Preliminary User Study

Participant Data Collection

 Begin by having participants complete a pre-questionnaire to gather some initial information.

Introduction to the Experiment

- Welcome the participant to the user study of "LunchSphere" and explain that you
 will guide them through an experiment involving the use of our lunch planner
 app.
- Let them know that they will be presented with two different versions of the app, and they do not need any prior knowledge about the app.

Scenario: Scheduling a Lunch, Step 1.1:

Present the following scenario to the participant:

Imagine it's around 10 am, and you're at home feeling quite hungry. You have a meeting scheduled until 12:00, and you want to have lunch at the university's cafeteria (mensa) with your friends. However, you're unsure if your friends are planning to eat before or after the meeting. You know that most of your friends use the "LunchSphere" app, and you're part of some lunch groups. You decide to open the app and search for a lunch reservation after 12:00.

Scenario: Scheduling a Lunch, Step 1.2: (Practical)

• Provide the participant with a smartphone with the "LunchSphere" app installed and have them use it to schedule a lunch based on Step 1.1.

Scenario: Rescheduling a Lunch, Step 2.1:

• Present the following scenario to the participant:

After using the app to schedule lunch, your supervisor informs you that the meeting will run longer than expected, likely until 12:20. This means you cannot make it to lunch with your friends as initially planned. However, there's a reschedule feature on the app. You know your friends are flexible with their schedules, so you decide to try and reschedule the lunch with them.

Scenario: Rescheduling a Lunch, Step 2.2 (Practical)

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 Provide the participant with the smartphone with the "LunchSphere" app again and instruct them to use the reschedule feature to adjust their lunch plans based on Step 2.1.

Subjective Ratings

We give the user the SUS rating scheme to fill out.

Performance

• While the participant performs the tasks, we measure the time he/she needs with a timer implemented in our App. We also log the swaps/taps the participant performed in our App.

We use both of these measures for our performance assessment.

Qualitative feedback after each A and B

- Post task interview:
 - "What were your thoughts when using the app for scheduling/rescheduling?"
 - "Were there any aspects of the app that confused you or that you found difficult to use?"
 - "What did you like or dislike about the user interface and design?"
 - "Did you encounter any issues or unexpected behaviors?

Switch prototype

 Tell the participant that we now do the same procedure but with a different prototype. Then got to step 1.1 again in this protocol with the other prototype in hand.

Qualitative Feedback after both A and B

- **Comparative Analysis:** Since participants will interact with two different versions of the app, ask them to compare the two versions and express their preferences. This can help you understand which version performs better in terms of user experience.
- Think-Aloud Protocol: Encourage participants to verbalize their thoughts, feelings, and actions as they interact with the app. This allows you to gain insights into their decision-making process, frustrations, and satisfaction in real

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time. (maybe this we're not sure, this could also impact our measurements and lead to noise)

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