- ➔ The goal of HF is to consider the human factor when designing a system → the end goal being to minimize errors! To do so, knowledge about humans is fundamental!
- ➔ There are different levels of automation in a system, ranging from a system that offers no assistance, to a system that takes every decision and action alone while ignoring the human.

There are many sub-disciplines examples of HF: **Environmental factors** (noise, lighting), **Health and safety** (stress), **Task Factor** (easiness), **Constraints** (cost)

First, we need to create a list of which tasks machines and humans excel at. This is the **HABA-MABA** list

- Humans are better at perceiving small visual details, ability to store large amounts of information for long periods of time, ability to reason inductively, ability to exercise judgement, improvising
- Machines are better are repetition, multitask, reason deductively, at being precise

We can also ask ourselves what humans are bad at, maybe tasks that rely on this type of abilities should have "automation priority"

- Lack of reliability, difficulty with details, short term memory, not systematic, bad at optimizing

When designing systems, we should consider every human, for example, videogames always have a colourblind mode, so that colourblind people don't have issues playing

Humans have 2 cognitive systems or 2 ways of thinking, they are:

(1) Fast instinctive and emotional
(2) Slower more deliberative and more logical

This basically means, that our "reflex" or fast answer is very likely wrong, because not much thinking went into giving an answer

These cognitive systems are also very biased, every decision every human takes is biased on that same human's past experiences.

When designing systems, we always need to think which tasks can be automated, and of these tasks, which ones should be automated