HCI JOTTINGS

HCI is a field that focuses on designing and evaluating computer systems and technologies used by people.

A design in HCI is basically about achieving (a) goal(s), within a set of constraints such as materials, cost, time, policies, etc, and a trade-off between them. Users are always at the heart of any design. i.e. a good design must always start with the user(s) in mind.

Design process is then the systematic approach used by designers to solve complex problems requiring a design solution. It involves **how we do what we do.** It is therefore a structural set of steps employed by designers to solve users’ problems.

**Key aspects of HCI**

* User-centric design
* Prototyping
* Accessibility
* UI Design

**Principles of Design**

* Know your users. Conduct researches to understand users needs.
* Design for usability
* Evaluate and iterate

**Concept of Interactive Design**

The goal of an interactive design is to have a resulting product that is both enjoyable and effective to use. By comparing examples, considering the W-questions of use.

**Aspects of Interactive Design**

* Designer
* User
* Technology
* Interactions between interfaces

NOTE: You don’t design a user experience, you design for a user experience.

**Processes of design interaction**

* Requirement, design alternatives, prototyping, evaluating

The basic things in HCI include:

* Humans
* Computers
* Interaction

Goals of HCI can be summarised in three:

* Usability
* Safety
* Functionality

Main goals:

* easy to learn
* easy to remember how to use
* effective to use
* efficient to use
* safe to use
* enjoyable to use

Data Gathering and techniques

* Observation
* Questionnaire
* Interviews – sentence completion; word association; focus groups
* Surveys
* Experiments

Prototyping

Prototyping is the process of creating a model or sample of a product to test a concept or process. It's a crucial part of the design process, and it can help identify problems and improve the final product. Prototyping can be in two types:

* High fidelity
* Low fidelity prototypes: A low-fidelity prototype is a simple representation of a product or service that focuses on core functionality. Low-fidelity prototypes help designers quickly explore ideas and identify gaps and pitfalls.
* Story board: Probably the simplest notion of a prototype is the storyboard, which is a graphical depiction of the outward appearance of the intended system, without any accompanying system functionality.
* Sketches: A sketch is a quick, freehand drawing that's often not intended to be finished. While sketches are often considered to not be technically prototypes, they can be extremely helpful for making decisions, mostly because they are incredibly easy to create and even easier to discard
* Card Sorting: Card sorting is a research method that helps users organize information into groups that make sense to them. Card sorting helps UX designers understand how users think about how something works. This information helps designers create more intuitive and easy-to-use products.
* Wizard of Oz: A "Wizard of Oz" prototype is a user research method in UX design where a user interacts with a seemingly automated system, but in reality, a human operator behind the scenes controls the responses. It is useful for Simulating Digital Systems - Ideal for Websites and Apps, Validating Ideas and Saving Resources, New Functionality Testing.