



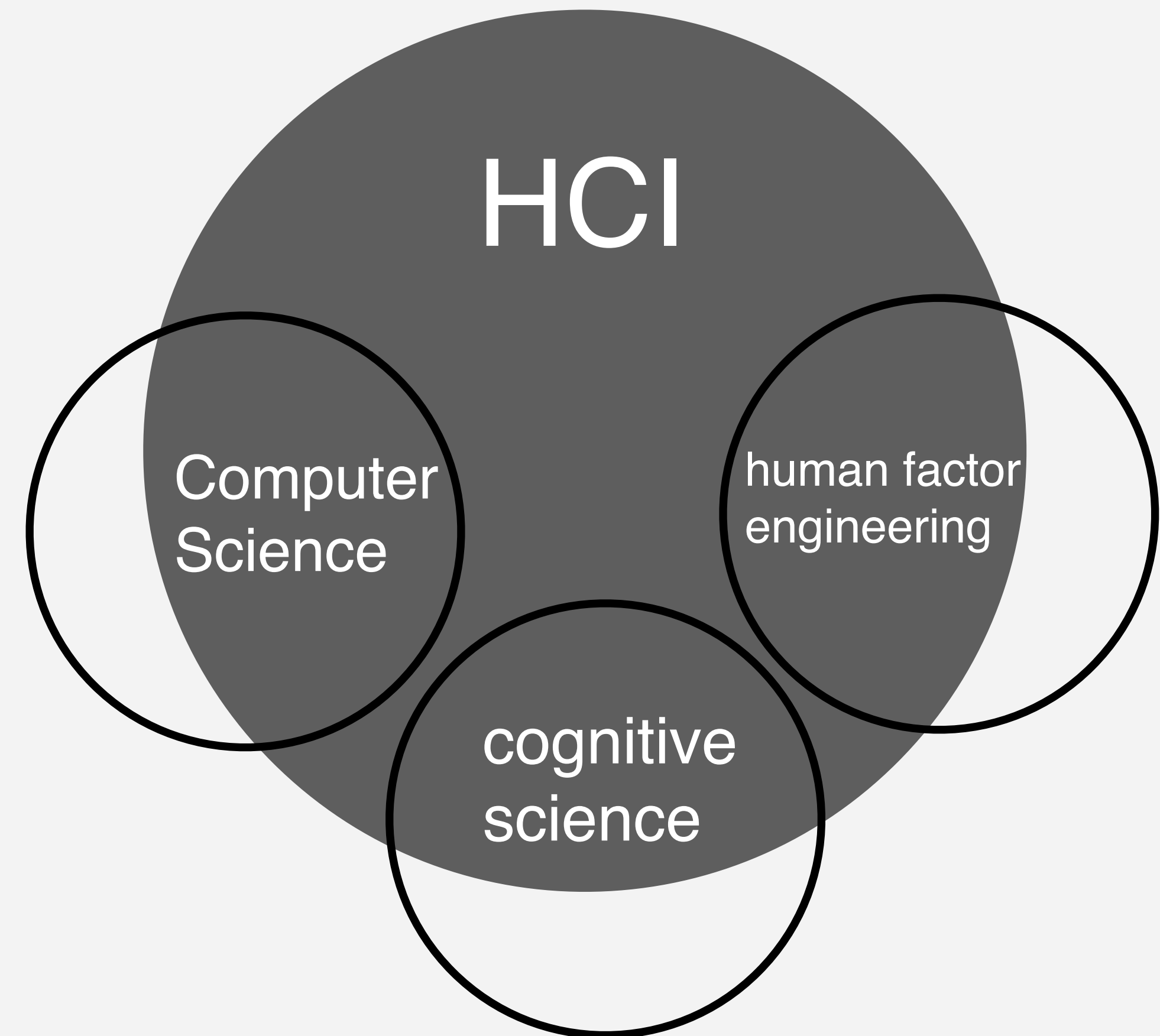
# HCI

**Software Engineering 1**

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# What is Human-Computer Interaction (HCI)?

HCI is a multidisciplinary field of study focusing on the design of computer technology and, in particular, the interaction between humans (the users) and computers.

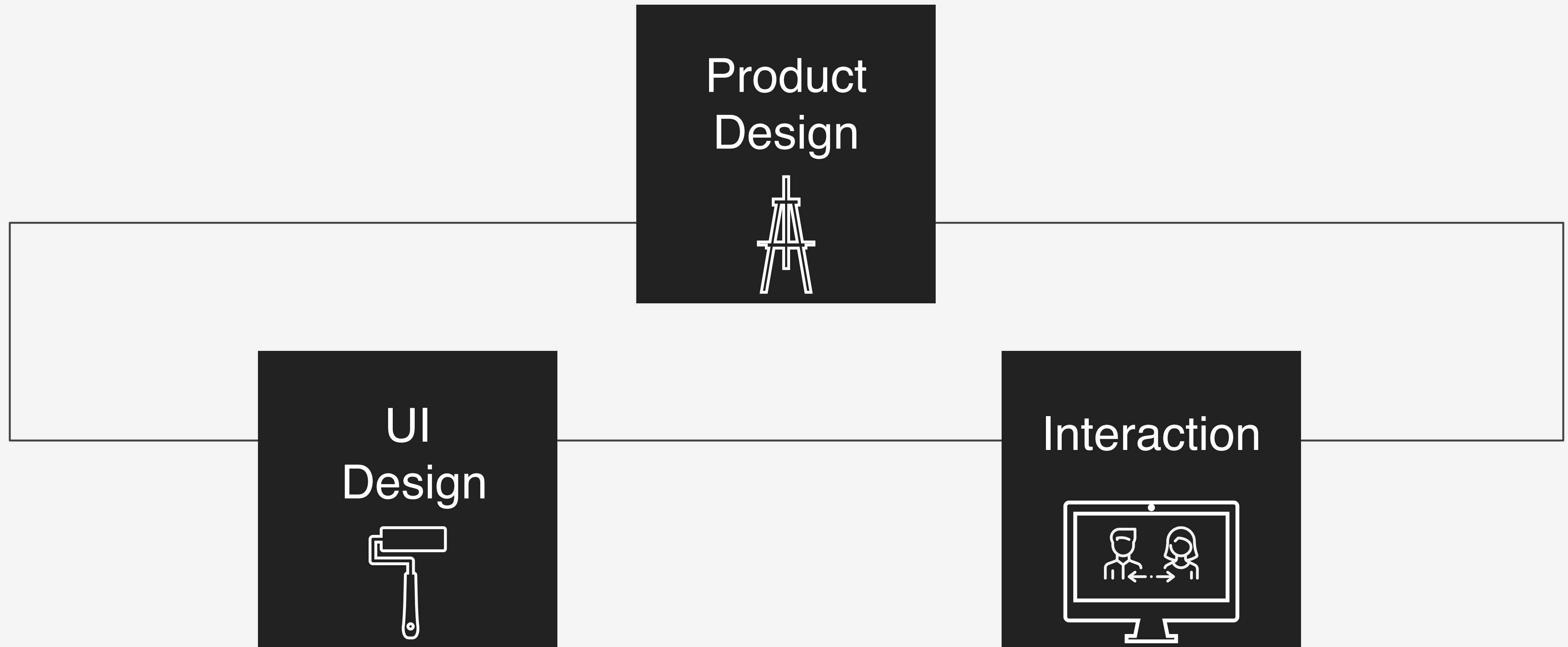


# Computer systems with good usability

Developers must attempt to:

- |   |  |
|---|--|
| 1 | Understand the factors that determine how people use technology  |
| 2 | Develop tools and techniques to enable building suitable systems |
| 3 | Achieve efficient, effective, and safe interaction               |
| 4 | Put people first   |

# Fields and Branches



What we are  
focusing on



UI/UX

UI

The “UI” in UI design stands for “user interface”. The user interface is the graphical layout of an application.

UX

“UX” stands for “user experience.” A user’s experience of the app is determined by how they interact with it.

Popular UI/UX design trends of  
the upcoming years

01

Animated  
illustrations

02

Micro  
interaction

03

Virtual  
Reality

04

Augmented  
Reality

05

Asymmetrical  
Layouts

06

Storytelling

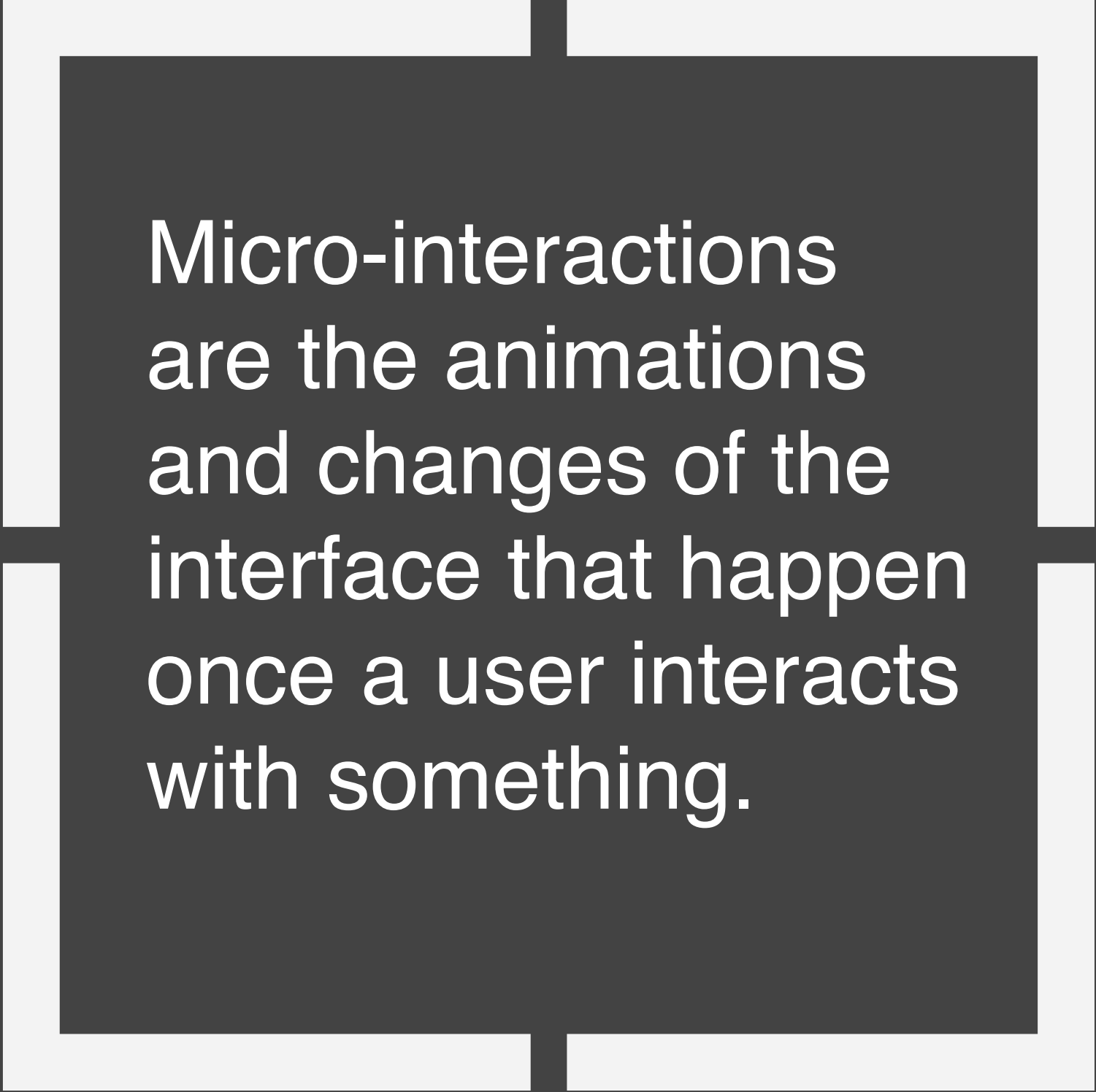
# Animated illustrations

Illustrations as very popular design elements add “natural feel” and “human touch” to the overall UX of our products.

Illustrations are also very strong attention grabbers  
(by applying motion to these illustrations)

applying motion is capturing users’ attention and making users engage with your product.

# Micro interaction



Micro-interactions  
are the animations  
and changes of the  
interface that happen  
once a user interacts  
with something.

**the color change** on button hover is an example for micro interaction.

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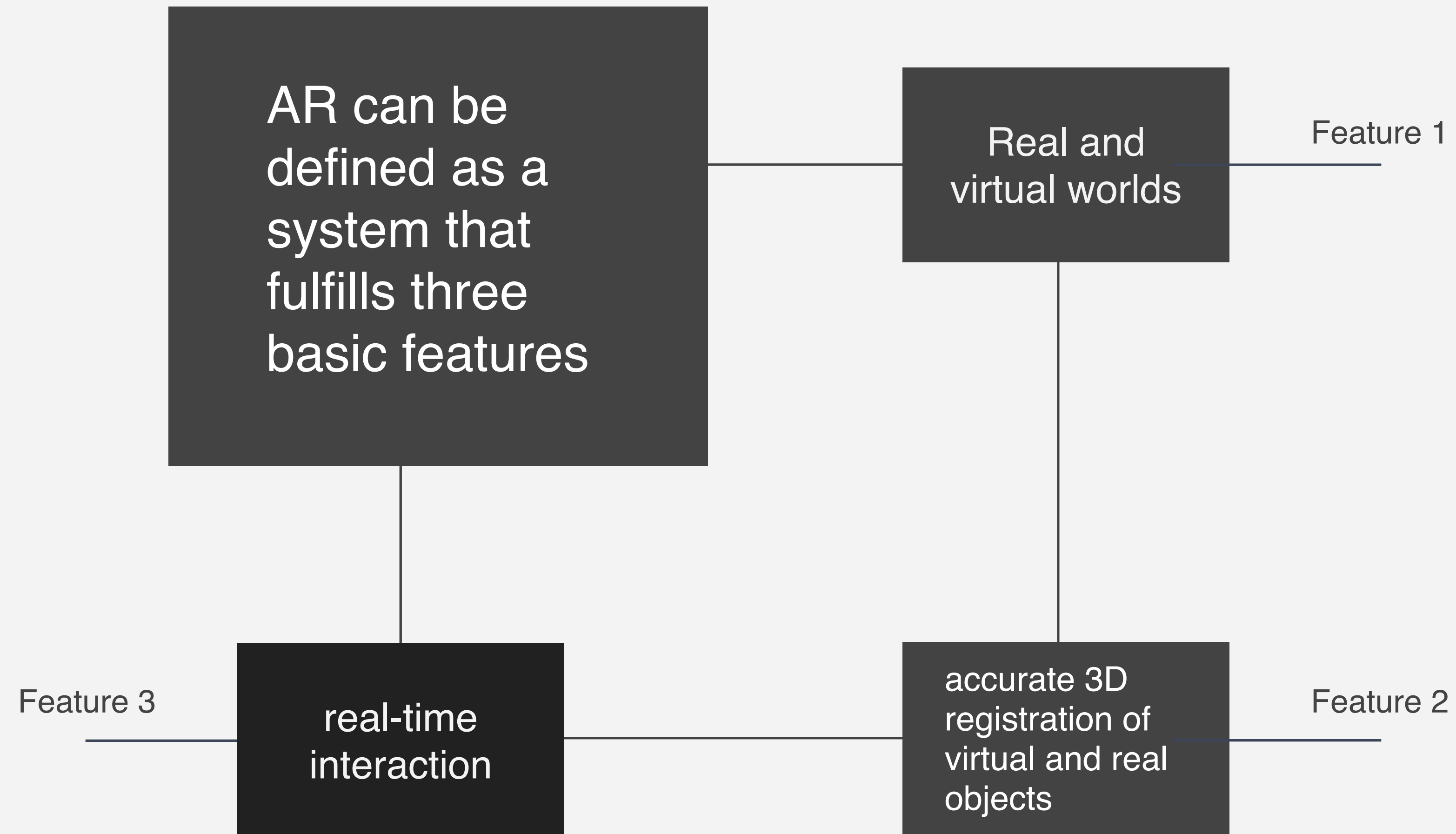


# Virtual Reality (VR)

VR is a simulated experience that can be similar to or completely different from the real world.

Applications of virtual reality can include entertainment (i.e. video games) and educational purposes (i.e. medical and so on).

# Augmented Reality (AR)



# Asymmetrical Layouts

In design,  
asymmetry is  
often used to  
create visual  
tension.

There is a lot of room  
for creativity as the  
number of options  
and opportunities  
when creating  
asymmetrical layouts  
are endless.

Designers who  
master  
asymmetry have  
greater freedom  
of expression.

# Storytelling

Stories play a very important role in overall UX in digital product design.

Storytelling is all about transferring data to the users in the best possible informative and creative way.

Storytelling helps to create positive emotions and relationships between your brand and users.

# References

Chapter 10 of “SYSTEMS ANALYSIS  
& DESIGN” book (5th edition)

01

02

“Human-Computer Interaction” book

<https://medium.com/free-code-camp/how-facebook-designs-microinteractions-for-feature-discovery-c79cfe998a77>

03

04

[https://en.wikipedia.org/wiki/Virtual\\_reality](https://en.wikipedia.org/wiki/Virtual_reality)

[https://en.wikipedia.org/wiki/Augmented\\_reality](https://en.wikipedia.org/wiki/Augmented_reality)

05

06

<https://www.shopify.com/partners/blog/asymmetrical-design>

<https://www.interaction-design.org/literature/topics/human-computer-interaction>

07

08

<https://uxdesign.cc/8-ui-ux-design-trends-for-2020-68e37b0278f6>

THANKS!

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