [Gunakan Kode Promo atau Kupon](#)



Design Principles



Sumber : <https://www.youtube.com/watch?v=JyEuFGkII-s&t=9s>




6. Constraints


Constraints

Physical Constraints


Paths




Brightness




Contrast




Hue



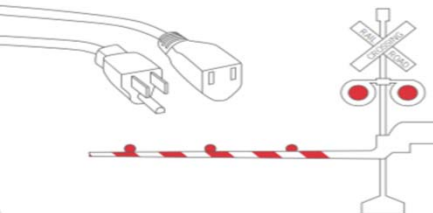
Saturation



Axes





Barriers






Psychological Constraints



Symbols



Conventions



Mappings



Design Principles

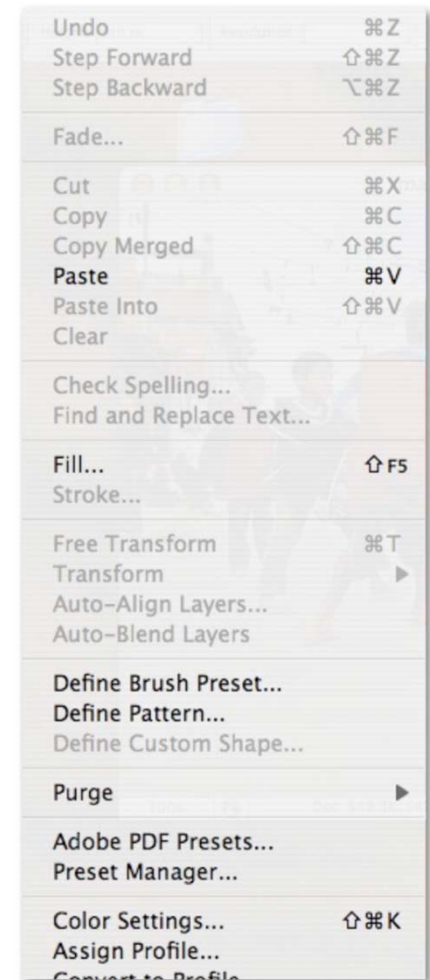
Restricting the kind of interactions that can take place

Constraints

Restricting the kind of interactions that can take place

Reduce the chance of error

Can also work to focus user's attention to needed task





Design Principles





Design Principles

LinkedIn™

Hmm, we don't recognize that email. Please try again.

philippe.hong@gmail.com

Did you mean: @gmail.com?

.....

?

Sign In

Not a member? [Join now](#)



Design Principles

The image displays three sequential screenshots of the BCA mobile application during a payment confirmation process. The first screenshot shows the 'Baca Sebelum Membayar' (Read Before Paying) section, which includes a warning that transfers are not supported with LLG/Kliring/SKBNI and a coupon section with a '12 GUNAKAN' (Use 12) button. The second screenshot shows the 'Rincian Harga' (Price Details) section, listing 'Pulsa XL 25.000 x 1' for Rp 24.500 and a total price of Rp 23.771. It also features a 'Bayar dengan Transfer 13' (Pay with Transfer 13) button. The third screenshot shows the 'Transfer' confirmation screen, including the account number '084 999 1100', the name 'PT. Trinusa Travelindo', and a total amount of Rp 23.771. A yellow warning box states 'PENTING! Mohon transfer sampai 3 digit terakhir' (Important! Please transfer up to the last 3 digits). The final step is '14 Saya Sudah Bayar' (14 I have paid).












BukaBantuan (Hubungi Kami)	Bukalapak	Pembeli	Pelapak	<p>Lebih mudah dan hemat di aplikasi Bukalapak. Masukkan nomor handphone kamu untuk mendapatkan aplikasi Bukalapak.</p> <input type="text" value="Nomor Handphone"/> Kirim Link via SMS
FAQ (Tanya Jawab)	Tentang Bukalapak	Cara Belanja	Cara Berjualan	
Panduan Bukalapak	Aturan Penggunaan	Pembayaran	Keuntungan Jualan	
Panduan Keamanan	Kebijakan Privasi	Jaminan Aman	Kisah Sukses	
	Penghargaan	Tips Berbelanja	Tips Berjualan	
	Berita & Pengumuman	Halaman Tag	Panduan Fitur Diskon	
	Karir di Bukalapak	Produk Terkini	Indeks Merek	
	Identitas Brand	Jasa Pengadaan	Direktori Pelapak	
	Vulnerability Reports	Promo	Beriklan di Bukalklan	
	Blog Bukalapak	Promo Ramadhan 2018		
	Affiliate Program	BukaReview		
	Timnas Indonesia			
	FAQ (Tanya Jawab)			

Ini Termasuk yang mana ?



Design Principles

UX Project Checklist		You're signed in with Google.		Like 5.7K Share Tweet Donate		
Research	 Competitive Analysis See how others solve similar problems and try to not reinvent the wheel. Read more	<input type="checkbox"/>	 Data analysis Do you have all the useful data you need? Try to have a look at funnels, clicks, page views, performances... Read more	<input checked="" type="checkbox"/>	 User feedback Always speak with Customer Care team! Don't have one? Check your old surveys or videos, what your customer says? What do they actually do? Read more	<input type="checkbox"/>
	 User stories Have you done personas yet? If not DO IT NOW. Ok, now use them to write down user stories and scenarios. Read more	<input type="checkbox"/>	 User flows Create your user's flow based on the scenarios you created, you can use it later to review the journey and create wireframes on top of each step. Read more	<input checked="" type="checkbox"/>	 Red routes Define red routes for your product and you'll be able to identify, prioritise and eliminate any usability obstacles on key user journeys. Read more	<input type="checkbox"/>
Plan	 Brainstorm & sketch Find a war room, fill it with markers and drinks, get together and sketch, discuss, vote, disrupt, have fun! Read more	<input type="checkbox"/>	 Wireframe Add some details and structure to your ideas, reuse patterns and create pages on top of your user flows so you'll not leave anything behind. Read more	<input type="checkbox"/>	 Prototype You can start creating paper prototypes and continuously iterate to more functional ones. Use sketches, HTML, pages or static images, then just get some people read more	<input type="checkbox"/>
Done						

<https://uxchecklist.github.io/>



Design Principles

Usability Techniques

Heuristic Evaluation - A System Checklist

By Deniese Pierotti, Xerox Corporation

Heuristic Evaluation - A System Checklist

1. Visibility of System Status

The system should always keep user informed about what is going on, through appropriate feedback within reasonable time.

#	Review Checklist	Yes No N/A	Comments
1.1	Does every display begin with a title or header that describes screen contents?	0 0 0	
1.2	Is there a consistent icon design scheme and stylistic treatment across the system?	0 0 0	
1.3	Is a single, selected icon clearly visible when surrounded by unselected icons?	0 0 0	
1.4	Do menu instructions, prompts, and error messages appear in the same place (s) on each menu?	0 0 0	
1.5	In multipage data entry screens, is each page labeled to show its relation to others?	0 0 0	
1.6	If overwrite and insert mode are both available, is there a visible indication of which one the user is in?	0 0 0	
1.7	If pop-up windows are used to display error messages, do they allow the user to see the field in error?	0 0 0	
1.8	Is there some form of system feedback for every operator action?	0 0 0	



Design Principles

Link Referensi Tambahan

<https://www.techopedia.com/definition/28140/discoverability-design>

<http://basuki.lecturer.pens.ac.id/lecture/MaknaWarnaDalamDesain.pdf>

<https://www.youtube.com/watch?v=JyEuFGkII-s&t=9s>

<https://uxchecklist.github.io/>

<https://www.instagram.com/uxindo/>



Thank you

[ASSIGNMENT] DESIGN ANALYSIS ARTICLE

- ✓ Make group of 2 students
- ✓ Create **Medium** account
- ✓ Choose two object with different design or home appliance to review
- ✓ **For each design**, write a review
 - ✓ Put pictures
 - ✓ What is user's scenario?
 - ✓ What is user's goal to use it?
 - ✓ Can the object support user's goal?
 - ✓ How to make it better?
- ✓ Analyse based on design principles:
 - Affordance
 - Signifiers
 - Mapping
 - Feedback
 - Discoverability
 - Constraint



Some Inspiration



DESIGN REVIEW ARTICLE

✓ Article in English will have +10 point bonus

✓ Send link to your article to my email :
rahmatfauzi9013@gmail.com

Subjek : SI4105-nama anggota kelompok-TUGASKARYAILMIAH

✓ Deadline: 1 day before Week 6

[**Bonus**] JOIN NATIONAL COMPETITION

- ✔ Competition Scope : **UI / UX Design Competition, Hackaton Programming / Software Development, Business Plan / Business Analyst, Scientific writing, etc**
- ✔ Send link to your Evidence to my email : **rahmatfauzi9013@gmail.com**
Subjek : SI4105/06/07/08 - nama mahasiswa - JOINCOMPETITION
- ✔ Deadline: before Week 13