

UX RESEARCH PLAN

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7013e

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EXECUTIVE SUMMARY

About AUXILIO

AUXILIO is a platform designed specifically for college students to exchange skills and services, helping them manage academic, financial, and social stressors. The app fosters a sense of community by enabling students to help each other without the need for monetary transactions.

Our unique value proposition is: **AUXILIO** is an app where students can trade skills and services, such as tutoring, translations, and personal training, to encourage a sense of service and community on campuses and motivate users to seek sustainable, wallet-friendly solutions to everyday needs.

Research Goals

The primary goal of our usability research is to evaluate the intuitiveness of key features within **AUXILIO**. We will test the process of posting services, the effectiveness of the homescreen layout, and how well the music theme resonates with users. Additional testing will focus on the usability of a potential badge system, the search and filtering functions, and overall user engagement with community features like Gives/Takes or Sync options. This research will provide valuable insights into how users interact with these core elements and help us refine the app to better meet their needs.

Hypotheses

We hypothesize that **AUXILIO**'s design, inspired by popular social media apps, will make it intuitive for students to navigate. We expect that students will find value in using **AUXILIO** to trade services, which will help alleviate financial strain and foster stronger community connections. By testing these hypotheses, we aim to determine if students see the platform as a meaningful, practical tool for their everyday college needs and whether they would use it as a reliable alternative to paid services.

Next Steps

The feedback from this usability testing will be incorporated into ongoing design and development improvements, ensuring that **AUXILIO** not only meets user needs but is also positioned for market success. This research will also validate the platform's value proposition, confirming whether there is demand for the app and if our investment of time and resources has been worthwhile.

METHODOLOGY

I. ROLES



MARIA FINOCCHIARO
Data Collector/ Photographer



SAMIRA JAFARI
Interviewer



AMANDA QUBTY
Observer/Notetaker

II. SAMPLING

Population
The population for our usability testing consists of college students at the University of Georgia and beyond, including both undergraduate and graduate students, as well as newly admitted students. These participants will represent the target user demographic for **AUXILIO**, which is exclusive to college students with a .edu email address.

User Personas
Our user persona is based on data gathered from initial research, representing students with varying levels of engagement with campus life and the need for services like tutoring, pet-sitting, and a wide level of interest, including keeping up with campus events.

Persona



Gabrielle, 21

Computer science major

Needs: Fun outfits for sorority events without breaking the bank.
Expertise: She's a webdev guru, who's happy to lend a hand with coding projects.

PERSONA

College student.
Student needing services.
Balances work and studies, sometimes feeling overwhelmed by responsibilities.

NEEDS & GOALS

Fulfill volunteer hours.
Affordable tutoring to maintain grades.
Wants to help reduce their carbon footprint without breaking the bank.
Seeks to add skills to their resume.

BEHAVIORS

Loves to find good deals when purchasing services or items.
Helps out friends with skills when available.
Enjoys low-key, affordable social activities.
Early adopter to new forms of social media.

Sampling Frame and Method

Participants will be recruited from the team's personal and professional networks, and the University of Georgia's online community, particularly through various Slack channels. The goal is to recruit 8-12 participants who represent the undergraduate, graduate, and newly admitted student segments.

The sample will be representative of the overall student body, including both undergraduate and graduate students. This will ensure that the sample aligns with the intended users of **AUXILIO**.

Recruitment Challenges

The main challenge anticipated is scheduling. Given that students juggle many commitments, including classes, part-time jobs, and extracurriculars, limited availability is a key barrier to recruitment. Coordinating testing times that fit into their busy schedules will be a primary concern.

Location and Recruitment Responsibility

Usability testing will be conducted via Zoom to accommodate participants' schedules and ensure flexibility. Recruitment responsibilities will be shared across the three-person team, with each team member reaching out through their networks.

III. TESTING INSTRUMENTS

UX Research Consent Form

Purpose
The researchers – Maria Finocchiaro, Samira Jafari, and Amanda Qubty – are conducting a usability study to evaluate the design of AUXILIO. The results will be used to help improve the site design. This test is being performed as part of a sequence of capstone classes in the 7016E: Emerging Media Capstone program.

The study will take approximately 1 hour.

Procedures
As a subject you will be asked to:

- Fill out a pre-test survey.
- Complete a series of tasks on the site while being observed and recorded.
- Complete post-test survey.
- Complete an activity with Product Reaction Cards.

Confidentiality and voluntary participation
Participation in this usability study is voluntary. The descriptions and findings will be used to compile a report about the site's effectiveness. However, at no time will your full name be used. With your permission, I would like to take photos, videos, and notes to share with faculty members at the University of Georgia's New Media Institute; as well as other Emerging Media Masters students in my group (if applicable).

You are at liberty to withdraw your consent to the experiment and discontinue participation at any time. If you have any questions please contact: Samira Jafari, 678-735-8590 and samirajafari2011@gmail.com here. You can also reach out to my instructor, Tyler Mazurek, at tylermazurek@uga.edu.

By signing below, you are indicating you understand the information on this form.

Participant Signature _____ **Date:** ___/___/___

Usability Test Script – Mobile apps

Adapted from Rocket Surgery Made Easy © 2013 Steve Krug

The Instructions

The mobile device is open to Home screen.

Hi, _____. My name is Samira Jafari, and I'm going to be walking you through this session today.

Before we begin, I have some information for you, and I'm going to read it to make sure that I cover everything.

You probably already have a good idea of why we asked you here, but let me go over it again briefly. We're asking people to try using a mobile app that we're working on so we can see whether it works as intended. The session should take about an hour.

The first thing I want to make clear right away is that we're testing the app, not you. You can't do anything wrong here. In fact, this is probably the one place today where you don't have to worry about making mistakes.

As you use the app, I'm going to ask you as much as possible to try to think out loud: to say what you're looking at, what you're trying to do, and what you're thinking. This will be a big help to us.

Also, please don't worry that you're going to hurt our feelings. We're doing this to improve it, so we need to hear your honest reactions.

If you have any questions as we go along, just ask them. I may not be able to answer them right away, since we're interested in how people do when they don't have someone sitting next to them to help. But if you still have any questions when we're done I'll try to answer them then. And if you need to take a break at any point, just let me know.

With your permission, we're going to record what happens on the screen and our conversation. The recording will only be used to help us figure out how to improve the app, and it won't be seen by anyone except the people working on this project. And it helps me, because I don't have to take as many notes.

Also, there are a few people from the design team observing this session in another room. (They can't see us, just the screen.) If you would, I'm going to ask you to sign a simple permission form for us. It just says that we have your permission to record you, and that the recording will only be seen by the people working on the project.

- Give them a recording permission form and a pen.
- While they sign it, START the SCREEN RECORDER on your laptop.

Do you have any questions so far?

OK. Before we look at anything, I'd like to ask you just a few quick questions. ...

Pre-Test Questions

1. What is your academic status?

- Undergraduate
- Graduate student
- Recently admitted (incoming student)

2. How comfortable are you using mobile apps for everyday tasks such as managing schedules, shopping and communicating with others?

- Very uncomfortable
- Uncomfortable
- Neutral
- Comfortable
- Very Comfortable

3. Which types of apps do you currently use to purchase or trade goods/services (e.g., Facebook Marketplace, OfferUp, Craigslist, etc.)?

[OPEN-ENDED RESPONSE]

4. Apps such as Nextdoor and Facebook Marketplace are trustworthy spaces for exchanging good or services

- Strongly disagree
- Disagree
- Neither agree no disagree
- Agree
- Strongly agree

5. How familiar are you with apps that allow you to trade goods or services? (1=Unfamiliar, 5=Familiar)

Unfamiliar ● ● ● ● ● Familiar

6. How often do you use apps or platforms to find or offer services (e.g., tutoring, petsitting, rideshares, etc.)? (1=Never, 5=Frequently)

Never ● ● ● ● ● Frequently

7. How important is it to you to have access to local community events or opportunities? (1=Not Important, 5=Very Important)

Not Important ● ● ● ● ● Very Important

If so, what kind of community events or opportunities would you like to see available through an app? [OPEN-ENDED RESPONSE]

8. Social media platforms are important for making social connections.

- Strongly disagree
- Disagree
- Neither agree no disagree
- Agree
- Strongly agree

What are some challenges or limitations you face when using social media to form meaningful connections? [OPEN-ENDED RESPONSE]

9. It's important to feel connected to a community while attending college.

- Strongly disagree
- Disagree
- Neither agree no disagree
- Agree
- Strongly agree

In what ways do you currently feel connected to your college community, or where do you feel disconnected? [OPEN-ENDED RESPONSE]

10. What are your general expectations when using an app?
[OPEN-ENDED RESPONSE]

First Screen Tour

OK, great. We're done with the questions, and we can start looking at things.

First, I'm going to ask you to open up the app called **AUXILIO**.

Now, before you start doing anything, just look at the first screen and tell me what you make of it: what strikes you about it, what you think you can do with it, and what it's for. Just look around and do a little narrative.

You can scroll if you want, but please don't "click" (or tap) on anything yet.

- Allow this to continue for two or three minutes, at most.
- Take notes on first impressions.

The Tasks

Thanks. Now I'm going to ask you to try doing some specific tasks. I'm going to read each one out loud and give you a printed copy.

I'm also going to ask you to do these tasks without using Search. We'll learn a lot more about how well the site works that way.

And again, as much as possible, it will help us if you can try to think out loud as you go along.

- Read aloud first task from Task Table.
- Hold "think out loud" protocol during Time-on-Task portion.
- Remind users that times tasks aren't testing them, they're testing the product.
- For Time-on-Task questions, the correct time to start the timer is when the user begins the task (ie. click "Sign Up") and ends when the user completes the task (ie. click "Submit").
- Allow the user to proceed until you don't feel like it's producing any value or the user becomes very frustrated.
- Repeat for each task.

Task Table

TASK	TASK TIME	NOTES
Task 1: Sign up for **AUXILIO**. **Post-task Question:** How easy or difficult was it to sign up for **AUXILIO**? Were there any steps that were unclear or confusing?	Measure the time taken from clicking the "Sign Up" button to completing the registration process. Time:	
Task 2: Post a "Give" offering a gently used textbook called "Measuring User Experience." **Post-task Question:** Did you encounter any challenges while posting a "Give"? What part of the process did you find most intuitive or difficult?	Measure the time it takes for the user to post a "Give" from start to finish. Time:	
Task 3: Search for a user who can walk your dog, Max. **Post-task Question:** Was the search process effective in helping you find a dog walker? How could the search experience be improved?	Measure the time taken to search for and find a dog walker. Time:	
Task 4: Post a "Take" asking for help with an advanced webdev assignment. **Post-task Question:** How did you feel about the process of requesting help from another student? Was anything confusing or unexpected during this task?	Measure the time it takes to post the "Give" process from start to finish. Time:	

TASK	SUCCESS OR FAILURE?	NOTES
Task 5: Find a running club meet up and save it. **Post-task Question:** How easy was it to find and save a running club meetup? Did you feel confident that you completed the task correctly?	Success: Home >> Scroll feed >> Select item labeled "RUNNING CLUB MEETUP!!" >> Click "bookmark" button. Success/Fail	
Task 6: Find your bookmarked item in your profile.	Success: Home >> Profile >> Saves Success/Fail	
Task 7: Select a "Give" post and respond to the user.	Success: Home >> Scroll feed >> Select an item labeled "Give" >> Click "Respond" >> Craft a message >> Click "Submit" Success/Fail	
Task 8: Revise your interests listed in your profile.	Success: Home >> Profile >> Edit Success/Fail	
Task 9: You've received a message! Check the message and complete the "Plug."	Success: Messages >> Reply >> Hit "Accept" >> Receive prompt re. Plug completion >> Click "Yes" Success/Fail	
Task 10: Find a "Give" post with a user badge and determine what the badge means.	Success: Home >> Scroll feed >> Find a "Give" post with a badge >> Click "Respond" >> Click on badge to read significance. Success/Fail	

Probing

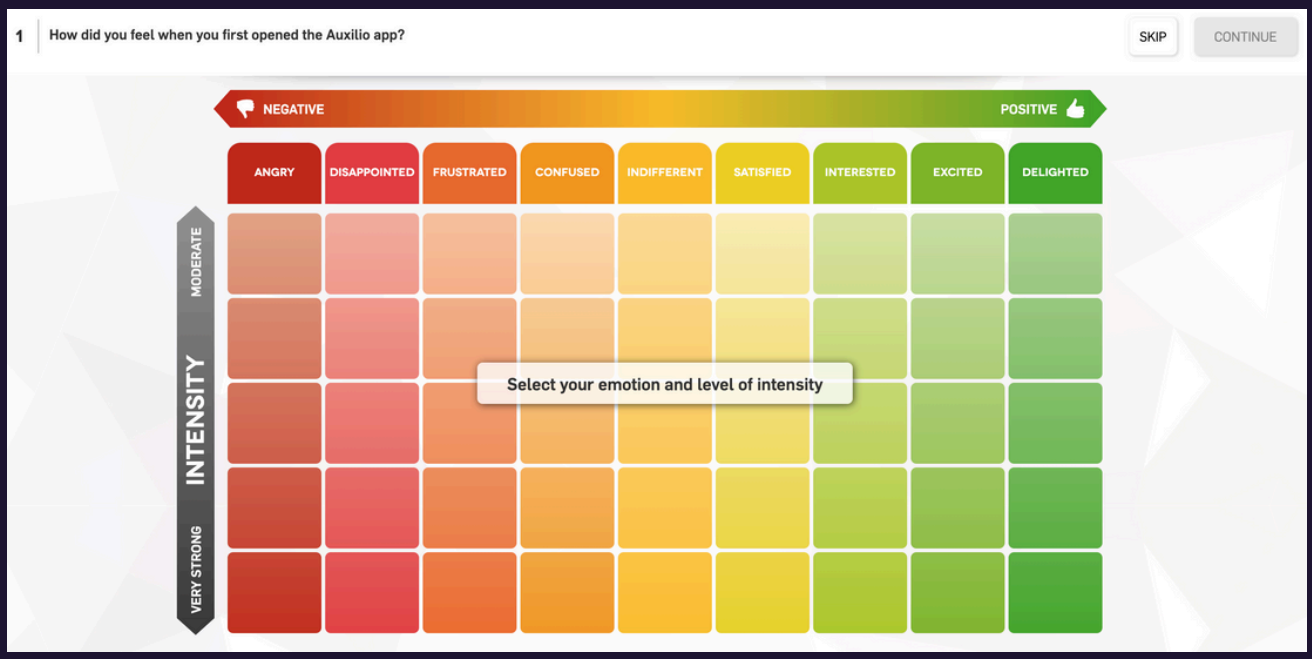
Thanks, that was very helpful.

Now that you've had a chance to explore **AUXILIO**, we'd love your help in making it even better.

I'm going to take a few more minutes to ask you more questions to better understand your impressions and your experience … does that sound good?

Now that you've had the opportunity to check out **AUXILIO**, I'm going to have you open a tool that will help capture how you felt while using the app.

- Share link to YOUXEMOTIONS survey.



… Do you have it open? Let me know if you have any questions before we jump in …

OK great… first question …

Post-Test Survey

1. How did you feel when you first opened AUXILIO?

[YOUXEMOTIONS CHART]

2. How appealing did you find the music theme in AUXILIO?

[YOUXEMOTIONS CHART]

3. How does the design of AUXILIO make you feel?

[YOUXEMOTIONS CHART]

4. How enthusiastic would you be about recommending AUXILIO to a friend or classmate?

[YOUXEMOTIONS CHART]

5. How did you feel about AUXILIO's potential to help you make connections and build a sense of community in college?

[YOUXEMOTIONS CHART]

6. How does requiring a university email address for login make you feel about the trustworthiness and comfort of the platform?

[YOUXEMOTIONS CHART]

7. How satisfied are you with the overall experience of using the app?

[YOUXEMOTIONS CHART]

8. What was your overall impression of AUXILIO's value in helping you connect with others or exchange services?

[YOUXEMOTIONS CHART]

9. What feature of the app did you find most useful? Why?

[OPEN ENDED RESPONSE]

10. Were there any features that you found difficult to use? If so, which ones and why?

[OPEN ENDED RESPONSE]

11. What improvements or additional features would you suggest for the app?

[OPEN ENDED RESPONSE]

12. Is there anything else you'd like to add?

[OPEN ENDED RESPONSE]

Thank you so much for that important feedback. I have one more exercise for you, which involves review a series of product reaction cards. I'm going to share my screen with you and ask you to select 5 terms that resonate with you after using **AUXILIO**.

- Open Product Reaction Cards and share the screen.
- Take notes about their choices and the reason why they selected specific words. Once test is completed, return to the script.

OK, so here are the terms. There's 64 words in all. Take a few moments and let me know which words jump out at you as best describing your impressions of **AUXILIO**.

Product Reaction Cards

Exciting	Rewarding	Simple	Outdated
Off-putting	Isolated	Smooth	Useful
Stressful	Engaging	Easy to Use	Functional
Creative	Cluttered	Helpful	Boring
Fun	Clear	Innovative	Connected
Difficult to Use	Accessible	Uninspiring	Relaxing
Unnecessary	Inconvenient	Well-Organized	Empowering
Interactive	Unattractive	Frustrating	Dull
Friendly	Rough	Quick	Unhelpful
Familiar	Reliable	Convenient	Efficient
Slow	Modern	Unorganized	Complex
Unresponsive	Unoriginal	Trustworthy	Unfriendly
Motivating	Professional	User-Friendly	Enjoyable
Straight-forward	Complicated	Fresh	Intuitive
Confusing	Supportive	Distracting	Appealing
Positive	Non-Functional	Negative	Unclear

Great job! Let's go through the words you selected and please take a moment to describe why you picked each one:

PRC Term	Description

Wrapping Up

Do you have any questions for me, now that we're done?

- Stop the screen recorder and save the file.
- Thank them for participating.

ANALYSIS

Our primary objective is to validate our hypotheses regarding the usability of the app and the features that will be most impactful for students. Specifically, we are testing whether **AUXILIO**'s design, inspired by social media platforms, makes it intuitive for users to navigate and whether students find value in trading services to alleviate financial stress and build community. The following methods will provide us with the necessary data to evaluate these hypotheses.

Metrics for Analyzing Tasks

Success/Fail Metrics (Hypothesis: **AUXILIO**'s design allows users to successfully complete key tasks without confusion or significant difficulty.)

Definition: We will define a "fail" as instances where:

- The user gives up on the task.
- The moderator "calls it" when a task takes longer than a minute or isn't progressing.
- The user thinks they've completed the task but actually haven't.

The metric is a binary rate (i.e., Pass/Fail) for each task, and calculated with confidence intervals at the 95% confidence level. Adjusted Wald is used due to the small sample size, providing a more accurate estimate of confidence intervals for proportions. Results are visualized with bar graphs or stacked bar charts, providing immediate insight into which tasks are problematic for users.

Time-on-Task Metrics (Hypothesis: Users will complete tasks like posting a service or requesting help quickly and efficiently.)

Time to complete a task is tabulated, with each participant's times listed by task. Data is entered into online calculator with a 95% confidence level to determine central tendency measures, including:

Median: The middle value of task times, less sensitive to outliers.
Geometric Mean: Accounts for skewed data if task times are not symmetrically distributed.

Outlier exclusion will be determined by visually inspecting the distribution (i.e., extreme times should be excluded). Additionally, a threshold is set to track the percentage of users who complete each task within 1 minute. This adds insight into how efficiently tasks are completed and how many users can navigate the app quickly.

Scatter plots visualize the time distribution for tasks, while bar graph captures what percentage of users complete the tasks under set threshold.

Metrics for Analyzing Surveys

Pre-Test Survey

(Hypothesis: Students will express a strong need for a community-driven platform and the ability to connect with peers for both academic and personal support.)

To analyze the results of the pre-test survey, we will use a combination of nominal, ordinal, and qualitative metrics:

1. Nominal Metrics
For the current academic status question, we analyze the frequency and percentage of responses for each category (Undergraduate, Graduate, Recently admitted).

A pie chart can capture the distribution of participants by their academic status (Undergraduate, Graduate, Recently admitted). The chart shows the percentage of each group in the sample.

2. Ordinal Metrics
For questions addressing the "comfort level using mobile apps" and "trustworthiness of platforms like Facebook Marketplace," we will calculate the frequency and percentage of responses for each level. The mode and median will be used to assess central tendencies.

For the questions on "familiarity with apps that trade goods/services," "frequency of using apps to find/offer services," and "the importance of access to local events," we will calculate the mean and median scores to measure the central tendency of responses.

A bar chart can illustrate how participants feel about using mobile apps for everyday tasks, with the frequency of responses for each level shown on the y-axis. Another bar chart can show how familiar participants are with apps that allow trading goods/services, using a 1-7 scale. Again, the y-axis represents the frequency of responses for each level of familiarity.

3. Qualitative Metrics
The open-ended responses (regarding apps used for trading goods/services and general expectations of using an app) will be analyzed through thematic analysis. Common themes will be categorized and counted to identify frequent responses and areas of interest and potentially used to generate a word cloud to visualize the metrics.

Post-Test Surveys

(Hypothesis: We expect users to have positive emotional reactions to features like the homescreen layout, event Syncs, and the overall community-building aspects of the app.)

To analyze the results of the post-test survey, we will primarily use emotion-based metrics for the questions that use the YOUXEMOTIONS chart and qualitative analysis for the open-ended responses. Here's a breakdown of how we will analyze each section:

1. Emotion-Based Metrics

For each question using the YOUXEMOTIONS chart, we will: count how many participants selected each emotional state on the spectrum; identify the most common emotional response to each aspect of the app (mode); understand the spread of responses across different emotions, highlight whether users generally feel positive, neutral, or negative about specific features.

Each response will be represented using a bar chart or slider distribution chart to visualize the frequency of selected emotions for each question. The chart will show how users are emotionally engaging with various elements of the app, such as its design, theme, and overall functionality.

2. Qualitative Metrics

For the three open-ended questions (about the “most useful feature,” “difficult-to-use features,” and “suggested improvements”), we will perform “thematic analysis” to identify recurring themes and insights by counting how often certain features or issues are mentioned; grouping similar responses into categories to identify areas for improvement and areas where users find value; gauging whether feedback is generally positive, neutral or negative based on the context of the responses.

A thematic table could list the most common themes and the percentage of responses that mention each theme.

3. Metrics for Analyzing PRCs

(Hypothesis: The app will evoke positive reactions, with students finding it engaging, intuitive, and useful.)

We will categorize the responses into positive, neutral, and negative based on the reaction words provided in the Product Reaction Cards. For example:

Positive: Exciting, Rewarding, Intuitive
Negative: Stressful, Boring, Complex
Neutral: Simple, Familiar, Interactive

This helps quantify the overall emotional reaction users had toward the app, allowing us to easily see if the app is generally well-received or has areas of dissatisfaction. We will visualize the proportion of positive, negative, and neutral reactions using a pie chart or stacked bar chart.

Categorizing Issues

To categorize major and minor issues from usability testing or surveys, we will follow a severity-based approach, considering both impact and frequency of the issues raised. This approach will allow us to prioritize which issues need immediate attention and which can be addressed later.

MAJOR ISSUES

TASK COMPLETION

Issue prevents the user from completing task (e.g., inability to post a service, unable to sign up, or broken navigation).

SEVERE FRUSTRATION

User expresses high levels of frustration, confusion, or annoyance that prevent them from continuing or result in abandonment.

CORE FUNCTIONALITY

Issue involves key features of the app or annoyance that prevents users rely on (e.g., sign-up process, skill exchange, messaging, etc.).

IMPACT ON ENGAGEMENT

Issue significantly impacts users' willingness to engage with the app or recommend it to others.

MINOR ISSUES

TASK COMPLETION

Users can still complete tasks successfully, but the process may be inefficient, inconvenient, or unnecessarily complex.

LOW FRUSTRATION

Issues may cause some inconvenience or mild irritation, but users are generally able to continue without significant problems.

NON-CRITICAL FEATURE

Relate to non-essential features or small design inconsistencies (e.g., visual inconsistencies, wording errors).

VISUAL/UX PROBLEMS

Issues with the layout, fonts, colors, or small elements of the user interface that don't affect usability but might impact the app's visual appeal.

Bar charts can display the frequency of minor issues encountered, categorized by type (e.g., usability issues, design issues, confusing labels). Tables can present minor issues grouped by severity level or type of problem, showing which areas need attention but are not as critical.

CONCLUSION

THE UX research plan for **AUXILIO** focuses on evaluating key features of the app to ensure it provides an intuitive, effective, and engaging user experience for college students. This plan seeks to test various functionalities, such as the app's posting process, while also evaluating the effectiveness of core features like searching, filtering, and interaction with the give/take system. Through a comprehensive usability test, the team will gather quantitative data (success/fail rates, time-on-task) and qualitative feedback (emotions, open-ended survey responses, and product reaction cards) to identify both the usability of the app and the emotional response it elicits from users. The goal is to refine the app based on this feedback and assess its potential for fostering a campus community by allowing students to exchange services and skills efficiently.

The findings from this research will be critical in shaping the future development of **AUXILIO**. Major issues that hinder task completion or create significant frustration will be prioritized for immediate fixes, while minor issues will be addressed in later iterations. By focusing on both usability and emotional engagement, the research will provide actionable insights that will help ensure AUXILIO meets its goal of reducing the need for paid services while building a stronger, more connected campus community.