

# DES102: Introduction to Human Computer Interaction

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**<https://classroom.google.com/c/NjE3NDY3NzEwNDEx?cjc=qzrt54j>**

# User experience key

“It is not enough that we build products that function, that are understandable and usable, we also need to **build joy and excitement, pleasure and fun, and yes, beauty to people’s lives.**”

# Why was the iPod user experience such a success?



Figure 1.6 The iPod Nano Touch

Source: ©Press Association, reproduced with permission.

- Quality user experience from the start
- Simple, elegant, distinct brand, pleasurable, must have fashion item, catchy names, cool...

Many aspects of the UX that can be considered and many ways of taking them into account when designing interactive products.

**Of central importance are the usability, functionality, aesthetics, content, look and feel, and emotional appeal.**

# Which kind of design?

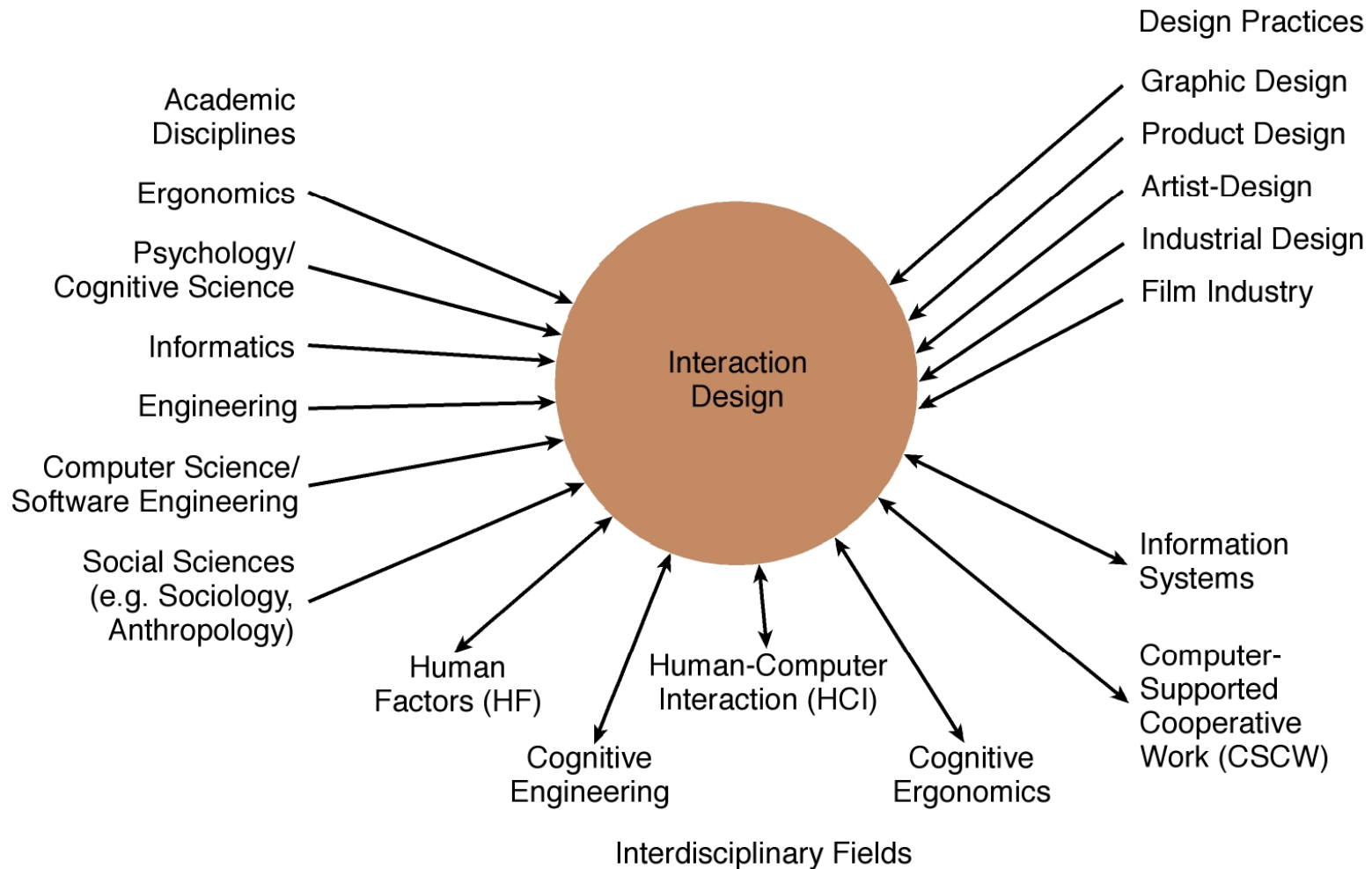
Number of other terms used emphasizing what is being designed, for example:

- User interface design, software design, user-centered design, product design, web design, experience design (UX)

Interaction design is the umbrella term covering all of these aspects:

- Fundamental to all disciplines, fields, and approaches concerned with researching and designing computer-based systems for people

# Interaction design



# Relationship between ID, HCI, and other fields—academic disciplines

Academic disciplines contributing to ID:

- Psychology
- Social Sciences
- Computing Sciences
- Engineering
- Ergonomics
- Informatics

# Relationship between ID, HCI and other fields—design practices

Design practices contributing to ID:

- Graphic design
- Product design
- Artist-design
- Industrial design
- Film industry

# Relationship between ID, HCI and other fields—interdisciplinary fields

Interdisciplinary fields that '**do**' interaction design:

- HCI
- Ubiquitous Computing
- Human Factors
- Cognitive Engineering
- Cognitive Ergonomics
- Computer Supported Co-operative Work
- Information Systems



# Working in multidisciplinary teams

- Many people from different backgrounds involved
- Different perspectives and ways of seeing and talking about things

## Benefits

- More ideas and designs generated

## Disadvantages

- Difficult to communicate and progress forward the designs being create

# Interaction design in business

Large number of ID consultancies. Examples of well known ones include:

- **Nielsen Norman Group:** “help companies enter the age of the consumer, designing human-centered products and services”
- **Cooper:** “From research and product to goal-related design”
- **IDEO:** “creates products, services and environments for companies pioneering new ways to provide value to their customers”

## ACTIVITY 1.1

In practice, the makeup of a given design team depends on the kind of interactive product being built. Who do you think should be involved in developing

- A public kiosk providing information about the exhibits available in a science museum?
- An interactive educational website to accompany a TV series?

### Comment

Ideally, each team will have a number of different people with different skill sets. For example, the first interactive product would include the following individuals:

- Graphic and interaction designers, museum curators, educational advisers, software engineers, software designers, and ergonomists

The second project would include these types of individuals:

- TV producers, graphic and interaction designers, teachers, video experts, software engineers, and software designers

In addition, as both systems are being developed for use by the general public, representative users, such as school children and parents, should be involved.

In practice, design teams often end up being quite large, especially if they are working on a big project to meet a fixed deadline. For example, it is common to find teams of 15 or more people working on a new product like a health app. This means that a number of people from each area of expertise are likely to be working as part of the project team. ■

# Running Applications



# Project Guideline



[https://www.youtube.com/watch?v=C\\_h4HnKVptk](https://www.youtube.com/watch?v=C_h4HnKVptk)

# Recap: Core characteristics of interaction design

- Users should be involved throughout the development of the project
- Specific usability and user experience goals need to be identified, clearly documented, and agreed to at the beginning of the project
- Iteration is needed through the core activities

# Why?

## Help designers:

- Understand how to design interactive products that fit with what people want, need, and may desire
- Appreciate that one size does not fit all (for example, teenagers are very different to grown-ups)
- Identify any incorrect assumptions they may have about particular user groups. (for example, not all old people want or need big fonts)
- Be aware of both people's sensitivities and their capabilities

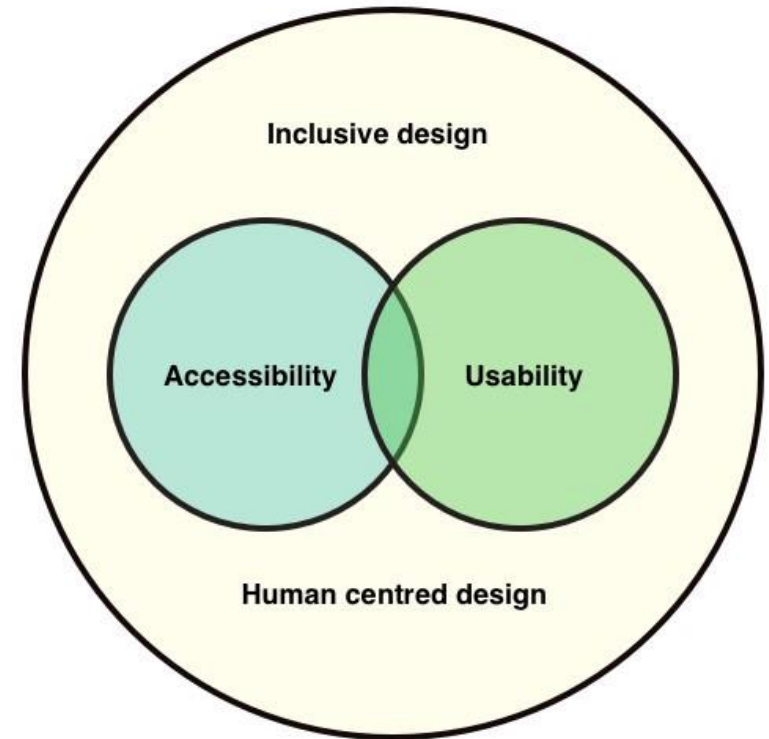
# Accessibility and inclusiveness

**Accessibility:** the extent to which an interactive product is accessible by as many people as possible

- Focus is on people with disabilities; for instance, those using android OS or apple voiceover

**Inclusiveness:** making products and services that accommodate the widest possible number of people

- For example, smartphones designed for all and made available to everyone regardless of their disability, education, age, or income



<https://blog.prototypr.io/inclusive-design-and-accessibility-50718a3ac768>

**Accessibility is an outcome.**  
**Inclusive design is a process.**



# Microsoft's definition of the two are:

**Inclusive design:** *a design methodology that enables and draws on the full range of human diversity.*

**Accessibility:** *the qualities that make an experience open to all.*