HUMAN CAPABILITIES

to perceive and process information

1 INPUT AND OUTPUT SYSTEMS
The output system of the machine sends messages to the input system of the user and conversely our output system sends messages to the input system of the machine

2 Input system
We perceive stimuli through our senses and other stimuli like proprioception, temperature, vibration...

3 Vision
Issues to address in the interface design include legibility, brightness, foveal versus peripheral view, color blindness and optical illusions

7 Processing memory
People have limitations to process and remember
Use standard or self-evident interactions

6 Output system
We can touch, point at things, speak, move, look, use body language, or even our vital signs to communicate with the computer

5 Haptic
Vibration and other sensorial stimuli send messages to the user

4 Hearing
The volume, tone and the pitch of the sound are adequate to the user and the context of use
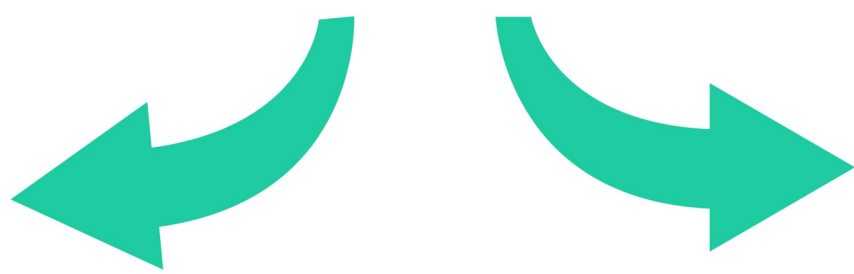

CHOOSING AN INTERACTION STYLE

Use a novel interaction not just because it is technically challenging, use it when
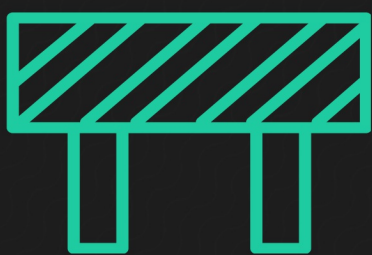
(circle) Users concentrate their attention into that kind of feedback

(circle) Users are proficient with that kind of output system

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HOW TO DESIGN YOUR INTERACTION

DON'T PUT BARRIERS

Design for the physical and cognitive capabilities and limitations to perceive, process and send information

Consider also the social, cultural and organizational context

AVOID UNNECESSARY COMPLEXITY

Help users to reach their goals with your system in a straightforward and seamless way

Use heuristics, principles and patterns to design an easy to use product

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7.3 What users can and can't do

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