

INTRODUCTION TO HUMAN- COMPUTER INTERACTION

PRESENTED BY:

MS. JEANNY O. GARCIA

LEARNING OUTCOMES

1. Define what a Human-Computer Interaction is.
2. Identify the objectives of HCI.
3. Explain the multiple fields of HCI.
4. Explain the importance of HCI in UX design.

DESIGNING OBJECTS

"'You would need an engineering degree in MIT to work this', someone once told me, shaking his head in puzzlement over his brandnew digital watch. Well, I have an engineering degree from MIT... Give me a few hours and I can figure out the watch. But why should it take hours? I have talked with many people who can't use all the features of their washing machines or cameras, ... who habitually turn on the wrong stove burner."

- Don Norman, Design of Everyday Things

STOVE

Bad arrangement of burners



STOVE

Better arrangement of burners



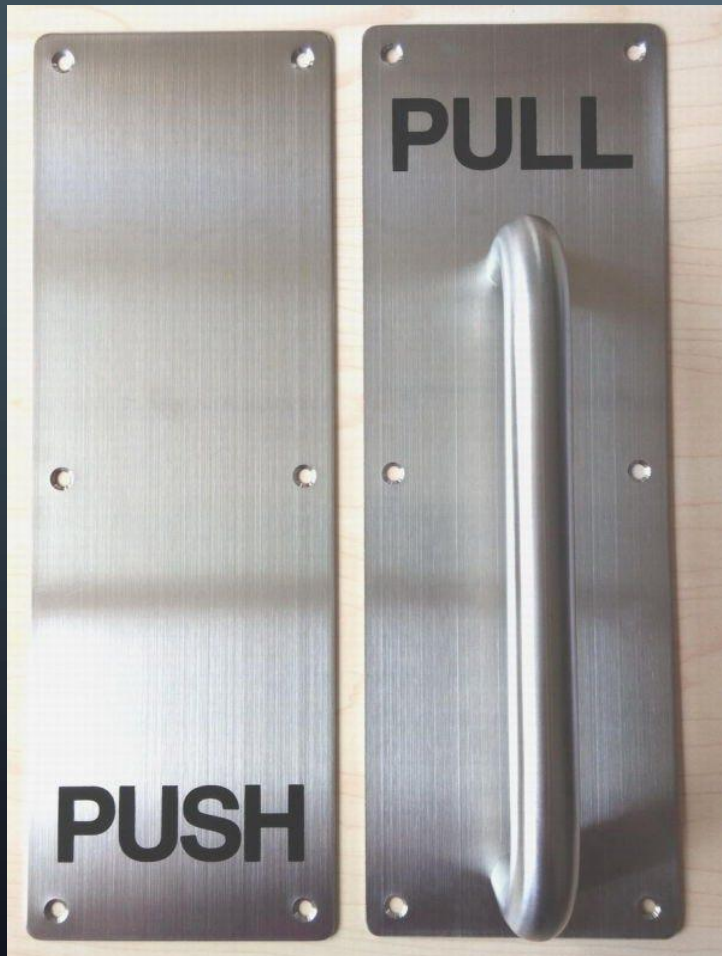
DOOR

Door handle for a door to push



DOOR

Door handle to pull



CASSEROLE POT

With steel handle



CASSEROLE POT

With insulated handle



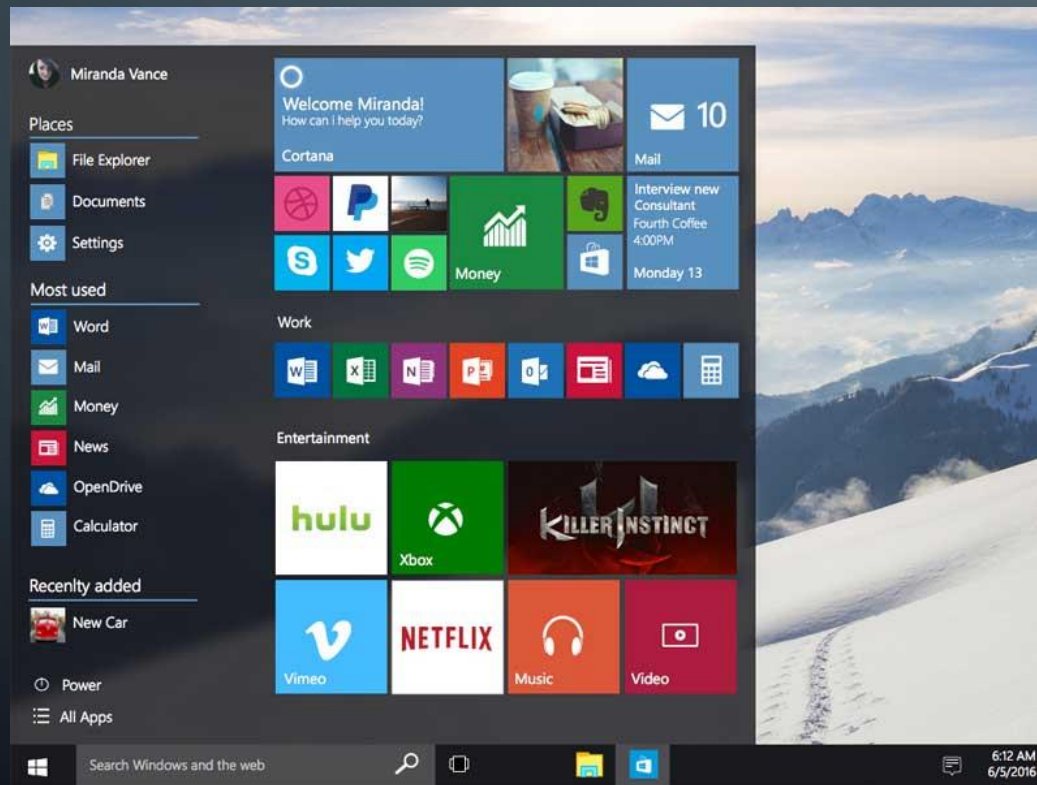
WINDOWS OS

Windows 8 – not designed on PC BUT marketed by MS on PCs.



WINDOWS OS

Windows 10 - more consistent user experience across devices



SMARTPHONES

Too small to use



SMARTPHONES

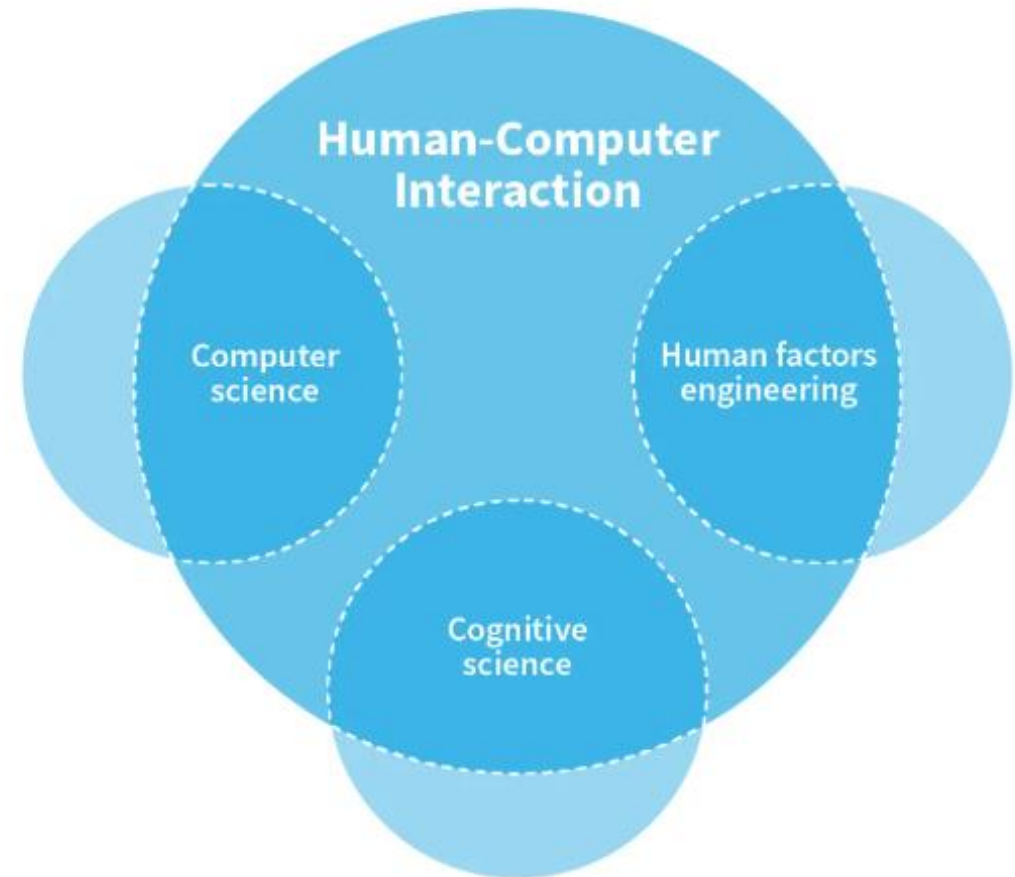
Enough size to tap icons



WHAT IS HCI?

- It is the study of how users interact with technology drawing insights from **computer science, cognitive science and human factor engineering** to create engaging experiences.

The Multidisciplinary Field of HCI



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RISE OF HCI

- It surfaced in the **1980s** with the emergence of personal computing using machines like **Apple Macintosh, IBM PC 5150 and Commodore 64.**
- They were used for applications like **word processor, games and accounting aids.**
- The need of **user-friendly computer interaction** for less experienced users became increasingly vital.

TWO SIDES OF HCI

- **Academic Discipline**
 - About studying the way people interact with computer technology.
- **Design Discipline**
 - Application of user-experience design and interactive design

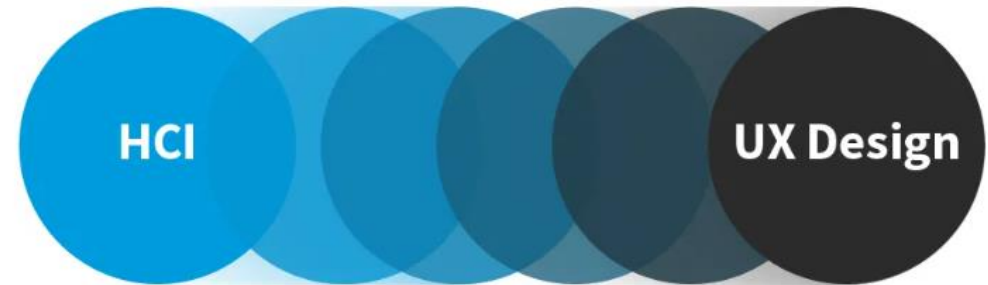


"How do you create interventions with technology that make difference to people?"

THE EVOLUTION OF UX DESIGN

- HCI overlaps with areas such as user-centered design, user-interface design and user experience design.
- HCI — academically-focused
- UX — industry-focused
- Regardless of this divide, the practical considerations for products that the **UX professionals** take is based on the findings of **HCI specialists** about human mindset.

The Evolution of UX Design



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THE IMPACT OF HCI DESIGN ON UX

Here are **four design principles** that have been influenced by HCI design:

- Goal-driven design
- Improved usability
- Positive emotional responses
- Put human first



FOR A SUCCESSFUL PRODUCT

For the product to be successful, it must be:

- **USEFUL**
- **USABLE**
- **USED**



CAREER PATHS OF HCI PROFESSIONALS

- User Experience (UX) Designer: Focus on creating user-friendly and engaging experiences.
- User Interface (UI) Designer: Focus on the visual design of interfaces.
- Interaction Designer: Focus on how users interact with technology.
- Usability Analyst: Evaluate the usability of products and systems.
- User Researcher: Conduct research to understand user needs and behaviors.
- HCI Researcher: Conduct research to advance the field of HCI.
- Product Designer: Focus on the overall product design, including user experience and interface.

REFERENCES

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- *Norman, Don. (2013). The Design of Everyday Things: Revised and Expanded Edition. Basic Books.*
- *Sakoane, Kelvin. (2022, February 23). The Importance of Human-Computer Interaction in UX Design. <https://shorturl.at/hME5B>.*
- *University of Maryland College of Information.(2025).Career Paths – Master of Science in Human-Computer Interaction (HCIM). <https://shorturl.at/csTv4>*
- *Interaction Design Foundation.(2002). Human-Computer Interaction. <https://shorturl.at/p6lDa>*



SEE YOU
LATER

The text "SEE YOU LATER" is rendered in a bold, red, sans-serif font with a 3D effect, featuring a teal shadow. The words are arranged in two lines. Small purple star and dot accents are scattered around the text. The entire graphic is set against a light yellow rectangular background.

Let's have a 10-minute
break