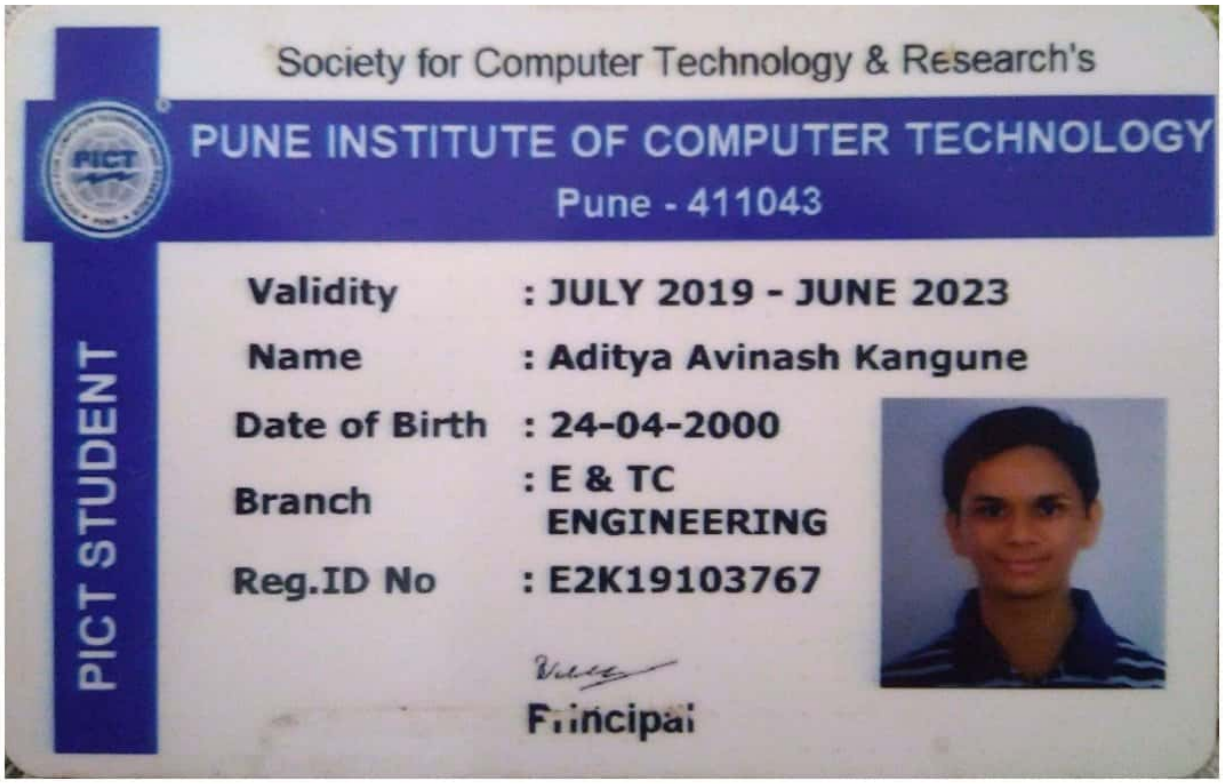
Human and Computer Interaction Laboratory

Assignment 3

Name: Aditya Kangune
Roll number: 33323

Batch: K11
Date of Submission: 26/09/2021



Theory:

HCIL Assignment 3

Name: Aditya Kangune.	Date of Submission: 25/09/2021.
Roll no: 88809	
Batch: K11	

Aim: Feedback and constraint designs.

Problem statement: Products or interfaces should offer useful interfaces feedback to understand the state and have constant constraints to avoid mistakes. Student have to identify and analyze minimum 5 interfaces or products offering feedback and constraint.
Prepare a report clearly showing using feedback and constraint and support it with minimum of 5 photographs taken it in their surroundings or home or neighbourhood.

What is feedback?

When users interface with machines, feedback is necessary about how their work is progressing.
It is the evaluation about an action to the effect on the process to be done.

What are constraints?

Controlling relationship b/w actions and results with layout and movement and restricting or prohibiting some possible wrong actions.

What is need of Feedback?

1.) Acknowledging acceptance of input.
2.) Recognising that input is in correct form.
3.) Explaing delay in process.
4.) Acknowledging if request is done.

What is need of constraints ?

1) Constraints limit the actions that can be performed by the user, thus increasing usability and design and reducing likelihood of operator error.

2) Help to narrow choices.

Conclusion:

1) The usage of feedback to the advantage of user was understood.

2) Using constraints to reduce the probality error was discussed.

3) Importance of feedback and constraints was thoroughly brainstormed.

(Note: PPT alongwith examples, images and sources has been attached).

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Feedback and Constraints.

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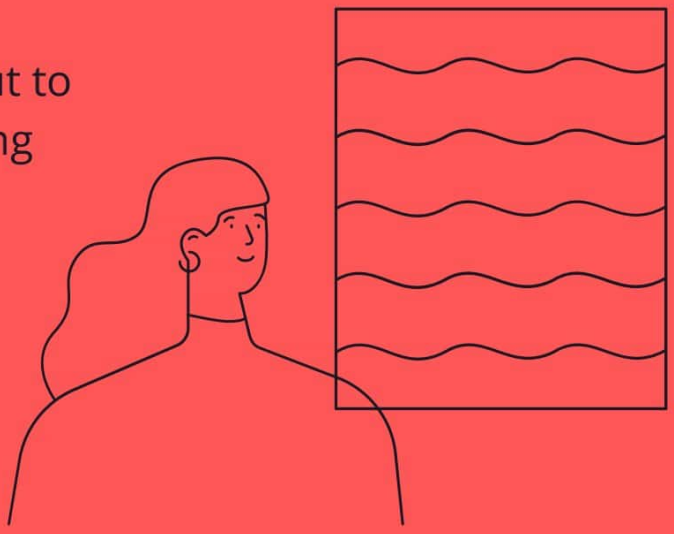
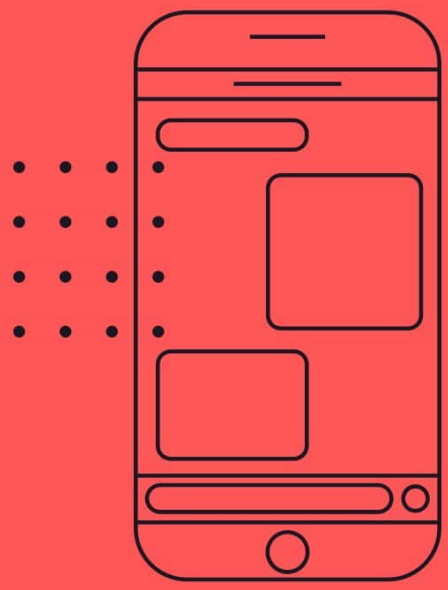
Feedback.

Allows the user to predict what's about to happen, be aware of what is happening now and understand what has just happened.



Constraints.

Allows the user to predict what's about to happen, be Prevents users from making too many mistakes by providing smart defaults and appropriate visual design of UI controlsaware of what is happening now and understand what has just happened.



Examples of Feedback

THE SOUND OF LAPTOP CHARGING

After I plug my laptop to the charging pin, it makes a sound to ensure that the laptop is charging. Sometimes, we forget to switch on the electric switch and just connect the charger to the laptop, due to which the laptop doesn't actually charge.

Source: Home

PLAYSTATION JOYSTICK

The remote/joystick that I have for my PlayStation has a vibrating feature. For example, if your character in the game, gets hit, the joystick vibrates. This vibration is a feedback to the player that something bad has happened.

Source: Home

CLICKING AND CLACKING OF MOUSE AND KEYBOARD

Modern day keyboards and mouses, do not make "clicking sounds" on typing or clicking. Befroe, the mouse would make a "CLICK" sound on clicking, thereby the user knows that the mouse has been clicked. Or the keyboards would make the "CLACKING" sound when we press the keys, so that the user can specifically know how many keys have been pressed.

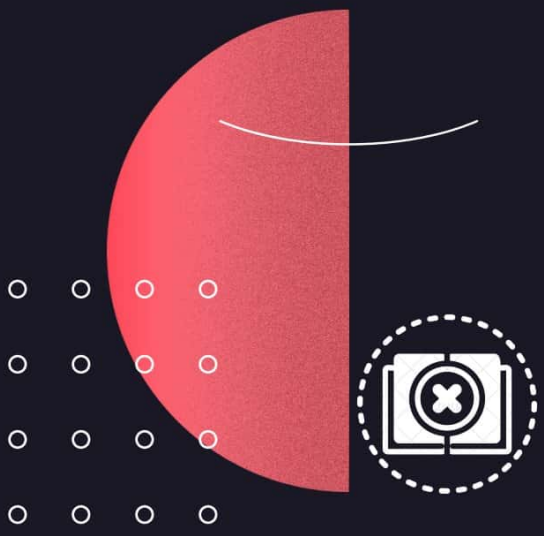
Source: Home

LIGHT ON MOBILE CHARGING

A red flashlight appears on the top of my mobile when I put it on charging. Many times, I put the phone on charging but forget to turn the electric switch on. The red light on the top is an assurance that the mobile is charging now.

Source: Home

Source: www.sunyoungkim.org



Examples of Constraints

Relationship between actions and results in the world, between interface controls (their layout and movement) and their effect.

- Restricting the possible actions that can be performed
- Helps prevent users from selecting incorrect options

USE FLASH DRIVE CONSTRAINT

The other part of pen drive is locked and cannot be inserted in a wrong way, so that the detectable part is inserted correctly.

Source: Home

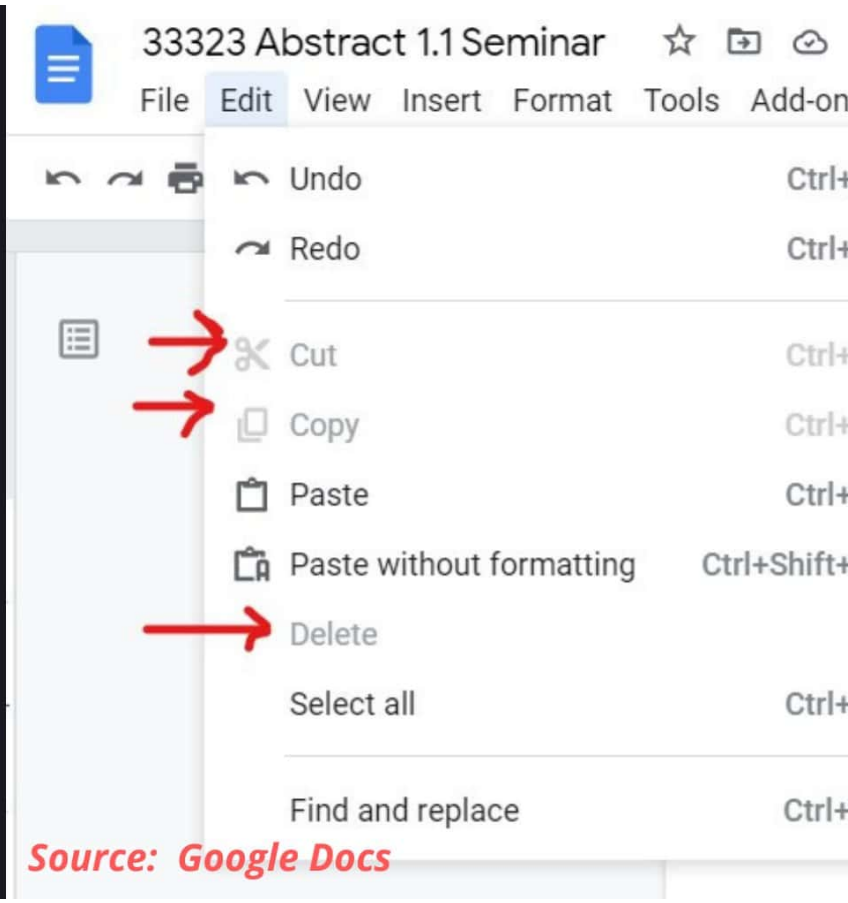
INSERTING BREAD IN TOASTER

The toaster has a particular way in which we can put the bread in it. So that only the needed part of the bread will be grilled.

Source: https://hfeindividualassignmentnorman.home.blog/7constraint-toaster/

HIGHLIGHTED PART IN DOCUMENTS

If we select a text, then only can we cut, copy or delete it in a text document. Hence the features that are not of use are made unclickable and unhighlighted.



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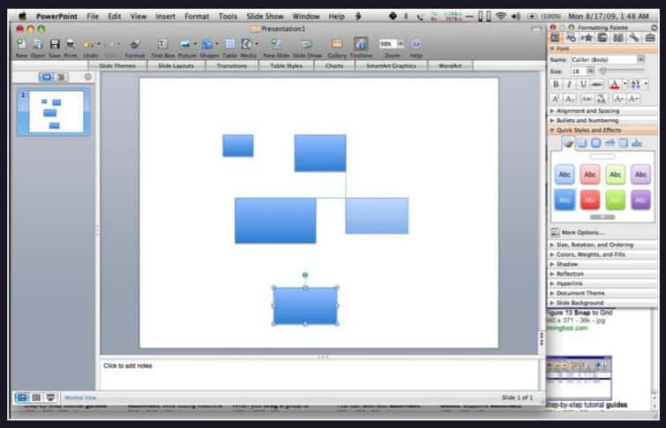

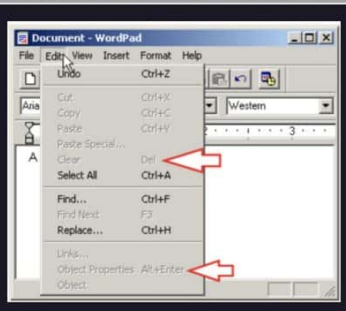
Document - WordPad
File
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Format
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Find... Ctrl+F
Find Next F3
Replace... Ctrl+H
Links...
Object Properties Alt+Enter
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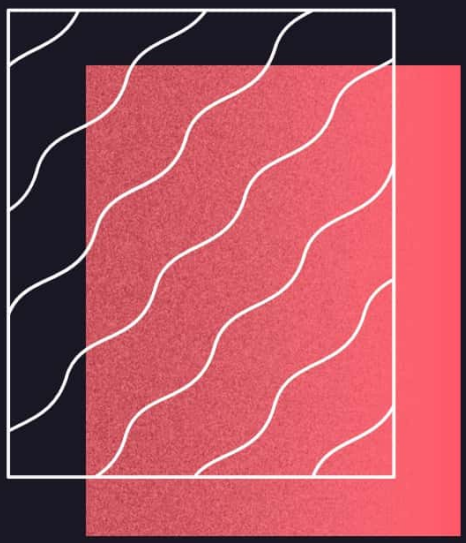
Name :
Ex: Albert
Email :
Ex: albert@gmail.com
Message :
Ex: Hi! Wassup
Submit

All of these principles aid in the usability of a system, and dictates a user's interaction with an object. They are designed for humans and any challenges that may arise as a result, hence the term, human-centered design.



CONCLUSION

After looking at these various principles we can learn that user experience and human-computer interaction are tightly interwoven practices that share the same common goal of usability. Many of these principles are related and play off one another, but all share the same theme. All experiences stemming from these core principles aim to make the user's daily interactions easier and more intuitive.

"We must design for the way people behave, not for how we would wish them to behave."

Donald A. Norman, Living with Complexity


THANK
YOU
Canva