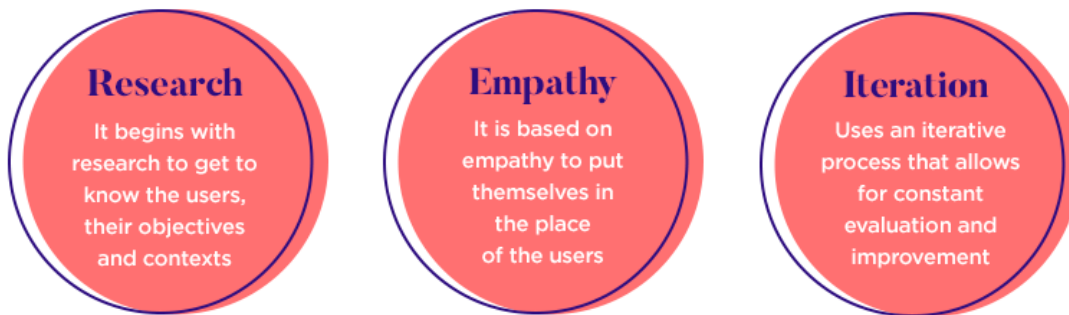


### USER-CENTERED DESIGN

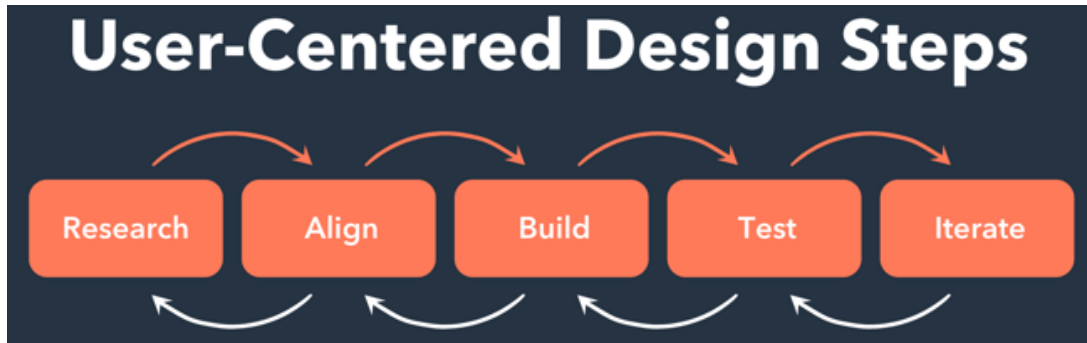
User-centered design (**UCD**), a design approach that prioritizes the needs, preferences, and behaviors of users throughout the design process. The principles and process of UCD, which involves users in the design process through **research, iteration, and usability testing**. Students will understand the importance of empathizing with users, defining user needs and goals, ideating and prototyping solutions, and evaluating designs based on user feedback.

### What is user-centered design



Students will use various user research methods used in UCD, such as **interviews, surveys, observations, and usability testing**. They will learn how to plan and conduct user research to gain insights into user needs, behaviors, and preferences. They will also learn how to analyze and synthesize research data to inform the design process.

Throughout the lab, students will apply the principles of UCD in a design project. They will identify a specific **design problem or challenge** and go through the process of **understanding user needs, ideating potential solutions, creating prototypes, and testing and iterating on their designs based on user feedback**. They will learn how to incorporate user feedback into their design decisions and make iterative improvements to their solutions.



**Tasks (with report):** Report must include screenshots and figma design link.

In this lab, students will have the opportunity to apply their knowledge of design in a practical setting. The lab tasks include:

- 1) Conduct user research to gather insights into user needs and preferences:** In this task, students will plan and conduct user research to gain a deep understanding of the target users' needs, preferences, and behaviors. They will choose appropriate research methods such as **interviews**, surveys, or **observations** to collect data from users. Students will create research protocols, recruit participants, and conduct the research sessions. They will carefully analyze and synthesize the data collected to identify patterns, trends, and user insights.
- 2) Generate design ideas and create prototypes based on user research findings:** Based on the insights gathered from user research, students will generate design ideas and concepts. They will brainstorm potential solutions and explore different approaches to address user needs and preferences. Students will then create prototypes to visualize and communicate their design ideas.
- 3) Test and evaluate the prototypes with users:** In this task, students will conduct usability testing or user testing sessions to evaluate the effectiveness of their prototypes. They will recruit participants who represent the target user group and facilitate the testing sessions. Students will guide participants through predefined tasks and observe their interactions with the prototypes. They will collect qualitative and quantitative feedback on usability, satisfaction, and overall user experience.
- 4) Iterate and refine the design based on user feedback:** Based on the feedback received from users during the testing phase, students will analyze the data and

## LAB 9: User-Centered Design

**Ms. Sana Ashraf**

identify areas for improvement. They will iteratively refine their design by making necessary adjustments, addressing usability issues, and incorporating user suggestions. Students will consider the feedback received and prioritize design changes that align with user needs and preferences. They will update their prototypes accordingly and prepare for subsequent testing cycles.

### **Ideas:**

1. Utility store website/app (considering “%off” category)
2. Shopping (clothing) app/website
3. Cooking recipe
4. Foodpanda
5. Job recruitment app/website
6. Property rental app/website
7. News platforms app/website
8. Online teaching app