

SWE 503 | Lec 2 | Aug 26, 2024

# Defining "Good" User Interfaces

Dr. Omar Hammad

## In today's lecture

- What is a good interface?
- Systematic ways to build & evaluate interfaces.
- Practice evaluating interfaces

# User Interface?

# A User interface is:

Set of all the components of an interactive system that **provide information and controls** for the user to **accomplish specific tasks** with the interactive system

-ISO

~ 10 mins

**Write down a short paragraph about your last experience in interacting with a software system?**

Then share your experience ..

**Can we quantify/measure an experience?**

# Revision of user goals in ..

- Uber Mobile App?
- MS teams?
- Smart lock

# A good interface is measured by:

User Performance

User Perception



# User Performance

- Could users achieve their goal? (Effectiveness)
- How fast could they achieve it? (Efficiency)
- Did they commit any mistakes? (Error Rate)
- Could they remember next time? (Learnability)
- ...

# User Perception

- How satisfying was it? (Satisfaction)
- Do they trust the system? (Trust)
- How convincing was it? (Authentic)
- Did they enjoy it? (Enjoyment)

...

**Which is more important?**

# Importance change based on context & user goals..

- Banking (Trust > Enjoyment)
- Education (Enjoyment > Error rate)
- Games (Excitement > Learnability)

~ 10 mins

**Go back to the same experience and try to evaluate it  
using Performance & Perception metrics ..**

Then share your experience ..

**Are there well defined methods to ensure that we build good interfaces?**

# Are there well defined methods to ensure that we build good interfaces?

- Design processes
- Design principles
- Research Methods
- Evaluation Methods

# Design Processes

HCD  
Method

Design  
Sprints

Lean UX  
Method

Design  
Thinking

Double  
Diamond



# Design Principles

Consistency

Visibility

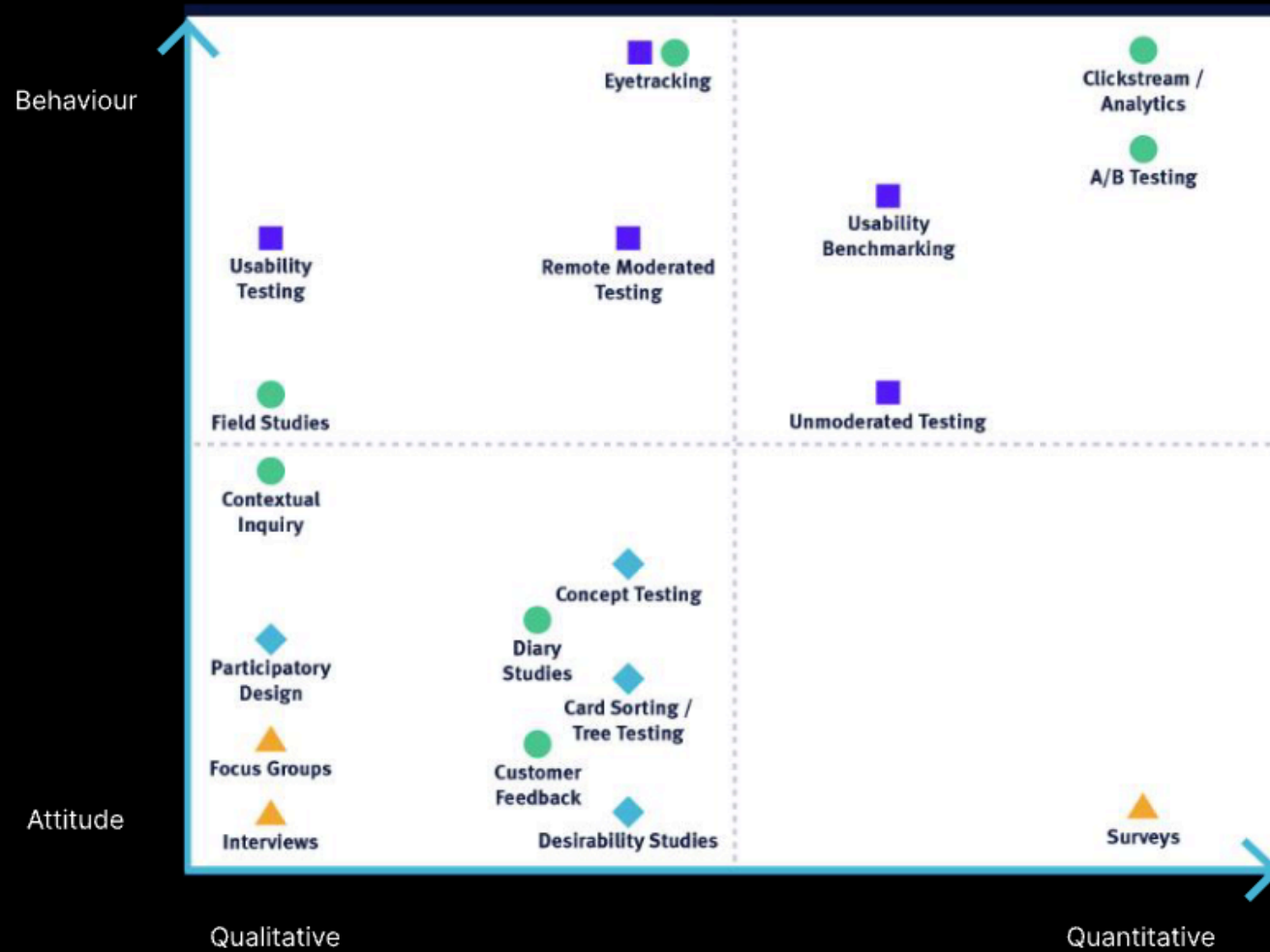
Feedback

Constraints

Affordance

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# Research methods



~15m

# **Evaluate your previous interaction using Nielsen's 10 Usability Heuristics for user interface design**

-> Google: Nielsen's 10 usability heuristics

# Next Week

- The Double Diamond Process
- Read Chapter 1 of *Interaction Design, Beyond Human-Computer Interaction*
- Pay attention to BB announcements