

Binder^{beta} - Study Together And Make New Friends

Personas Research

We interviewed real characters to do our personas research to represent the different user types that might use our service, product, site, or brand in a similar way.

The personas could be:

-University students. - School students. - Young people over the age of 18.

We choose ‘**University Students**’ as our prime personas. Due to the nature of our application, university students are the most targeted group of people. The age group, and the nature of their careers makes them way more likely to use the application due to the convenient benefits it provides. Therefore ‘**University Students**’ are the main users of the application.

Observation:

Our study group consisted of 10 randomly chosen people. They were all asked to use our application for a certain duration of time. They were given 50 minutes to discover, use, and try out all the different features the application has to offer. Data such as screen-time usage on different features of the application, the most used or clicked on feature, and much more was collected.

Design Methods and Techniques

LOOK - Focus Groups:

Identifying and clarifying research questions during the early stages of a research project is crucial for ensuring that the research is focused and will provide useful insights. It is also important to gain insight into how people talk about a problem, product, or shared experience in a group setting, as this can provide valuable information about how these issues are perceived and addressed. Finally, learning about users' opinions, attitudes, and preferences after they have used a prototype can help identify any issues or challenges that need to be addressed in order to improve the product or service.

Our Hypotheses:

- ☐ We believe that the **Live sessions** feature will enable University students to create and watch sessions sorted into categories because they want to just study or study and talk with others.
- ☐ We believe that the **schedule session time"** feature will help university students manage their time properly because it will enable them to specify the appropriate time and date in advance to create the session.
- ☐ We believe that the **watching youtube** feature will enable University students to watch YouTube and share it in the session.
- ☐ We believe that the **People** feature will enable university students to search for friends, view their profiles, and view their sessions to be able to share sessions.
- ☐ We believe that the **Posts** feature will allow university students to view displayed posts or search for a friend to view their posts.
- ☐ We believe that the **create own community** feature will satisfy all university students because they want to send invitations to people of the same interest.
- ☐ We believe that the **Stats** feature will increase the desire to use the site because it will monitor the hours of progress of university students in the study in two weeks.
- ☐ We believe that the **Set Timer** feature will enable university students to determine the duration of the study and the duration of the break to organize their time
- ☐ We believe that the **Add tasks** feature will enable the students to schedule the tasks they want to complete within the session.
- ☐ We believe that the **registration and login** features will be easy to use for 90% of university students.
- ☐ We believe that The design of the site, its colors and the arrangement of the elements will appeal to the students.
- ☐ We believe that using the application on the phone will make it easier for students to do their work.

Testing our assumptions:

A focus group was created again, this time, we wanted to create an affinity map. This was done by testing our own assumptions on our focus group by using the focus group design method. Letting the users rank each feature from 1 to 10 and scale our assumptions, we were able to continue our approach of affinity mapping, and gather our data into a set of certain themes.

Date	7 Dec 2022	
The place	At the university at B5 in the College of IT.	
Time	What do	note
12:00 - 12:10	Welcome and explanation of the application.	Welcome and explain the website and what you have to do.
12:10 - 1:00	Observation	We asked the students to try the program with all its features, and we asked them to record the screen during use, put the phone camera on, and we left.
1:00 - 1:10	Break	To ensure the comfort of the users, we gave them a rest period and offered them juice, and explained to them the next step.
1:10 - 2:00	Ask	After they became familiar with the site and experienced all its features, we asked the questions that we prepared for them, took the necessary notes, and recorded their answers to convert them into information that we benefit from to develop and improve the site.

Interview Questions :

- **Usability & System Performance :**

What do you think is the most important thing we should fix on the site?

- User 1 : “I had difficulty finding how to access the site registration, it is not clear”.
- User 6 : “When I was using the timer in the live session, it did not give me an alert that the time had expired or even made a sound”.
- User 8 : “The site took a long time to complete the registration process, so I had to restart it in order for the process to complete successfully”.
- User 9 : “ Creating a private session does not work, the page continues to load only”.

Out of everything you’ve seen here, what do you think you do not need?

- User 3 : “I think I don't need to “**your communities**” feature, because my only goal is to study with people I don't know”.
- User 7 : “I think “**Watching YouTube**” it is not important because I can watch YouTube from YouTube”.
- User 8 : “I think **your communities** are not important because I can search for the topic of the session in the search engine”

If you could use this on your phone as an application, would it make your job easier to do?

- User 2 : “I think this feature will make it easier to use when I'm out on the road”
- User 4 : “I do not prefer that. I think I will be distracted and use social media applications if I use my mobile phone.”
- User 5 : “ It will be useful if I don't have my laptop with me.”

- **Interaction Design:**

When you explored the programs did you get confused at any point?

- User 10 : “Yes, when entering the "watching YouTube" session, I did not understand much about how to work.”
- User 2 : “ When I opened the site for the first time, I didn't know where and how to start.”

- User 4 : “When I join sessions, there are several classifications distributed in an unorganized way for me.”

With the navigation, did you find whatever you were looking for?

- User 3 : “Yes,I did not face a problem, and I got to join a random session .”
- User 2 : “No,I cant find where to create my own session.”
- User 4 : “No,I could not access a session related to my field of study.”

- **Visual Design :**

If anything — what could we do to ensure that you would use this system frequently?

- User 4 : “Send motivational messages to motivate me while studying”
- User 5 : “Redesigning the site in a more organized manner so as not to be confused during use”
- User 10 : “I like to study while listening to soft music, so I think adding this feature will make me use the site daily”

How would you describe using this system in your own words?

- User 2 : “My purpose when going to the library was to see others studying so | can stay motivated and stop procrastinating. On Bindr | have the same experience while also meeting interesting people from all around the world who face the same challenges”
- User 5 : “I was not motivated at all studying from home until | tried Bindr. | suddenly felt connected”
- User 7 : “The idea of the application is very beautiful. I liked using it, but I would not prefer to use it daily because there are some problems with the design”.

Was there any information or features to improve that you think are missing?

- User 8 : “I like to study while listening to music, and I think adding a feature to study while listening to music will make me happy”.
- User 7 : “It is possible to add a feature to be able to create a chat group to create groups and communicate with friends in writing”.

- User 1 : “ I wish I could search for a specific session according to its classification, not just its name”.
- User 9 :” I prefer that the hours of my use of the site be recorded monthly and not only in the current and past week”.

Were there any steps taken in the software that you think we should improve or design differently?

- User 2 : “Home design”.
- User 3 : “Profile page is inconsistent”.
- User 5 : “The page layout is not good”.

- **Content Understanding :**

Is there any content you’d like to see us offer?

- User 1 : “It is possible to add entertainment content such as game sessions to keep you entertained when the specified work is completed or when you take a break.”.
- User 6 : “Organizing the process of publishing posts by topic.”.
- User 10 : “It is possible to provide an expert person for each subject and the possibility of inquiring from him when a question is needed”.

How do you feel while using the site in general in terms of the site's colors and design?

- User 9 : “The colors of the site are a bit childish, and the design needs to be modified, such as connecting using a Google account, which should not be on the home page”.
- User 6 : “I feel comfortable when entering the session, but the design of the homepage is not suitable for university students in terms of colors and shapes”.
- User 5 : “The “Just study” feature and “study & talk” I think are not necessary separating them ,You can put them in one place in two categories.”.
- User 1:”The design of the home page needs to be modified, such as the profile picture, which should not be displayed on the home page, and “Try the binder mobile app” button is very large”.

How do you feel when creating a new session, is it easy to do?

- User 3 : "I encountered difficulty when creating a private session, as he did not open it and I waited for a long time without creating it".
- User 2 : "I created a public session and it was easy, but when creating a private session a problem appeared that I could not solve as the page starts to load but it does not open".
- User 5 : "I could not create a private session to study with my friends only, as I set up a public session instead because it is the only solution".

How do you feel when joining an existing session faces any trouble?

- User 3 : "I feel comfortable, it's easy and I can join in easily".
- User 2 : "I do not face any difficulties because it is easy and anyone can join easily".
- User 5 : "It is easy and I liked the possibility of seeing who is in the session before entering it and seeing the topic of the session. This makes it easier to choose which session to join".

How do you feel when registering and entering the site?

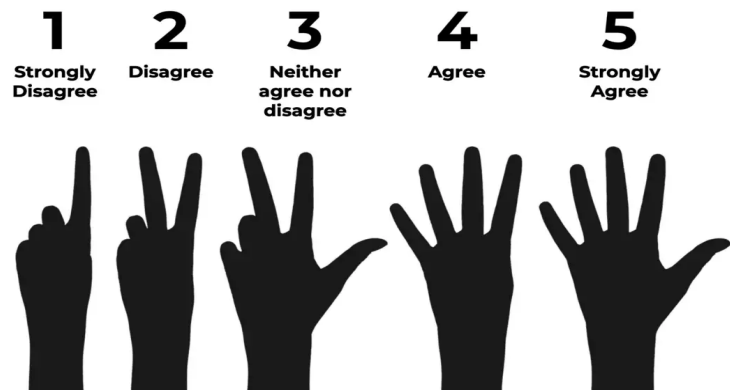
- User 3 : "I did not encounter any difficulties except that the questions are boring and I could not skip them, but I answered them and logged in".
- User 2 : "I decided to log in with a Google account and registered easily".
- User 5 : "The questions when registering a new user are many and boring, and there is no option to skip them, but things went well after answering them".

How do you feel when trying to use Snapchat filters during the session?

- User 4 : "I loved it so much it saves me when I'm in a rush and haven't prepared myself".
- User 9 : "I liked this feature. I use it when I enter a session with my friends. Each of us uses it to have fun".
- User 2 : "A very good idea and I used it when I wanted to study with people I do not know because the room is not arranged and this feature helped me and encouraged me to open the camera".

The Five Finger Survey

At the end of the interview (the last ten minutes), we did a research to find out and confirm the site's problems, and we asked users to fill it in, and the results were as follows:



	User 1	User 2	User 3	User 4	User 5	User 6	User 7	User 8	User 9	User 10
I was able to complete tasks and scenarios quickly.	4	4	3	4	3	2	3	3	4	3
I feel comfortable using this software.	3	2	4	4	3	4	4	5	3	4
The software gave me enough error messages so that I can figure out how to fix my problems.	4	2	3	5	4	3	3	3	3	4
I would need to learn a lot of things before I could use this software.	1	1	2	1	1	1	2	1	1	2
Whenever I made a mistake using the software, I could recover easily.	1	1	1	2	2	2	2	2	2	2
The on-screen messages and information were clear and easy to understand.	3	2	3	4	3	2	3	1	2	2
When I needed information from the software, it was easy to find.	4	4	3	4	3	4	3	4	3	4
The information found in the system was useful.	4	5	5	4	5	4	4	5	4	4
The organization of information on the UI screens is clear.	2	3	4	4	3	4	5	3	3	4
The user interfaces are visually pleasing to the eye.	2	3	2	3	2	3	2	3	2	2
The software has all the functions and capabilities I expect it to have.	4	3	4	4	3	4	3	4	3	3
I think this software would make my job easier to do.	5	5	4	5	5	4	4	5	5	4
Overall, I am satisfied with how easy it is to use this software.	2	1	2	2	1	4	3	2	3	2

University students Persona :



Image(1)Binder -University Student persona

Key insights from the Interviews:

- 80% of the students agreed that the **watch youtube** feature is not important and that it does not work properly.
- 60% of the students agreed to use the application on the phone and 40% did not like it because they will be distracted by the mobile applications.
- 90% of University students unanimously approved of the **Snapchat filters** feature.
- 70% of the students agreed that the “**watch youtube, just study, study&talk**” property can be combined with “**Your communities**” feature and that there is no need to separate them.
- 80% of students agreed that the **timer feature** does not work as they expected it to be.
- 90% of the students agreed that the **design of the website** is childish and its colors are not suitable for university students, and that the distribution of elements on the home page is not appropriate.
- 60% of the students agreed that the process of registering a new user is tedious and the questions that appear at the beginning cannot be skipped.
- 70% of the students agreed that Stats Fetcher needs to be modified and that it is not suitable in its current form.
- All students agreed that the rest of the site's features that we did not mention are easy and that there are no problems with them.

From this quick research, We updated and re- prioritized our hypotheses based on the pain points that both would critically affect the business and users.

Prioritizing Our Hypotheses

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- ~~✗ We believe that the “**watching youtube**” feature will enable University students to watch YouTube and share it in the session.~~
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- ~~✗ We believe that The design of the site, its colors and the arrangement of the elements will appeal to the students.~~
- ✓ We believe that using the application on the phone will make it easier for students to do their work.

User Experience Metrics Design KPIs:

We use user experience metrics and design KPIs to understand the behavior of our users and identify areas for improvement. By tracking metrics we are able to gain valuable insights into how our users interact with our product or service. These insights allow us to design and optimize the user experience, ensuring that our product or service meets the needs and expectations of our intended users. By using user experience metrics and design KPIs, we are able to make informed decisions about how to improve our product or service, and address any issues or challenges that may be impacting its effectiveness.

1. Behavioral

We used behavioral metrics to understand the actions taken by users while interacting with our product or service.

1.1 Pageviews

Page views are a metric that measures the number of times a specific page on a website is viewed. To understand how users are interacting with a website. By tracking page views, companies can identify which pages are most popular and can optimize their content and design to better meet the needs of their users.

Live Sessions = 1.5

watch youtube = 0.6

just study = 0.5

study & talk = 0.7

Profile = 0.4

Posts = 0.6

Messages = 0.2

Notifications = 0.2

product pages	LIVE SESSIONS	watch youtube	just study	study & talk	Profile	Posts	Messages	Notifications
Page Views	15	6	5	7	4	6	2	2

Table(1) Binder user experience metrics-behavioral-page view

1.2 Time per task:

Time per task is a metric that measures the amount of time it takes for a user to complete a specific task or action within a product. This metric helped us understand user efficiency and effectiveness, and for identifying areas where the product or service may be causing unnecessary delays or friction. Each user took an average of 9.8m to finish all tasks.

	Sign Up	Login	Edit Profile	Start Session	Browse a Community	Find Session	Create Community	Delete a Session	Add New Post
Minutes Per Task	3.2	1.5	2	1.4	0.2	0.5	0.5	0.1	0.4

Table(2) Binder user experience metrics-behavioral-Time per task

1.3 Task completion rate

This measures the percentage of users who are able to successfully complete a specific task. A high task completion rate may indicate that the task is easy to complete and well-designed.

Total task completion rate = $(80\% + 100\% + 30\% + 20\% + 100\% + 40\% + 90\% + 0\% + 100\%) / 9 = 62.2\%$

	Sign Up	Login	Edit Profile	Start Session	Browse a Community	Find Session	Create Community	Delete a Session	Add New Post
Users Completed the Task	8	10	3	3	10	4	9	0	10
percentage	80%	100%	30%	20%	100%	40%	90%	0%	100%

Table(3) Binder user experience metrics-behavioral-Task success

1.4 Error Rate

Error rate is a metric that measures the number of errors or mistakes made by users when interacting with a product or service. This metric helped to identify areas where the user experience may be frustrating or confusing. And it was 40%

	User 1	User 2	User 3	User 4	User 5	User 6	User 7	User 8	User 9	User 10
Number of Mistakes	4/9	6/9	3/9	4/9	2/9	5/9	3/9	2/9	4/9	3/9

Table(4) Binder user experience metrics-behavioral-Error rate

2. Attitudinal :

Attitudinal metrics measure user satisfaction and perceptions of a product or service. These metrics are collected through focus groups, and can provide valuable insights into how users feel about

the product or service. By tracking attitudinal metrics, we identify areas for improvement and make informed decisions about how to optimize the user experience.

2.1 SUS (System Usability Scale)

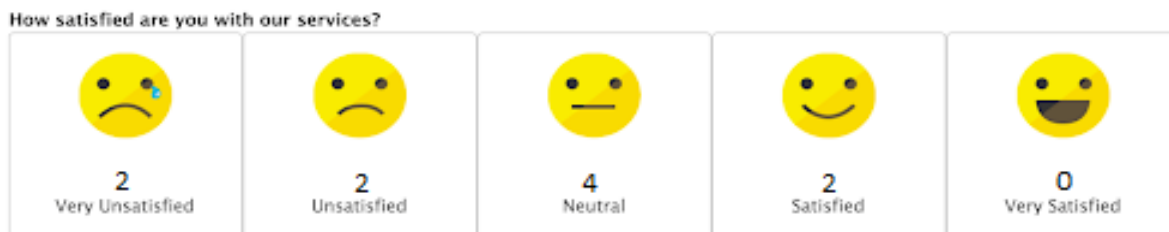
System usability scale is a commonly used measure of usability that provides a score based on user responses to a set of 10 standardized questions. It used to evaluate a wide range of products. The questions assess various aspects of usability, including ease of use, efficiency, and satisfaction. By calculating the average score for a group of users and it was 54.25% that means that our product needs optimization .

The System Usability Scale Standard Version		Strongly Disagree					Strongly Agree				
		1	2	3	4	5					
1	I think that I would like to use this system frequently.	1	3	4	2	0					
2	I found the system unnecessarily complex.	0	1	3	4	2					
3	I thought the system was easy to use.	2	3	4	1	0					
4	I think that I would need the support of a technical person to be able to use this system.	8	2	0	0	0					
5	I found the various functions in this system were well integrated.	3	2	4	1	0					
6	I thought there was too much inconsistency in this system.	0	2	2	3	3					
7	I would imagine that most people would learn to use this system very quickly.	0	0	1	2	7					
8	I found the system very awkward to use.	0	2	5	1	2					
9	I felt very confident using the system.	0	1	5	3	1					
10	I needed to learn a lot of things before I could get going with this system.	5	2	3	0	0					

Image(1) Binder user experience metrics-Attitudinal-SUS

2.2 CSAT (Customer Satisfaction)

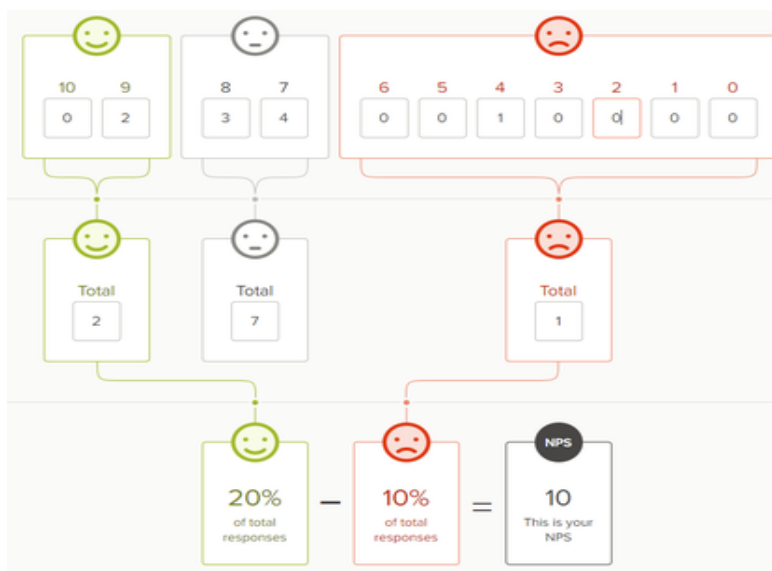
Customer satisfaction is a measure of how happy and satisfied a customer is with the products they have received. It is an important metric for companies to track, as satisfied customers are more likely to continue using the product or service, recommend it to others, and provide positive feedback. By tracking customer satisfaction, we identify areas for improvement and make changes to better meet the needs and expectations for the customers. And it was 20%



Image(2) Binder user experience metrics-Attitudinal-CSAT

2.3 NPS (Net Promoter Score)

Net Promoter Score (NPS) is a metric used to measure customer loyalty and satisfaction. It is based on a single question that asks customers to rate their likelihood to recommend a product or service to a friend or colleague on a scale of 0 to 10. NPS is a useful tool for measuring customer satisfaction and identifying areas for improvement. and it was 10%.



Image(3) Binder user experience metrics-Attitudinal-NPS

Task completion rate	Error rate	SUS (System Usability Scale)	CSAT (Customer Satisfaction)	NPS (Net Promoter Score)
33.20%	21.40%	29%	10.70%	5.40%

Conclusion

In conclusion, the Binder application aims to provide a platform for university students to connect, collaborate, and study together.

Through user research and testing, we identified several areas for improvement in the application, including the design and usability of the website, the functionality of certain features, and the overall user experience. By addressing these issues and optimizing the user experience, we hope to improve the effectiveness and appeal of the Binder application for university students.

Additionally, through the use of user experience metrics and design KPIs, we will continue to track and analyze the behavior of our users in order to identify any further areas for improvement and ensure that the Binder application meets the needs and expectations of our intended users. By staying focused on the needs of our users and continuously improving the product or service, we hope to create a valuable and enjoyable study experience for university students.

Based on the research and testing conducted, it appears that the Binder application has a number of strengths and areas for improvement. Some of the features, such as the Live sessions and scheduled session time, were well-received by users and seen as useful for studying and managing time. Other features, such as watching YouTube and creating your own community, were not as popular and may need to be revised or modified. In addition, The design and usability of the application were identified as areas for improvement, with users noting that the website was not visually appealing and the registration process was tedious. Overall, it seems that the Binder application has the potential to be a useful tool for university students, but there are still areas that need to be addressed in order to fully meet the needs and expectations of its intended users.