

# UI/UX DESIGN

Unit on UX Research Study  
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# Content

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- Steps in Conducting UX User Research
- Qualitative and Quantitative research methods.

# Study Design is Important

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- How are we going to evaluate the interface?
- Hypothesis: What do you want to find out?
- Population: Who will you target? How many users?
- Metrics: What will you measure? What questions to ask?

# Therefore the need of UX Research

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- **What is UX Research?**
- UX research, or User Experience research, is a systematic and investigative process that aims to understand users' needs, behaviors, and preferences when interacting with a product, service, or system.
- It involves collecting and analyzing data to gain insights into users' experiences, attitudes, and perceptions.

# Remember

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- User research is how you will know your product or service will work in the real world, with real people.
- It's where you will uncover or validate the user needs which should form the basis of what you are designing.”

# How to Conduct a User Research Study (1)

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- UX research is based on **Observation, Understanding, and analysis**.
- 1. Observe your users: Determine what is relevant for users.
- **Contextual inquiries** – Interview suitable users in their own environment to see how they perform a task/s in question and how you can design for them.
- **Diary studies** – Have users record their daily interactions with a design or log their performance of activities.

# What we are doing here?

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- We are understanding the user's mental model.
- What does the user anticipate when using a certain product?
- Based on their previous experience, how do they expect this particular product to work?
- Eventually, these insights will inform the decisions you make about the product and how it is designed.

# What is a Hypothesis?

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- Don't make Assumptions.
- Always validate a requirement coming from you with the customer first.
- This is forming a Hypothesis.

# How to Conduct a User Research Study (2)

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- Based on time and manpower, what methods should we select to the gather data?

## What to do? Interview, Survey, Questionnaire?

- We can divide UX research study in two subsets
  1. Qualitative Research
  2. Quantitative Research

# Qualitative Research

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- **Qualitative Research:** Methods such as interviews and ethnographic field studies (non-numerical data).
- **New word: Ethnographic field studies? What it is?**
- Ethnographic is a type of field study in which researchers observe people in their natural environment in order to gain a more holistic, contextual understanding on their needs.

# Quantitative Research

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- **Quantitative: Research:** More structured methods such as surveys and questionnaire.
- For example you may ask questions like:
  1. How many hours do you work per week to do this task?
  2. Is a Login function important to accomplish your task?
- **Note:** Quantitative data alone can't reveal deeper human insights.

# With whom to conduct those research? User Groups

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- Also called as **Focus group**.
- A user group is a set of people who have similar interests, goals or concerns.
- *We can not target everyone.*
- Sampling is important. How to know the exact number/population size of target audience?
- Normally include 3-6 users.

# Why do we conduct User Groups?

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- User groups can help you better understand:
  1. How users perceive a product.
  2. What users believe are a product's most important features (FR).
  3. What problems users experience with a product.
  4. Where users feel the product fails to meet expectations.
- In other words: User groups is used to generate ideas of what users want to see in the future.

# Best Practices for User Groups

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- **Ask good questions**: Make sure your questions are clear, open-ended, and focused on the topics you're investigating.
- **Choose a few topics**: On average, plan to discuss 3-5 topics during a 90-minute focus group.
- **Include the right amount of people**: A good focus group should include 3-6 users—large enough to include a variety of perspectives, but small enough so everyone has a chance to speak.

# Analyze the data from the research.

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- **Analysis** is the process by which the researcher identifies patterns in the research, proposes possible rationale or solutions, and makes recommendations.
- Based on the data received from the study we need to define the FR and NFR of the product.
- This step dive deep beneath the surface of **what your users say they want, to instead uncover what they actually need.**
- It's the key to ensuring that your products and features will actually solve the problems that your clients face on a day to day basis.

# Once We have analyze the data, what's next?

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- Design step: (UI Part)
- Creating the Wireframe, prototype and Mockup.
- *Wireframe, prototype, and Mockup the same things?*
- Wireframe : Focused on the informational and functional part of the design.
- Mockup : Wireframe with visual identity.
- Prototype : Interactive interface that the user can click through.

# The Difference

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# After that?

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- **Test:** Evaluate your designs.
- Usability testing – Ensure your design is easy to use.
- Accessibility evaluations – Test your design to ensure it's accessible to everyone. Remember Design for disabilities.

# Remember

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- “User experience research is the work that uncovers and articulates the needs of individuals and/or groups in order to inform the design of products and services in a structured manner.”
- Overall, the purpose of user experience research is simple: to discover patterns and reveal unknown insights and preferences from the people who use your product.