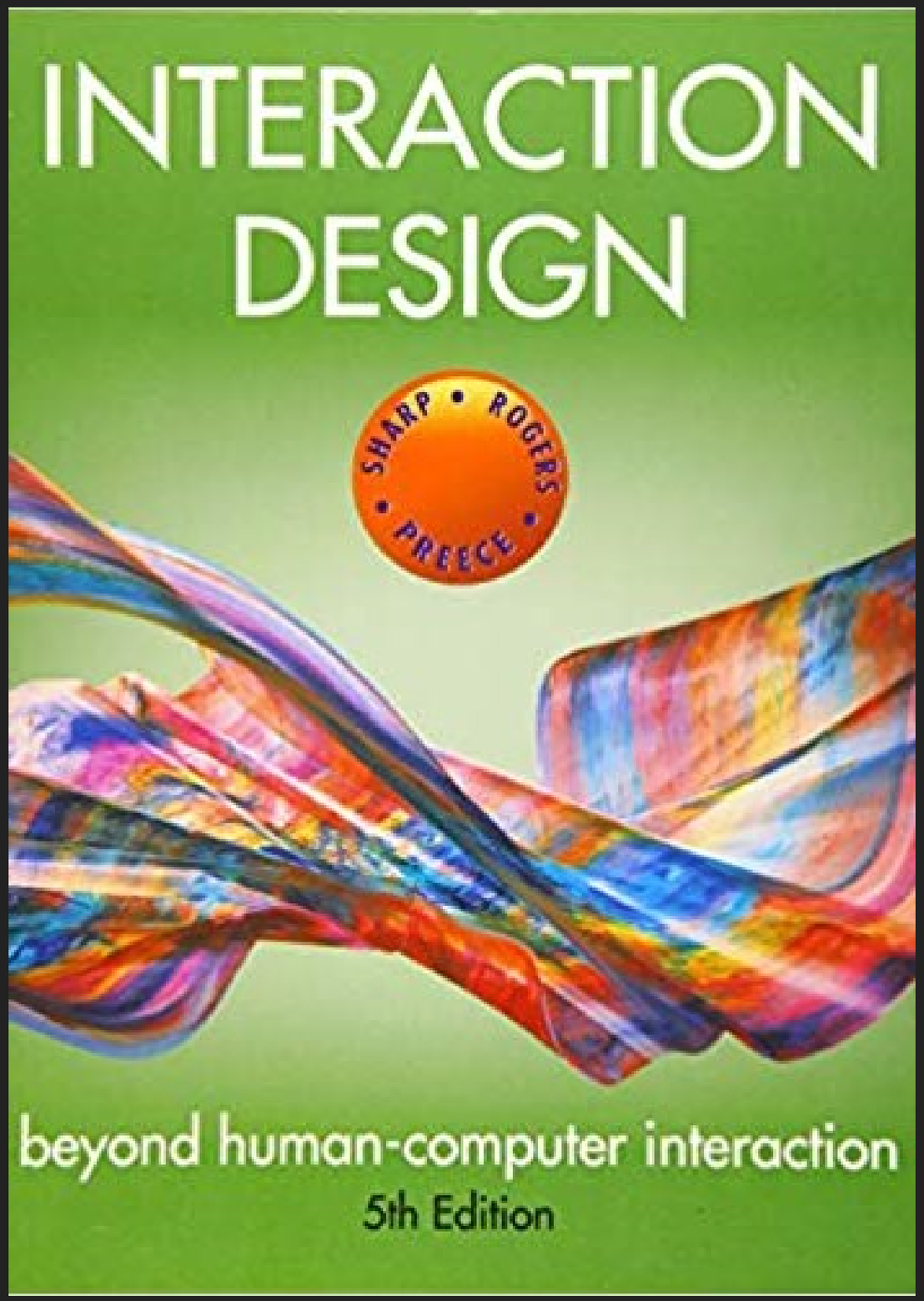
SOEN 357

USER INTERACTION DESIGN BEYOND HUMAN COMPUTER INTERACTION

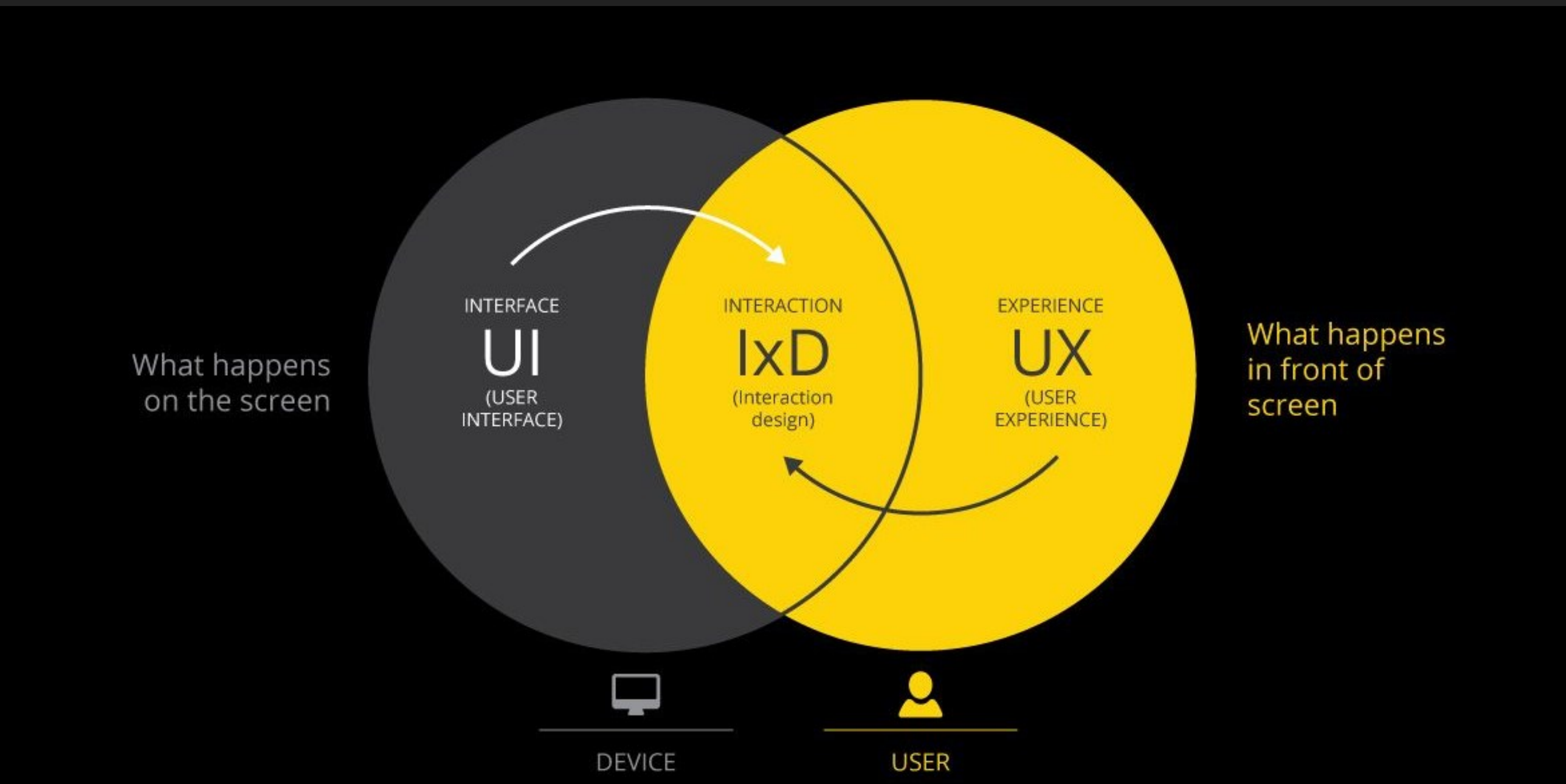
A LITTLE BIT ABOUT THE COURSE…

RECOMMENDED TEXT BOOK

- *But wait, it's called interaction not interface design?*



UI, IxD AND UX: WHAT'S THE DIFFERENCE?

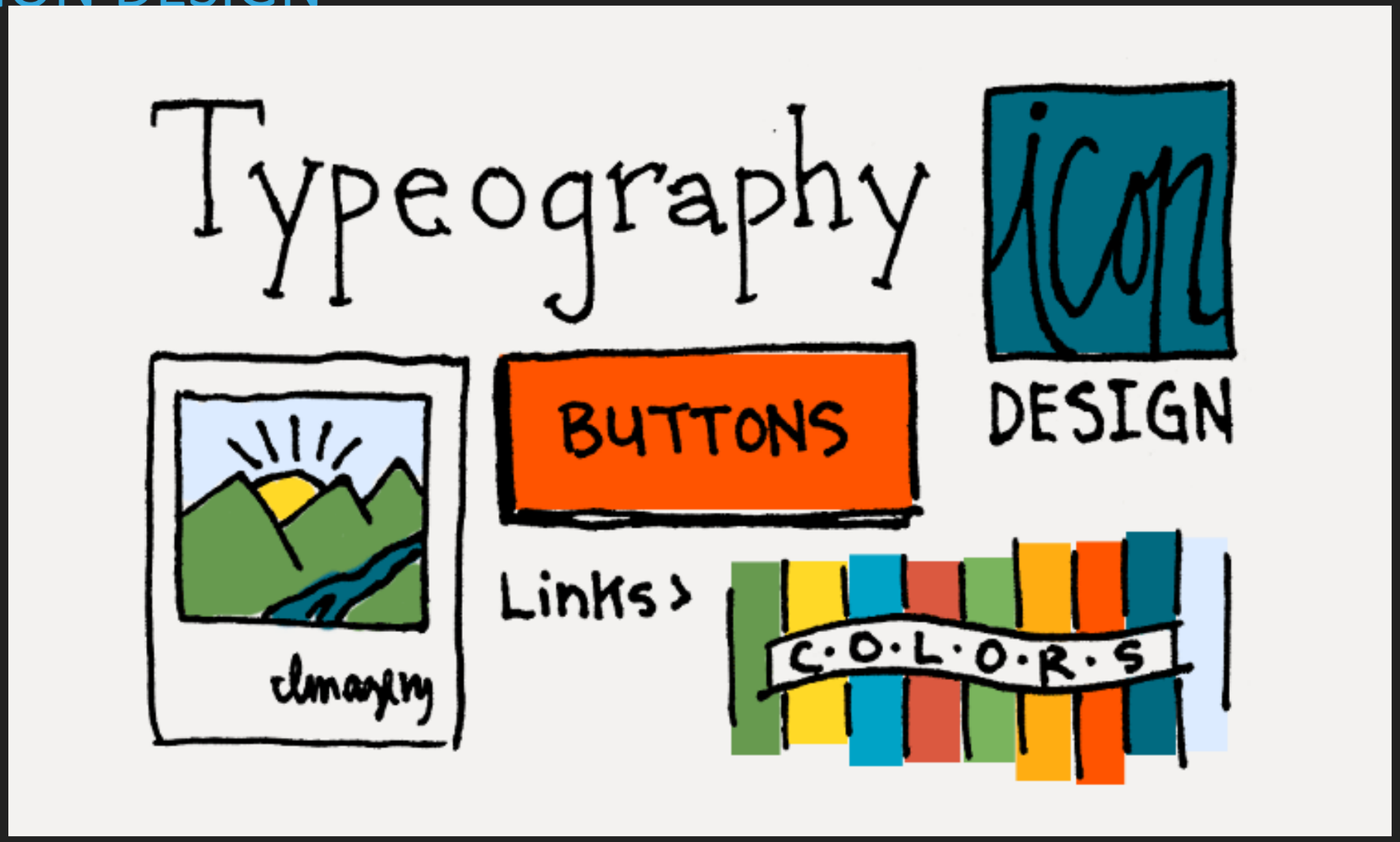


USER INTERFACE VS USER INTERACTION DESIGN

- Interaction design: how a product behaves.
  - When a user speaks to a product, touches it, or looks at it, they are interacting with it.
- Transitions from one screen to another, animations, and how elements move in relation to another are all a part of what an IxD focuses on.

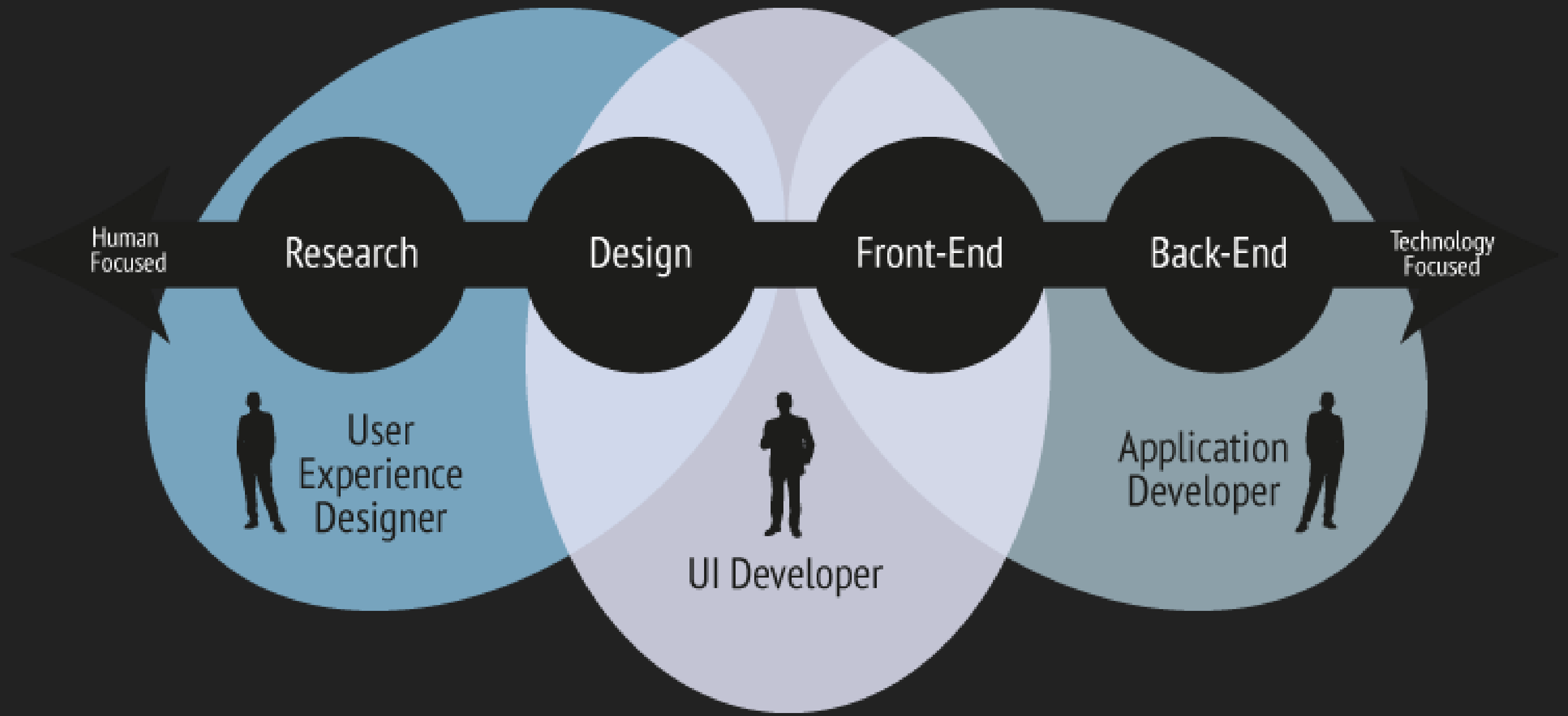
https://www.branchstrategy.com/understanding-design-ia-ux-ui-ixd/

USER INTERFACE VS USER INTERACTION DESIGN



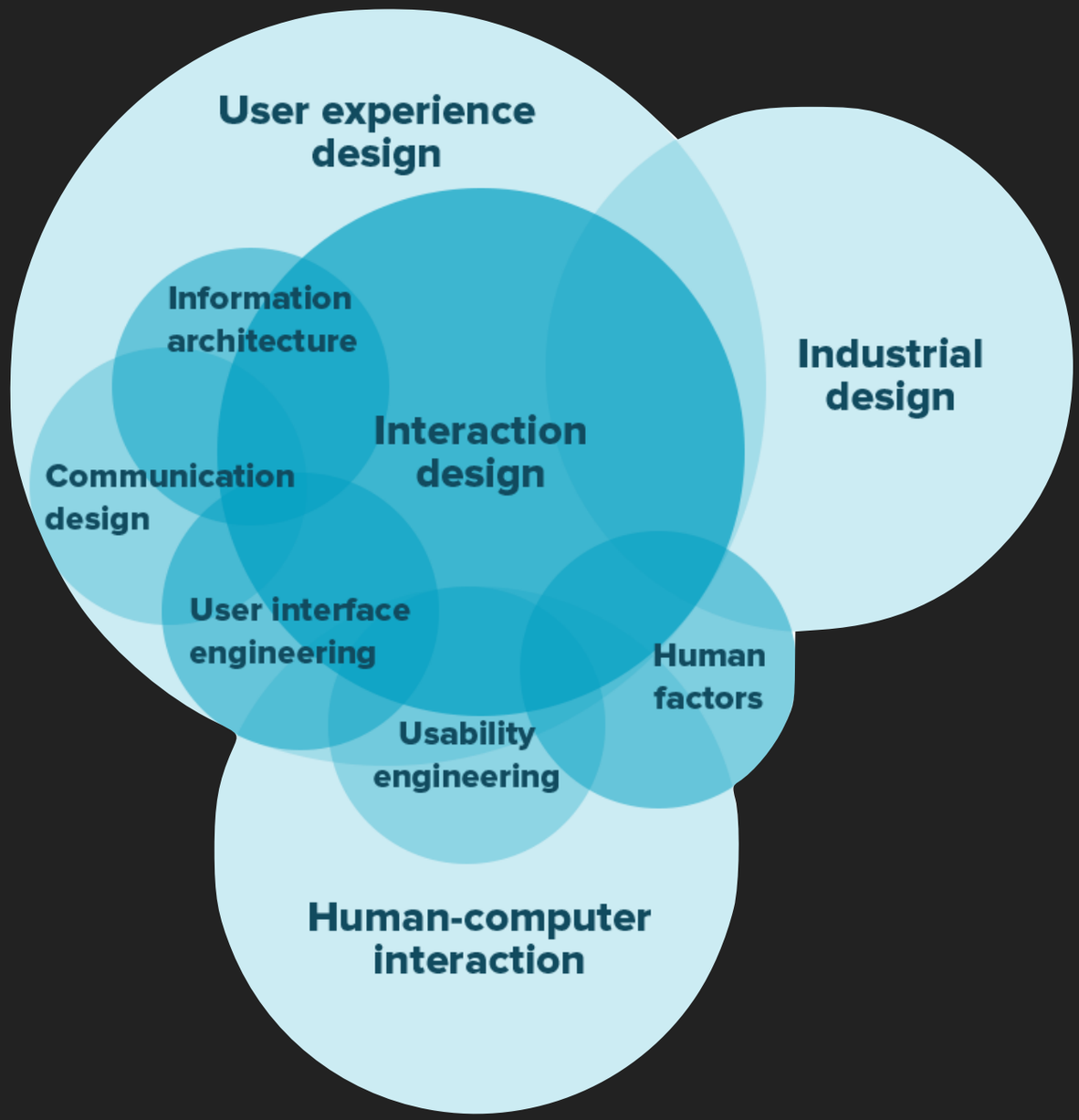
- User Interface Design: the way a product looks.
- This can be buttons, icons, colors, link and other call-to-action (CTA) styling, images, headings, typography (the font, size, spacing choices for all text), and how it all comes together.

USER INTERFACE VS USER INTERACTION DESIGN



PURPOSE & LEARNING OUTCOMES

- Understand what are HCI, UX, IxD, UI, are and learn about each of them.
- Learn about HCI frameworks, models and evaluation paradigms.
- Learn the importance of user-centred design and methods of user information gathering.
- Understand how the sensory, cognitive and physical capabilities of users inform design.
- Learn about the process of interaction design.
- Analyse and critique designs.
- Select, adapt and apply suitable design approaches and techniques towards the design of an interactive product.



GRADING SCHEME

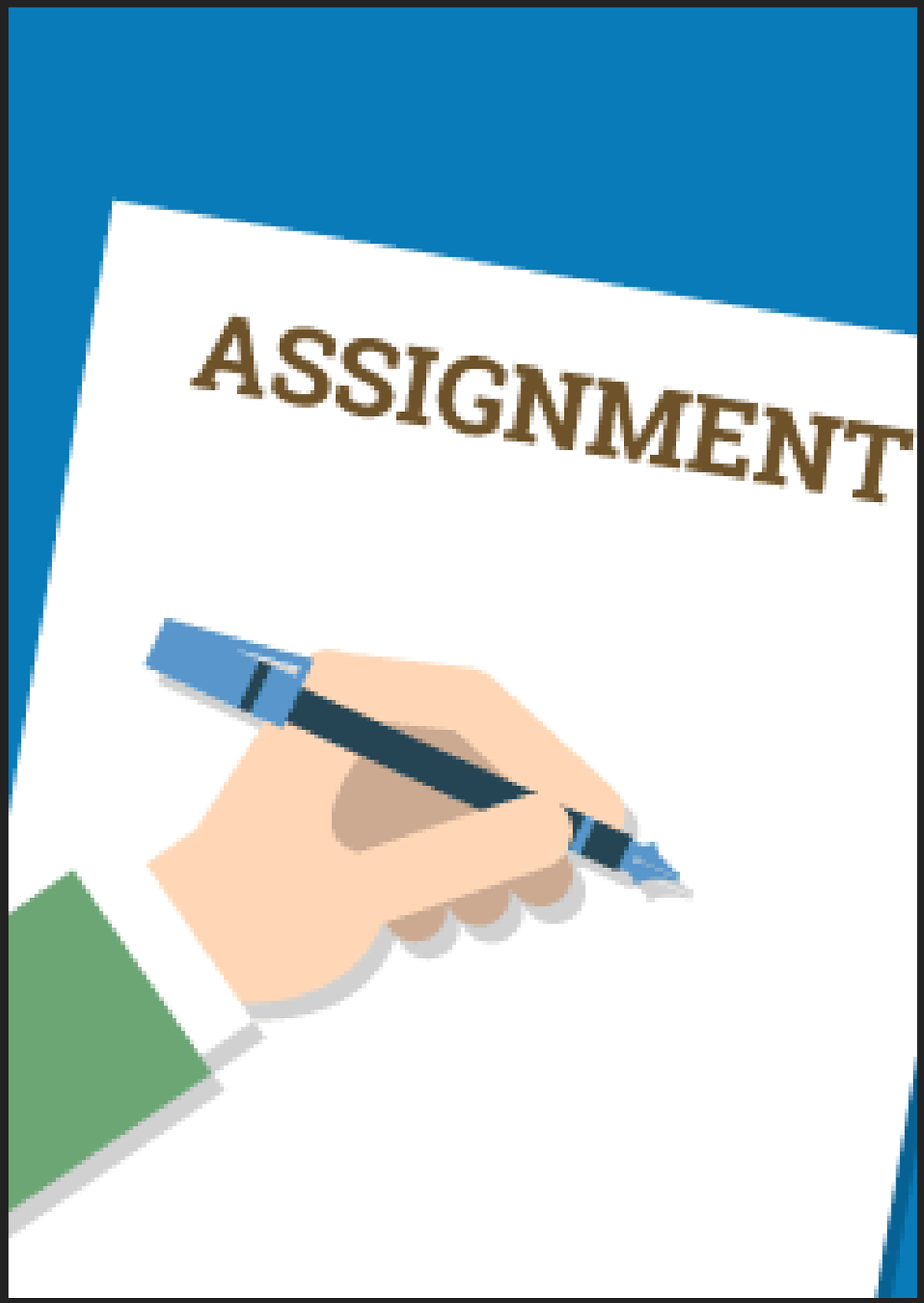
- 15% Assignment / Mini Project
- 10% Tutorials (“presence”and participation)
- 10% Midterm
- 45% Research project
- 20% Final

TUTORIALS

- This is where you'll do hands on work and exercises!
- Important you do these (10%)

ASSIGNMENT / MINI PROJECT

- Case Study: UX/UI design of a data marketplace.
- Teams of 2.
- More coming soon!

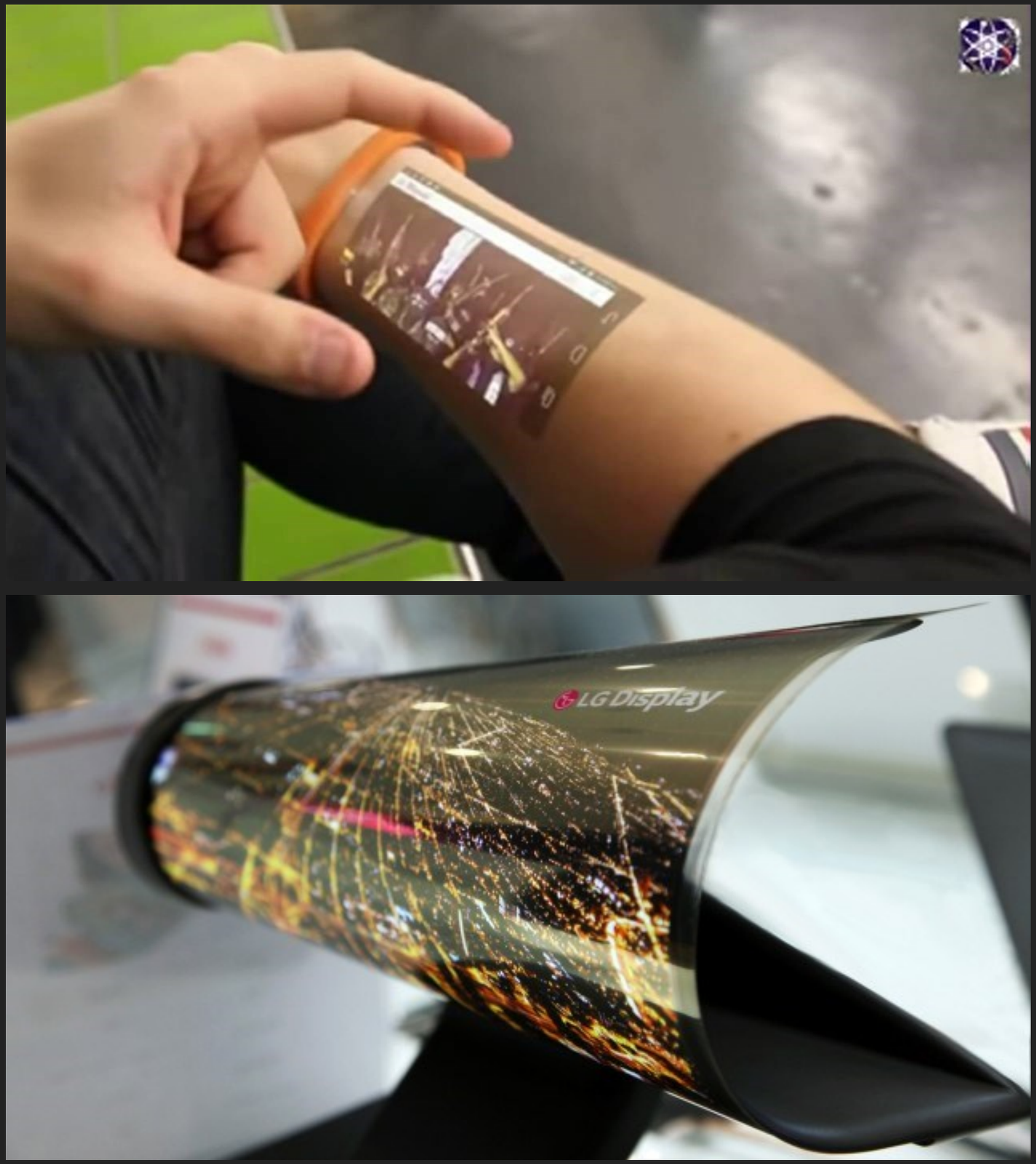


PROJECT

- Hardware (Kinect, Google Cardboard, Oculus Rift, Eye tracking…)
- Should raise an important research question, and plan and execute a methodology for answering that question.
- Should be done in teams of 2-4.
- Deliverables: Conference style paper, teaser video, code.

EXAMPLE PROJECTS

- Braille input keyboard for the blind on smart phone
- Musical training system using augmented reality
- Augmented reality app for MS needle injection
- Eye tracking/facial tracking for determining emotions when reading webpages
- Gesture based interface for presentation interactions
- EEG for looking at cognitive load of a particular technology
- … and many more


LG Display

actual footage shot
through HoloLens

S:
EL PHELPS:

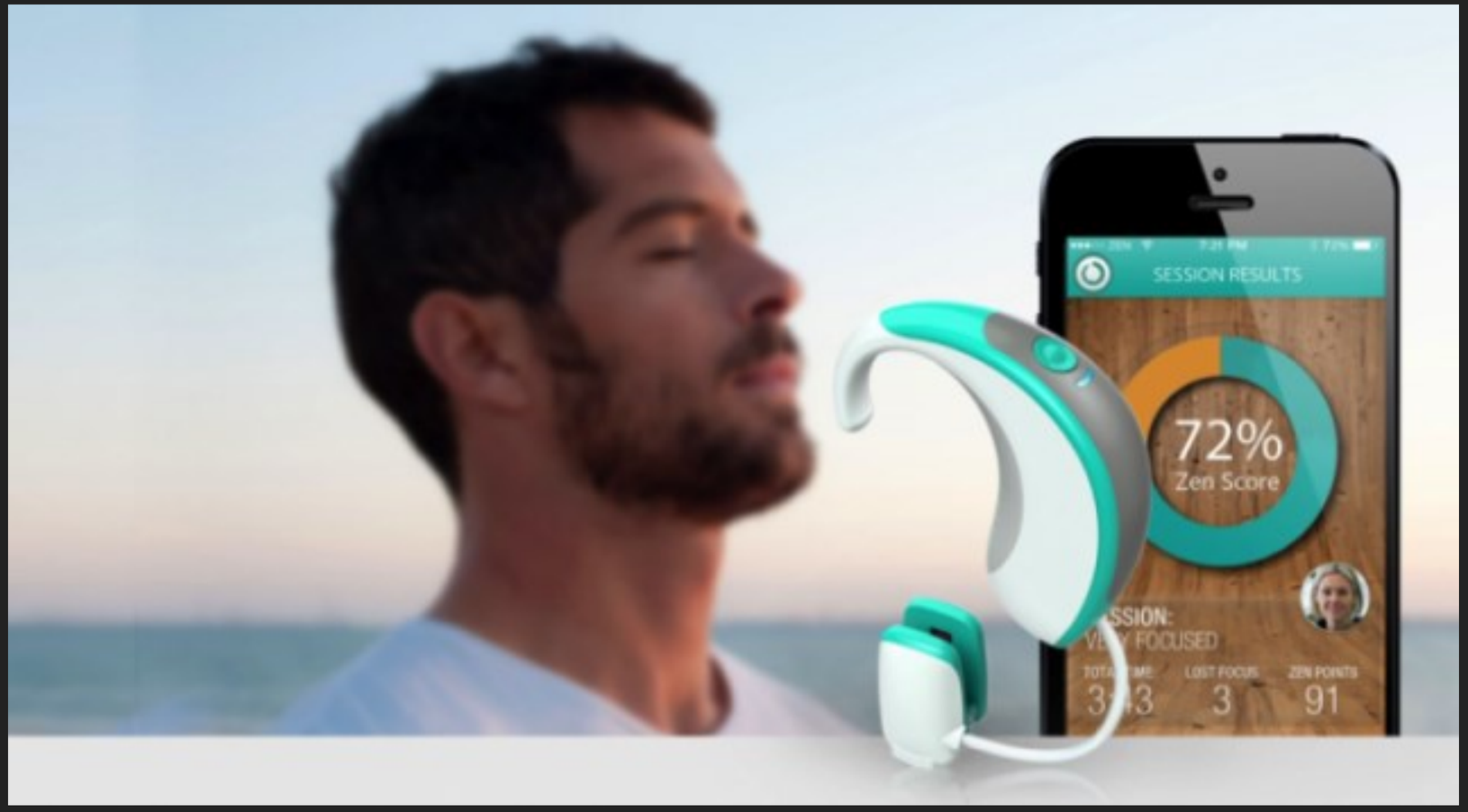
ers.
im

SAMSUNG SMART TV

Remote-control haters can log on to the $3,500 web-enabled TV by showing their face, and change channels using their voice.

GOOFY

amazon


SESSION RESULTS
72%
Zen Score
LOST FOCUS
3
ZEN POINTS
91