

IHCI First Project Submission

Rules

- Submit a Google Doc, NOT a PDF or a Google slide.
 - Use the default fonts, line spacing, and font size unless specifically required in the assignment.
 - After submission, the Google Doc will get automatically locked, so you won't be able to make any changes.
 - Standard plagiarism rules apply.
 - Your submission will not be considered for grading and feedback if you do not follow these guidelines.
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Names of Group Members: Aakanksha, Abhinav Kashyap, Aditya Bhandari, Akshat Bhatt, Aditya Bhandari, Aman Sachdeva, Anish Kumar

Project Group Number: 1

HCI Group No.: 3

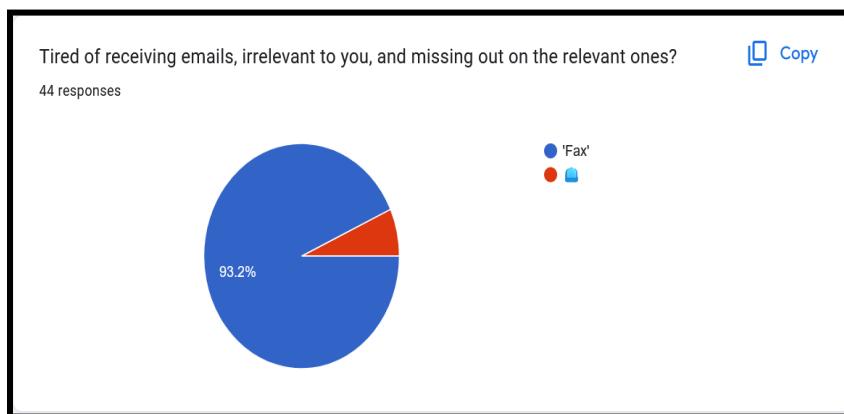
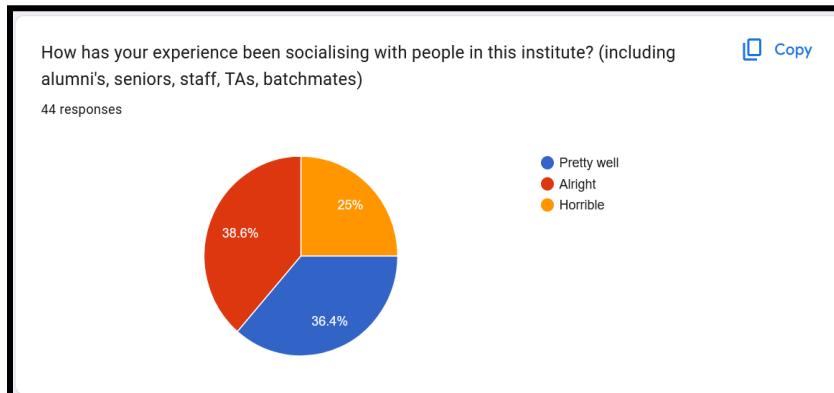
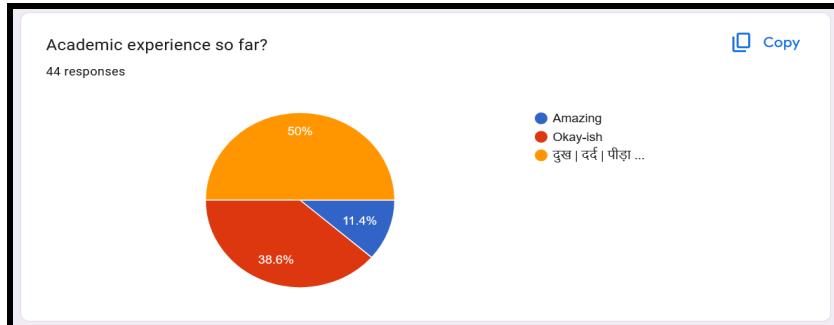
Requirement Gathering

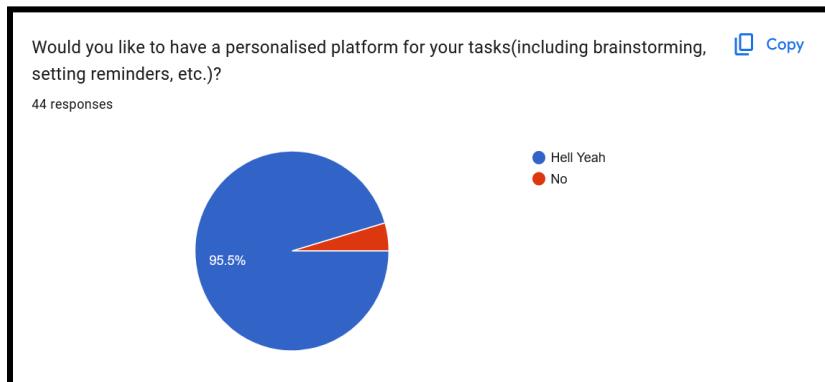
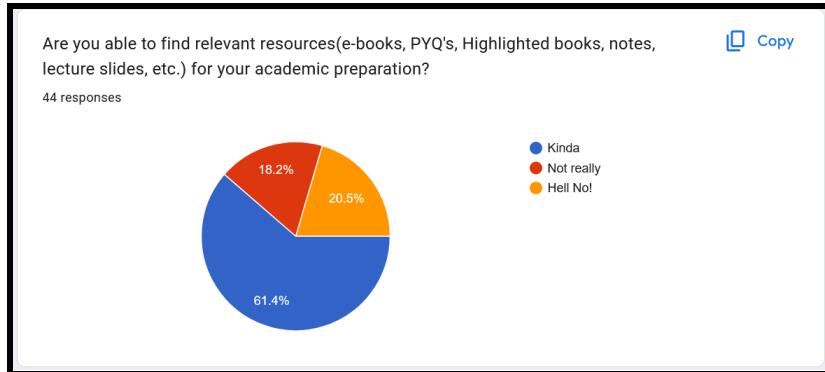
Google form was rolled out to survey about users i.e. college students. Results of the form are shown below:

Google Form: <https://forms.gle/9SL3nxwCVwHrfu779>

SpreadSheet link for the survey:

https://docs.google.com/spreadsheets/d/1nTIWD_AvgwEQGfJoR5nxzycXVdkHNaE4V8cqvLPQZ4E/edit?resourcekey#gid=696330120





Drive link for videos of interviews:

https://drive.google.com/drive/folders/18cR9IJgAC4w2xiXemZ_WiRPLC9INWM7u?usp=drive_link

Summary of the interviews done:

Interview 1

Akshitaa Sahoo- IIIT Delhi

By the end of this interview, it was clear that Akshita was not so comfortable having conversations in person which ultimately sabotaged her networking scopes. Although she does realize that it's her personal issue, she wants to break free from it. She has taken a few measures to tackle the problem but they haven't been that great and effective.

Interview 2

Sarthak Bhudolia- IIIT Delhi

Concluding the interview it is clear that Sarthak is facing issues in finding the relevant information out of 100 of mails that are received daily. He said in an interview that there are many instances where he wasn't able to participate in events of his interest as he missed the mails regarding them and couldn't keep up to the deadline.

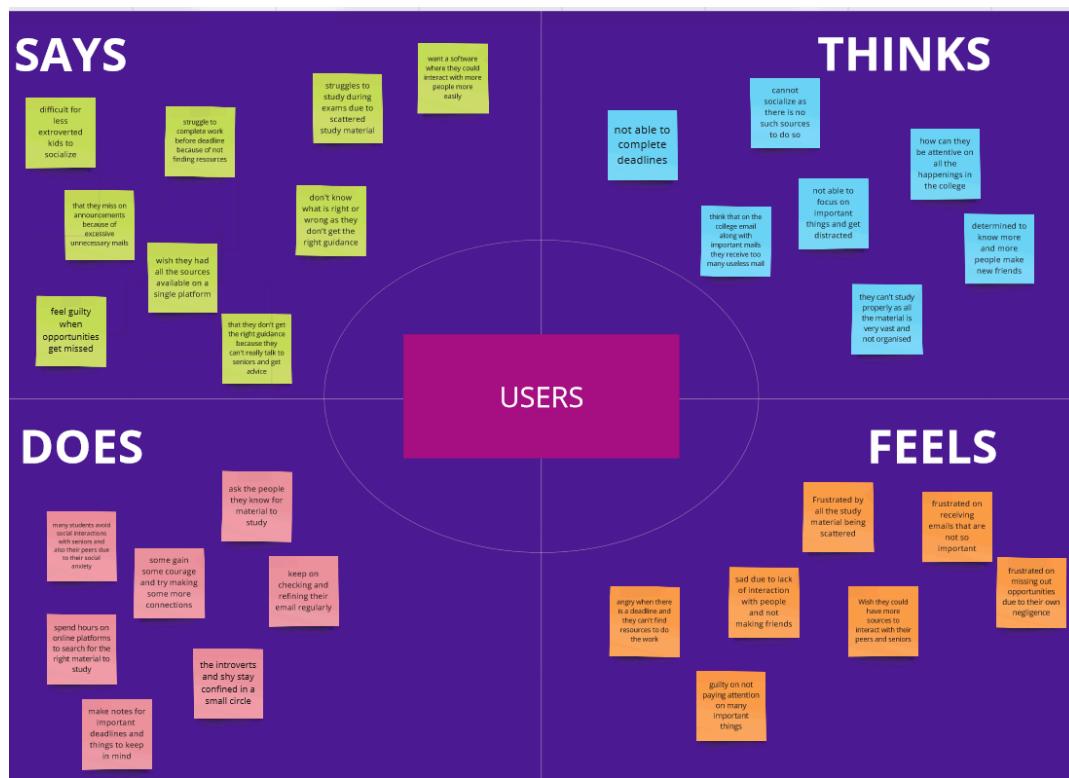
Interview 3

Aarush Rastogi - IIIT Delhi

As Aarush told in an interview he faces issues in collaborating with people whether it be for assignments, note making, etc. After telling him about the app that will provide him a platform where he can collaborate with people like him with common interests he was overwhelmed and wanted to know more about it. As I told him about more features of the application like commuconnect, notice board and e-resources He became more interested in the concept and find it very useful for him which proves the effectiveness of the application.

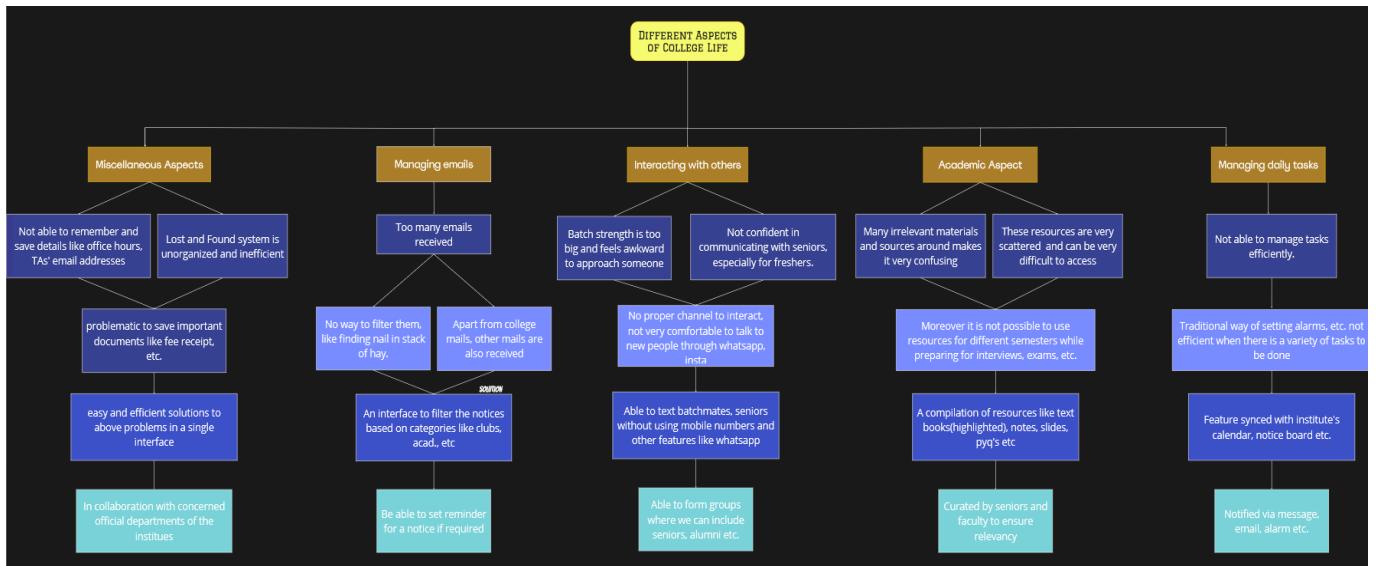
Empathy Map:

Miro Link: <https://miro.com/app/board/uXjVNYwkyoQ=/>



MindMap based on problem understanding and survey:

Miro Link: <https://miro.com/app/board/uXjVNYwkyoQ=/>



Personas and Scenarios

Miro Link: <https://miro.com/app/board/uXjVNYwkyoQ=/>

KAPIL SINGH

Challenges

- Not much socially active so misses many updates and opportunities in college
- As an introvert, not able to interact with many people so is a little lost about what to do and what not
- Not getting enough time to do extra-curriculars due to the packed academic schedule

Bio
Kapil Singh is a 19 years old B.Tech. pupil who is really talented but is a little shy to show off his skills. He comes from a small town and is the first person in his family to ever attend college. Along with studies, he plays sports like cricket, badminton, tennis and football. He also dances really well. He considers himself to be an introvert as he is not so confident in socializing, talking to new people and making new friends. He can sometimes be a little inattentive to things due to which he's not able to know everything happening around him. He is a diligent student always ready to learn new things.

Age
19

Education
Btech 1st year

Location
Delhi

Day scholar

“

The best way to predict the future is to create it.

Characteristics

```
graph TD; A[Passionate] --- B[Health conscious]; B --- C[Hard working]; C --- D[Team Player]; D --- E[Enthusiast]
```

Goals and needs

- 1.His goal is to graduate with a B.Tech. degree in Computer Science and embark on a successful career in the tech industry.
- 2.He needs to overcome his stage fright and build a network as his introversion makes it difficult for him to make new friends
- 3.He wishes to develop his personality and improve his social skills
- 4.His goal is to balance his hobbies with academics so that he also keeps doing things he is passionate about like dancing, playing sports.

Piyush Khatri

Challenges

- He feels like to gather different information he has to browse at different places and its hectic
- Balancing a social life, academics, and career networking with healthy eating.
- He struggles with keeping track of different deadlines, which affects his grades
- He also misses valuable opportunities due to his lack of attention in things

Bio
Piyush Khatri is a 18- time-old Btech Student with immense potential and talent. During his early school years, He excelled in artistic areas but struggled in academics due to his inattentive nature. He won several art competitions, sang songs, published poems but was often late in submissions and missed tests. But he is determined to overcome these challenges and make the most out of his college experience. Apart from his primary interests he enjoys spending time outside, living new experiences. He also gets relaxed by reading various philosophical subjects

Age
18

Education
Btech 1st year

Location
Delhi

Day scholar

“

My mind is a whirlwind of creativity, but I'm like a candlestick holding few stars. With the right organization and structure, I believe I can shine brighter than ever

Characteristics

```
graph TD; A[Talented] --- B[Creative]; B --- C[Artistic]; C --- D[Inattentive]; D --- E[Day Dreamer]
```

Goals and needs

- 1.He is aspire to show his creative talents to the people and maybe pursue a career that allows him to express through art
- 2.He wants to establish a daily routine and structure in his life which can help him maintain focus and make him more attentive towards things
- 3.He might also require a mentor or an academic advisor or some alumni who could provide him some guidance on improving and also clear all his queries about things

Himansh Jain

Challenges

Important academic materials and resources might be scattered across various locations, making it challenging to access them effectively.

Staying informed about college events, deadlines, and announcements can be difficult, leading to missed opportunities or deadlines.

Aishi sometimes becomes anxious about her career path and future prospects which lies ahead her graduation.

Himansh might often feel isolated from his peers and want to talk to some peers and have some meaningful interactions.

Bio

Himansh Jain is an 18-year-old engineering student with an insatiable curiosity for technology. He's a self-motivated who enjoys tackling new challenges and likes the thrill in life. He seeks to connect with fellow students and stay updated on college events. He is goal-oriented who has a clear focus on his academic and career goals.



Age
18

Education
Btech 1st year

Location
Delhi

Hosteller

“

I'm the architect of my aspirations

Characteristics



Goals and needs

1. Himansh's primary goal is to excel in his engineering studies.
2. He seeks to connect with his fellow engineering students for knowledge sharing, study groups, and potential collaborations on academic or extracurricular projects.

Aishwarya Jindal

Challenges

Her shyness makes it difficult for her to interact with people and make meaningful conversations.

She also sometimes feels anxious and struggles to speak at parties or public gatherings.

Aishi sometimes becomes anxious about her career path and future prospects which lies ahead her graduation.

While she may desire to participate in extracurricular activities, the fear of social interactions holds her back.

Bio

Aishwarya AKA Aishi is a driven 20-year-old female currently pursuing her Btech at IITD. Born and raised in Delhi. Early on she was good in academics particularly in maths and science which made her decision of pursuing Btech easy. Aishi has always been shy, it's a trait she acquired from her parents she found comfort in the world of books. The college was a significant change for her, she realized making friends was important not only for academics but for personal growth also.



Age
20

Education
Btech 2nd year

Location
Delhi

Hosteller

“

In the digital realm of my college I'll find my voice, build my path, and grow into the person I aspire to be

Characteristics



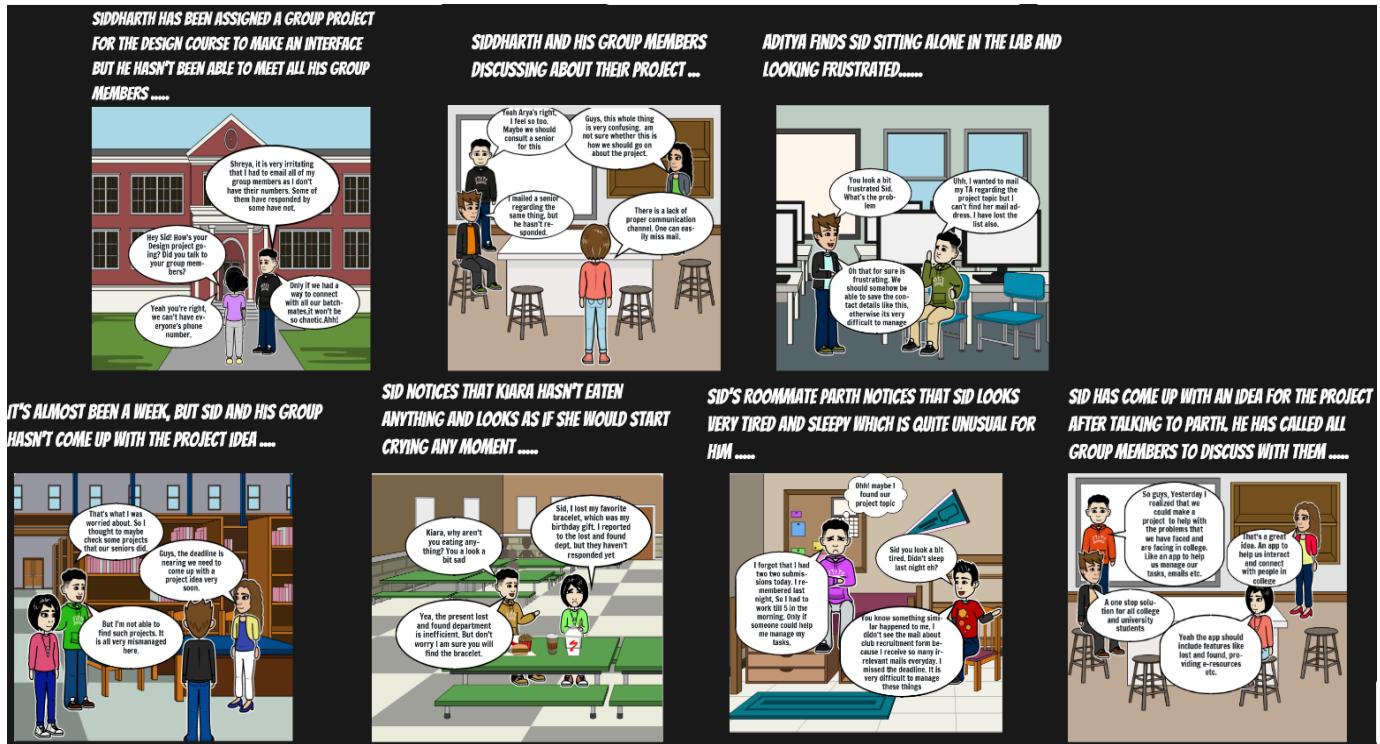
Goals and needs

1. Aishi aspires to break free from her shyness, make meaningful connections with her fellow students.
2. She desires a platform or app that can help her break the ice and connect with like-minded students who share her academic interests.
3. She seeks academic support and opportunities for collaborative learning.

Scenario (through storyboard)

Miro Link: <https://miro.com/app/board/uXjVNYwkyoQ=/>

Created using: <https://www.storyboardthat.com/>



Problem Understanding

Based on the surveys and interviews conducted we have come up with the solution, UniConn. UniConn is an app that intends to be a one stop solution for all the problems mentioned in the personas and interviews. Our target users include all the students attending colleges/universities across the country, be it graduation or post-graduation. The app will also be available for alumni who wish to be connected to their institutes and also help their juniors. The app will operate on an Intra-College/University basis. Users will be categorized on the basis of the institutes in which they are studying. Users would have to use his/her college/university given email id to sign up and log in. Once verified with the Institute, his/her account will be created.

The problems mainly include lack of proper communication channels to interact with people within the college, absence of a compilation of relevant resources for academics, an inefficient notification mechanism and not being able to manage tasks. UniConn provides broadly four features to its users:

- 1) **Space:** To deal with managing tasks on a daily basis by allowing users to set reminders. It also provides features such as My Board that can be the user's personal whiteboard. 'Notes' makes it easier for users to jot down whatever they feel is important. Finally the logbook feature allows users to save details like email addresses, office hours, etc.
- 2) **E-Resources:** This feature provides users the access to a compilation of all the relevant and useful resources that are related to academics like e-books, notes, lecture slides, previous year question papers and their rubrics, and projects. The E-Resources allows the students to access resources of not just their present semester, but also of all other semesters. This will help students who prepare for interviews and exams like GATE, etc. These resources are uploaded based on the opinions of seniors and faculty.
- 3) **Commu-Connect:** This feature provides a proper communication channel to the users to connect with their peers, seniors and even alumni. It eliminates the need to approach someone specifically. Under this feature, users can form their own chat rooms and also official groups like Batch wise groups, Branch wise groups. These groups will be moderated by a team of admins in order to keep on any activities of indiscipline. This feature will help in enhancing communication within the institute.
- 4) **Notice Board:** This feature allows the user to navigate through numerous notices, emails received on a daily basis by providing the option to sort them by using 'Tags' and 'Sub-tags'. For instance if a student wants to see notices/emails from the Maths Department, he/she can choose 'Academics' as the tag and 'Mathematics' as the sub-tag. Using this feature, students can directly set the reminder regarding a notice and be later notified by a message.

Brainstorming based on problem understanding & target users :

Miro Link: <https://miro.com/app/board/uXjVNYwkyoQ=/>

Brainstorming Chart

Managing emails too cumbersome since no way to filter them	In era of online learning, students find it easier to make e-notes as they provide many features.	introverts face immense stress when trying to approach someone even to ask for help or advise	there exist a lot of different platforms to cater to the needs of college-going students, but they're very unorganized.	Scattered and irrelevant sources for notes, lecture slides, books is a huge problem
Students miss relevant info. :- inability to filter information according to their priority	While e-notebooks offer numerous advantages, it's essential to choose the right platform that aligns with your specific needs	Students find themselves in a bad-influence-peer group which prevents them from approaching anyone else due to their prevailing image	the main aim of UniConn is to make uni life easy for students and to decrease unnecessary burden.	providing a solution to access curated materials, highlighted texts, useful lecture playlists
Notice feature should focus on filtering the emails & notices received	Multiple projects and assignments, over notes of different subjects get very confusing in one space.	providing a platform to allow approaching, connecting and contacting seniors, batchmates, alumni and more.	providing free e-resources so the students don't have to always rush to the library and depend on availability	giving appropriate solutions to the students regarding assignments, exams and other stuff as well
Tagging of notices w.r.t purpose .e.g.: club notices(specific), academic (branch-wise),etc.	UniConn's Workspace not only provides an e-notebook but also the whiteboard and calendar.	must be moderated since there are always malicious users who try to degrade and ruin the reputation	CommuConnect makes it easier to communicate to seniors and batchmates regarding any concerns .	sharing resources of seniors by their consent which could help juniors to learn better
'Lost and Found' feature is inefficient according to present method	Space helps organize all your work in your priority list with deadlines and tasks in calendar	Should allow personal chats, group chats and explore and find new peers to connect with	Space helps us organize our personal workspace	a great platform so that a student can work in the right direction rather than randomly studying stuff
Moderated feature to post about 'Lost and Found' specified using tags like electronic, etc.	Space is directly in sync with E-resources to help student take notes easily and refer to the book.	Will help students connect with the university and people better. Forming bonds with people, hence offering a "Homely" feel	We often miss out on important notices due to the unorganized nature of email system.	providing one stop solution to all academic related problems

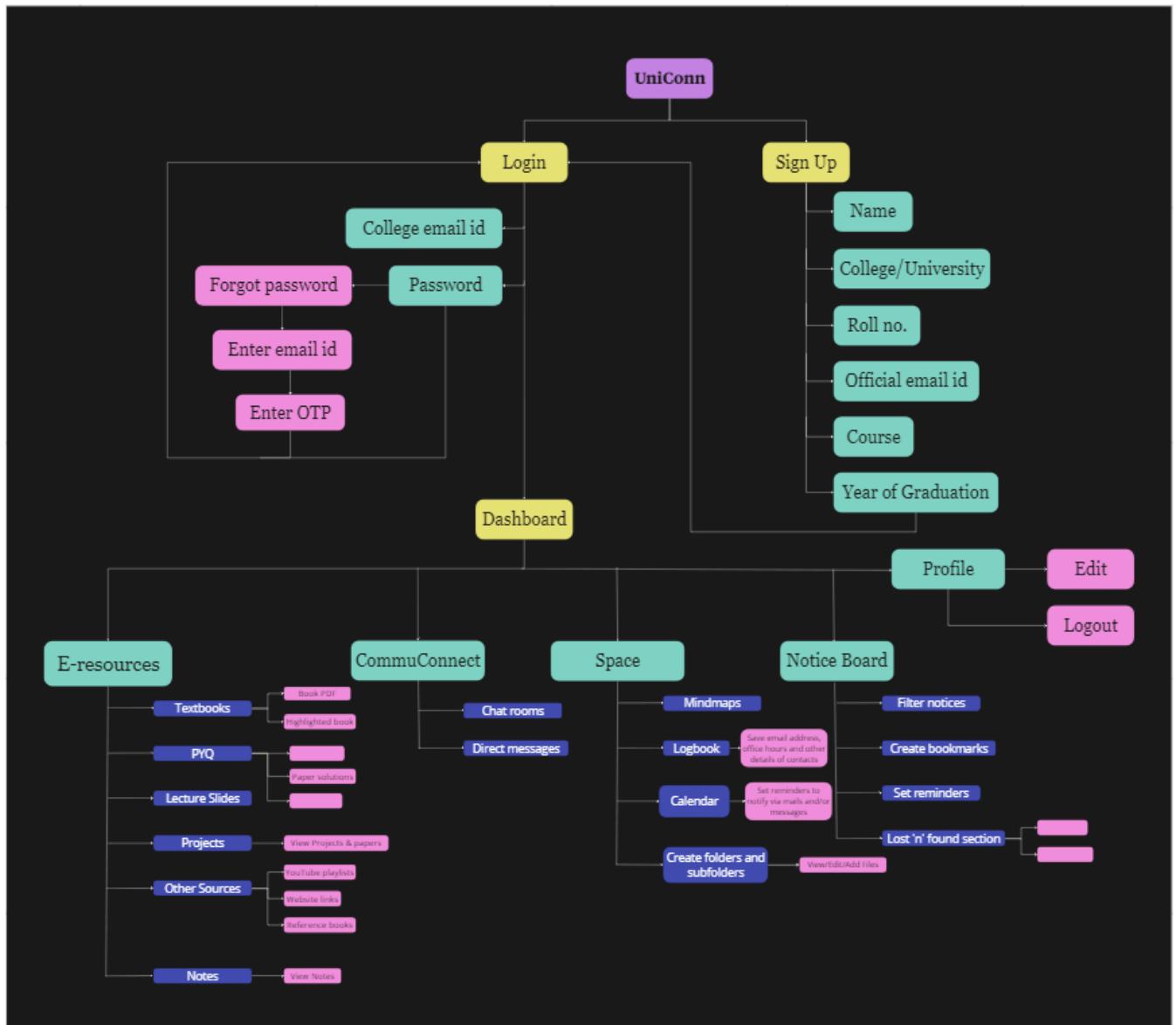
Mind Map based on problem understanding, brainstorming:

Miro Link: <https://miro.com/app/board/uXjVNYwkyoQ=/>



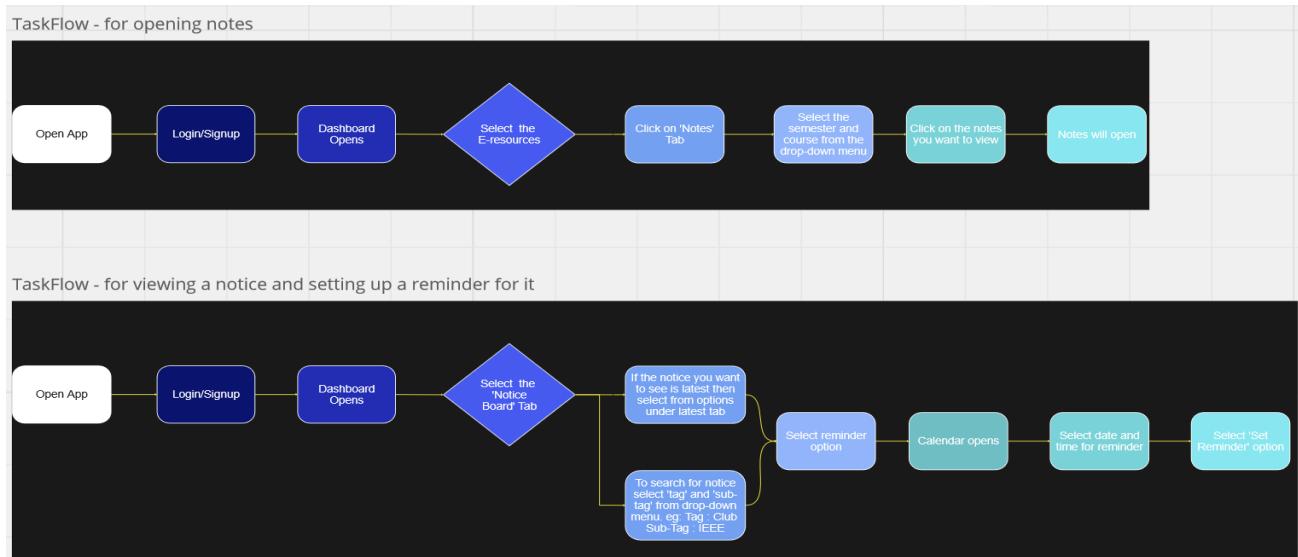
Information architecture:

Miro link: <https://miro.com/app/board/uXjVNwkyQ=/>



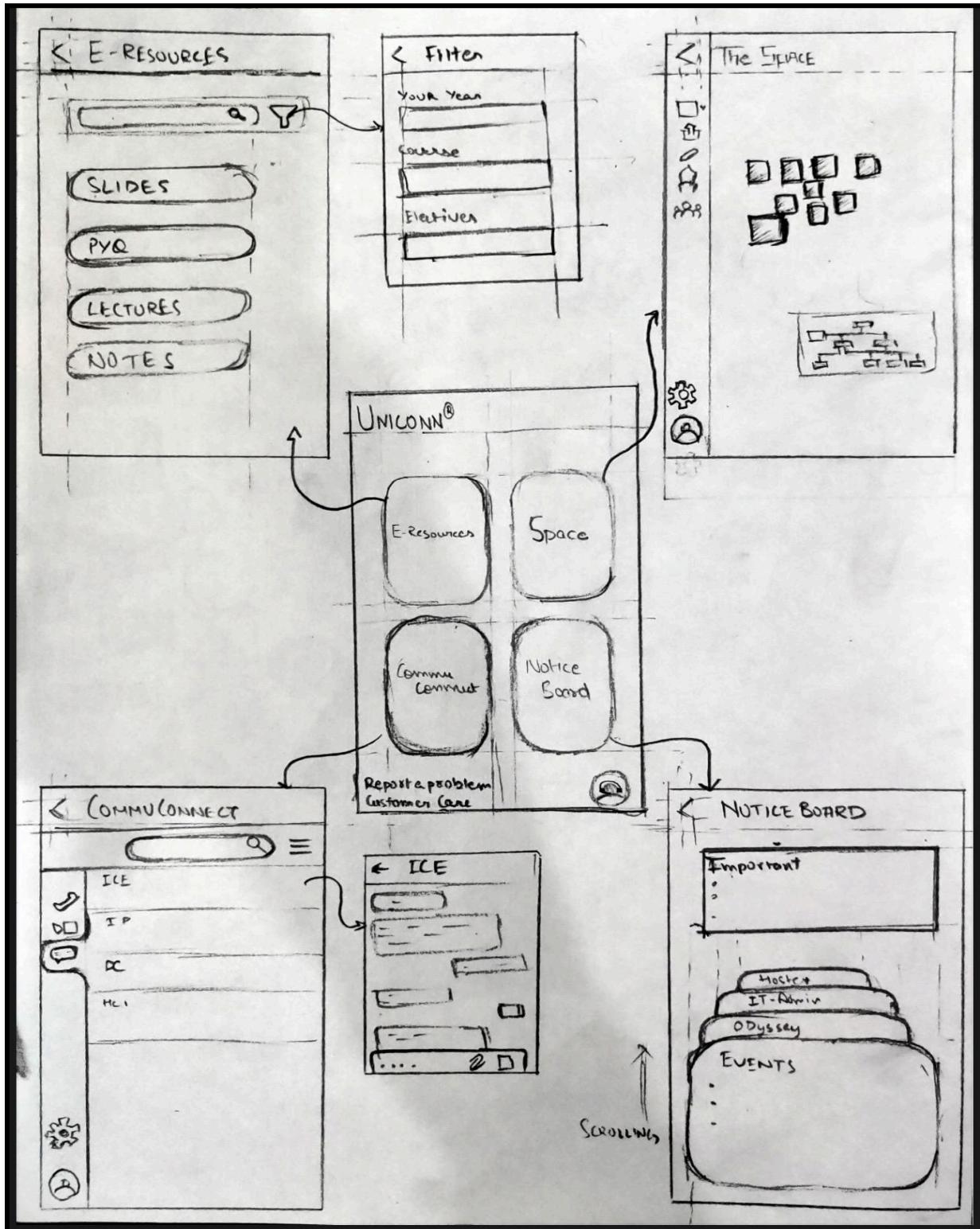
Task flow based on Mind Map and User Understanding:

Miro Link: <https://miro.com/app/board/uXjVNtWkyoQ=/>

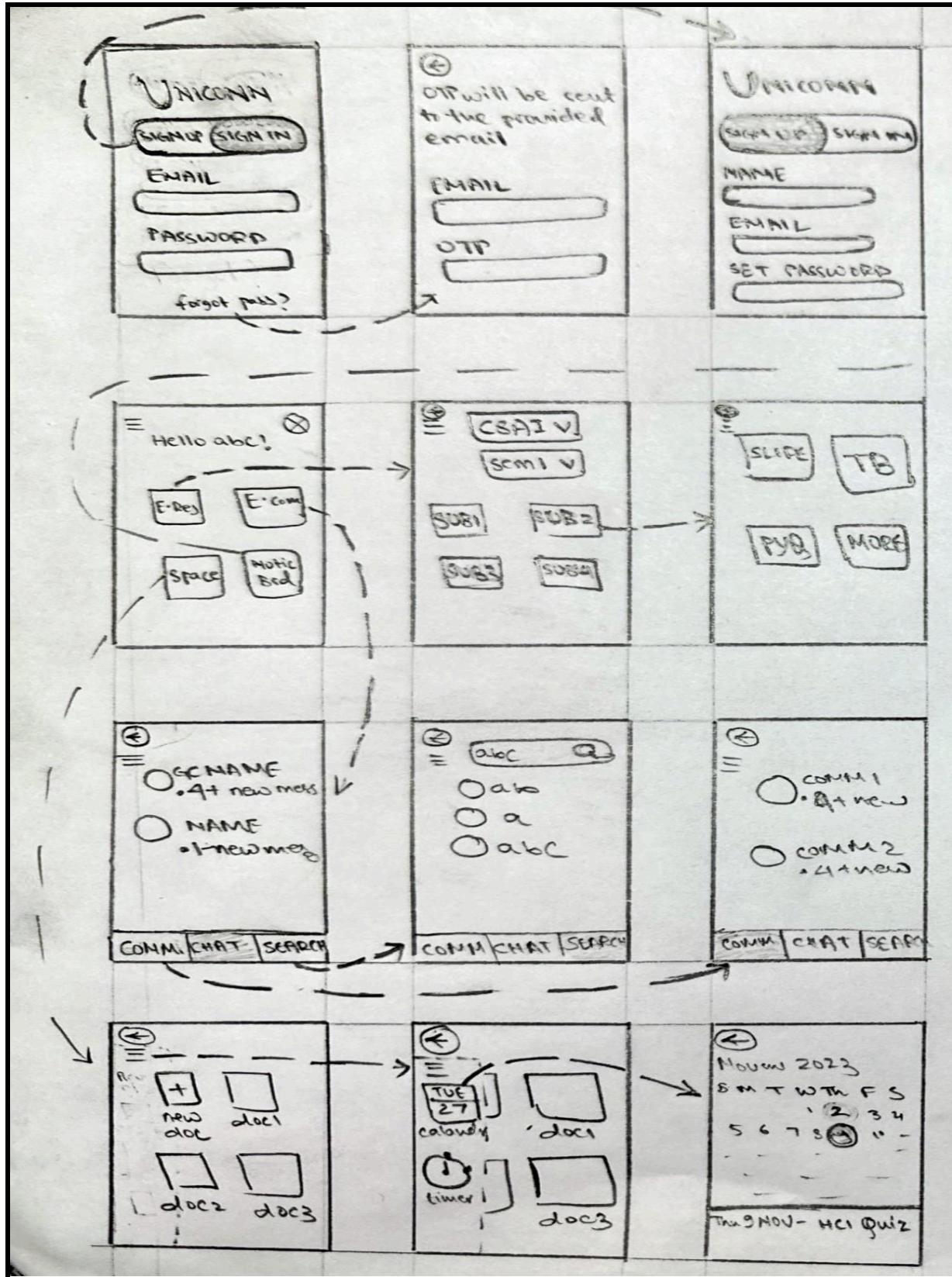


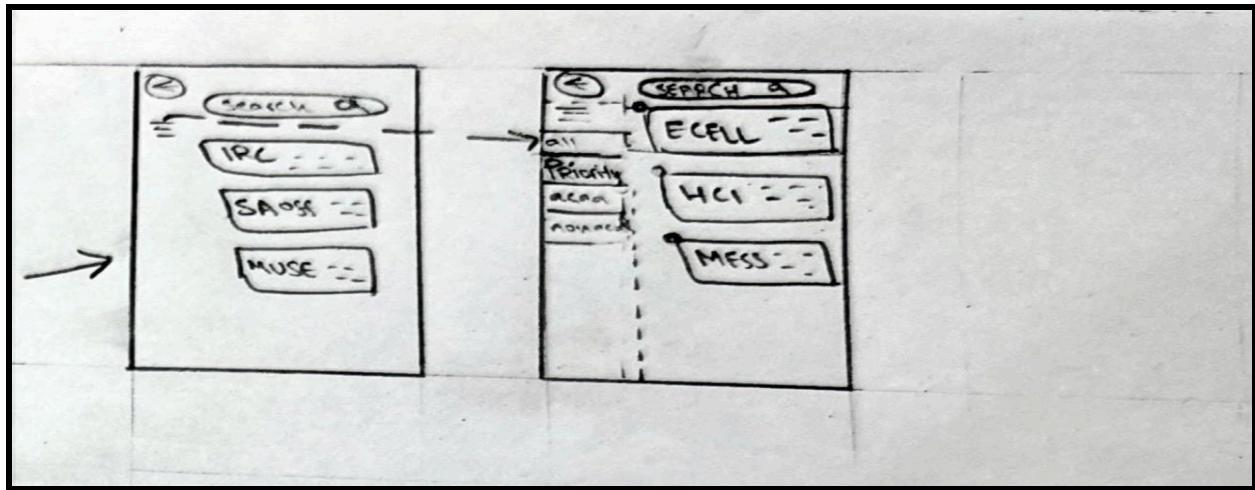
Low-Fidelity Designs

Lo-fi Design 1:



Lo-Fi design 2:





Lo-Fi Design 3:

① LogIn / SignIn Screen

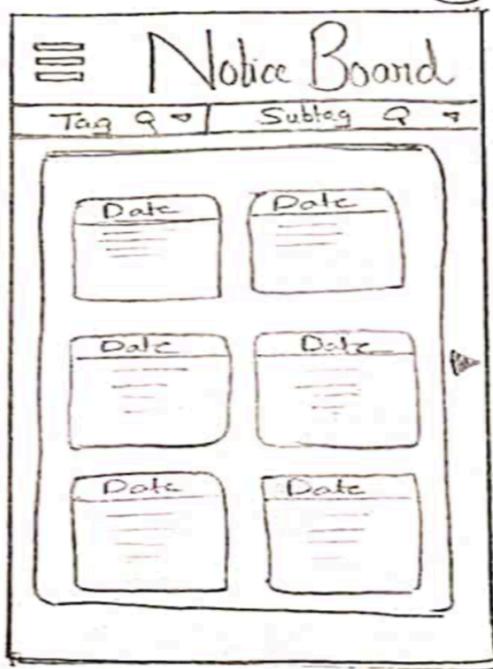
② Sign In / Log In

③ Home Page

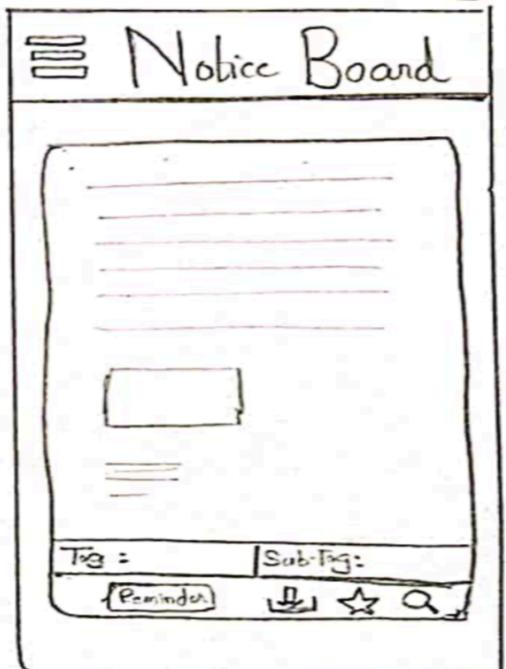
④ Space

⑤ E-Resources

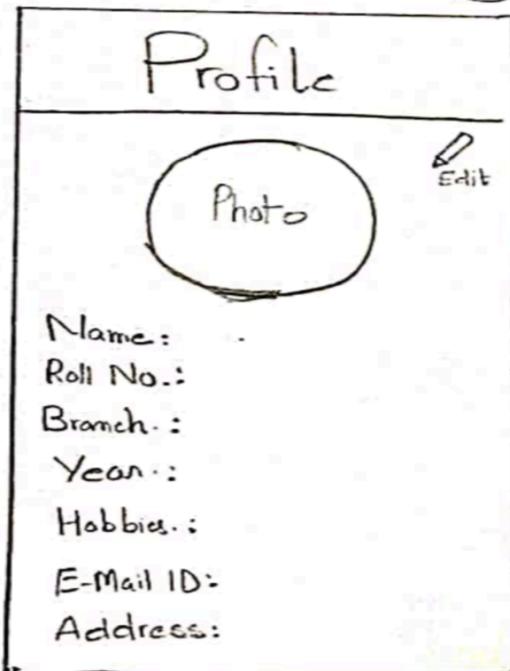
(1.4)



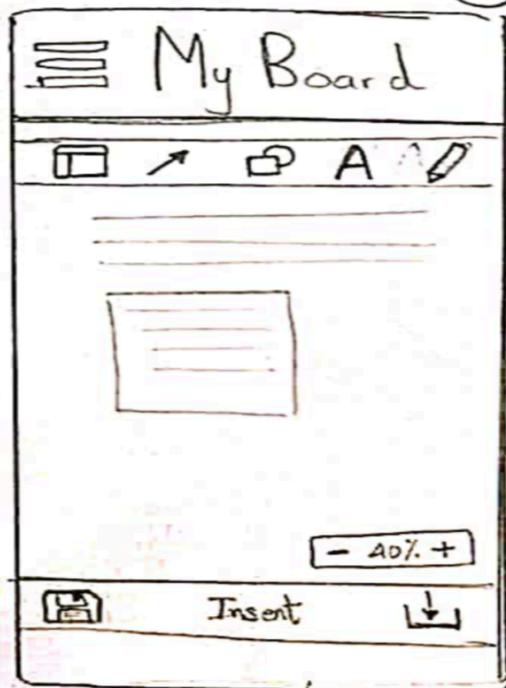
(1.4.1)



(1.5)



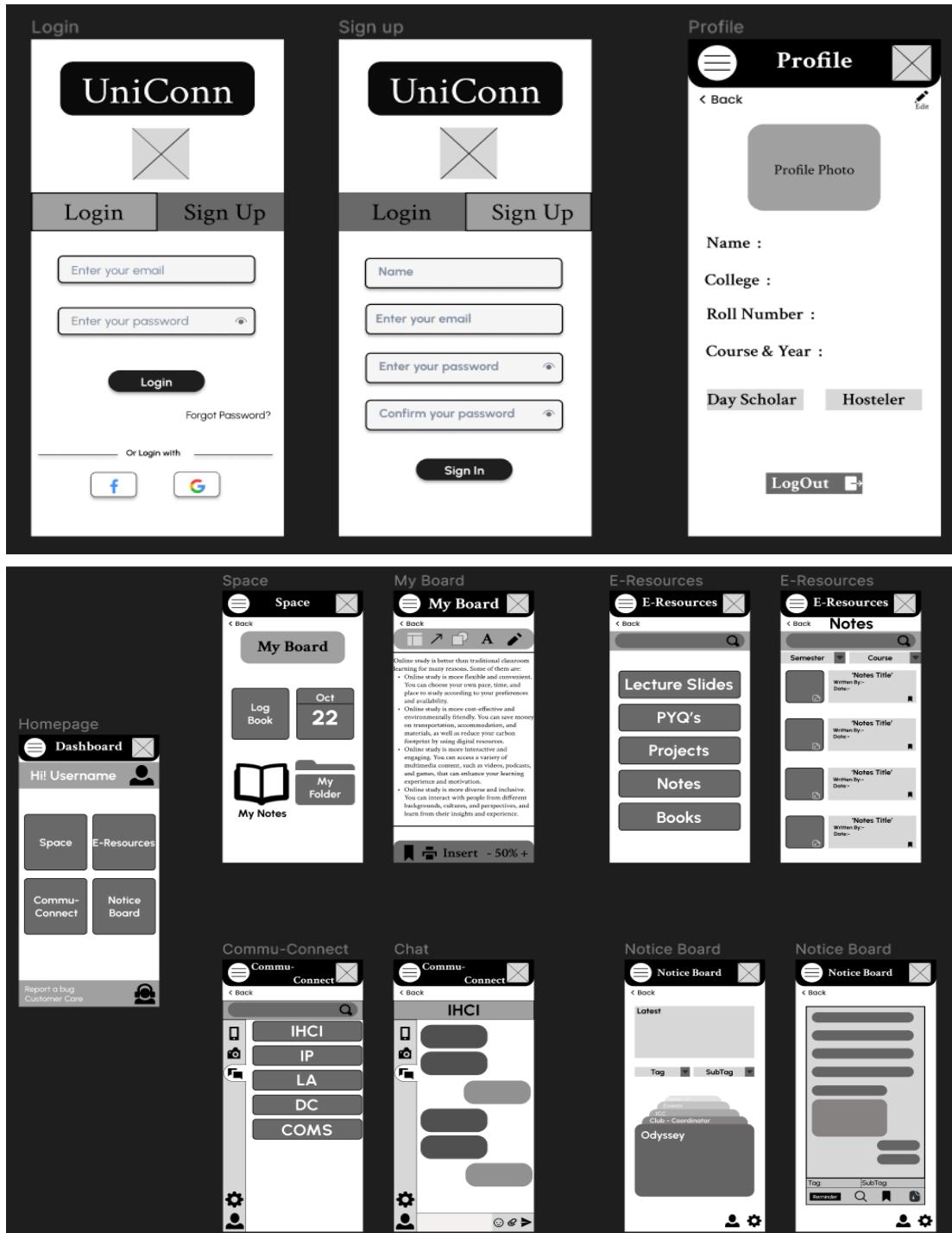
(1.6.1)



Final Lo-Fi design: Before testing, this design was prepared based on the 3 lo-fi sketches above:

Figma Link:

<https://www.figma.com/file/K2CwPLwXNHOLN7Wwk1xR5f/UniConn?type=design&node-id=0-1&mode=design&t=5LGa47FYEGpmc2pW-0>



Low-Fidelity Testing and Testing Methodology

Drive link for videos of interviews:

https://drive.google.com/drive/folders/18cR9IJgAC4w2xiXemZ_WiRPLC9INWM7u?usp=drive_link

Summary of the interviews done:

Interview 1

Akshitaa Sahoo

By the end of this interview, it was clear that Akshita was not so comfortable having conversations in person which ultimately sabotaged her networking scopes. Although she does realize that it's her personal issue, she wants to break free from it. She has taken a few measures to tackle the problem but they haven't been that great and effective. The idea of having a platform that caters to her issues in meeting more students within her campus bears a fruitful outcome. Upon disclosing the idea of our app, especially about "CommuConnect", she was really intrigued and wanted to explore it further. This goes on to show the efficacy of the concept.

Interview 2

Sarthak Bhudolia

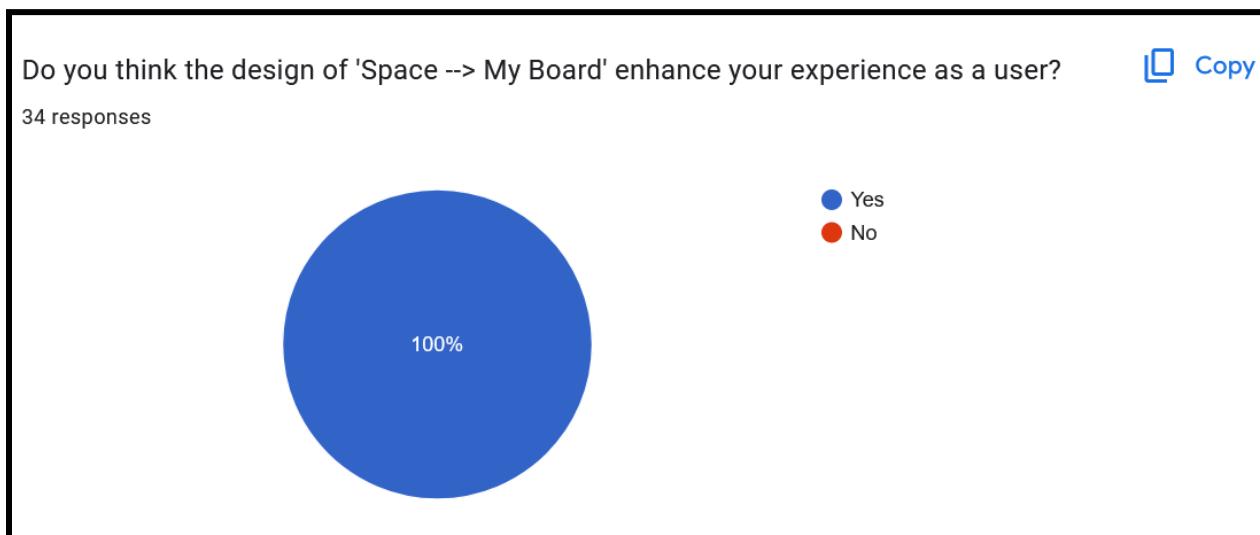
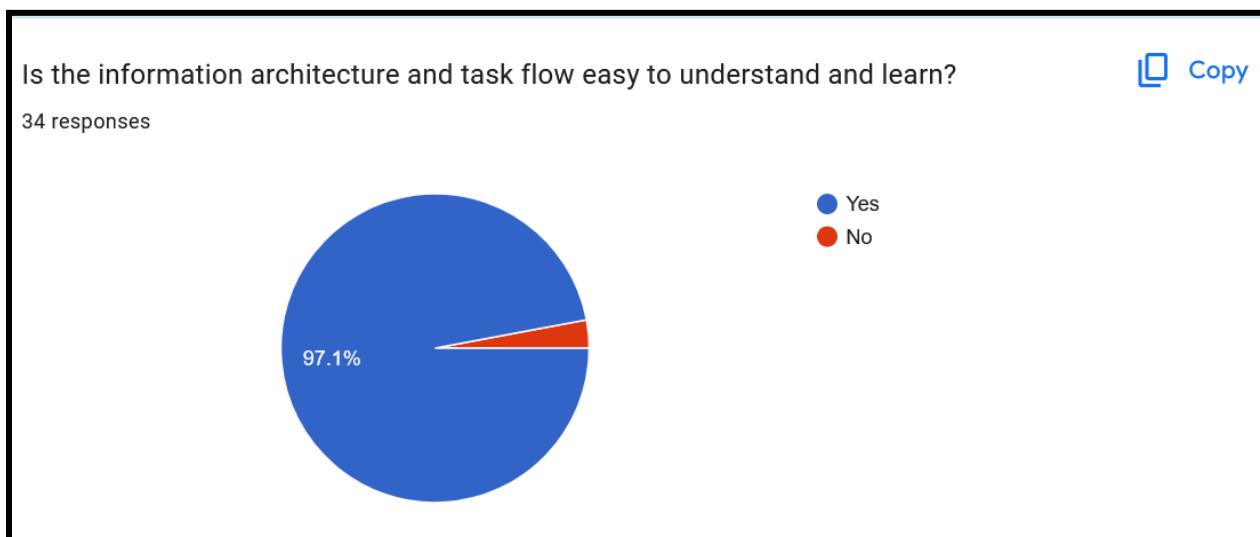
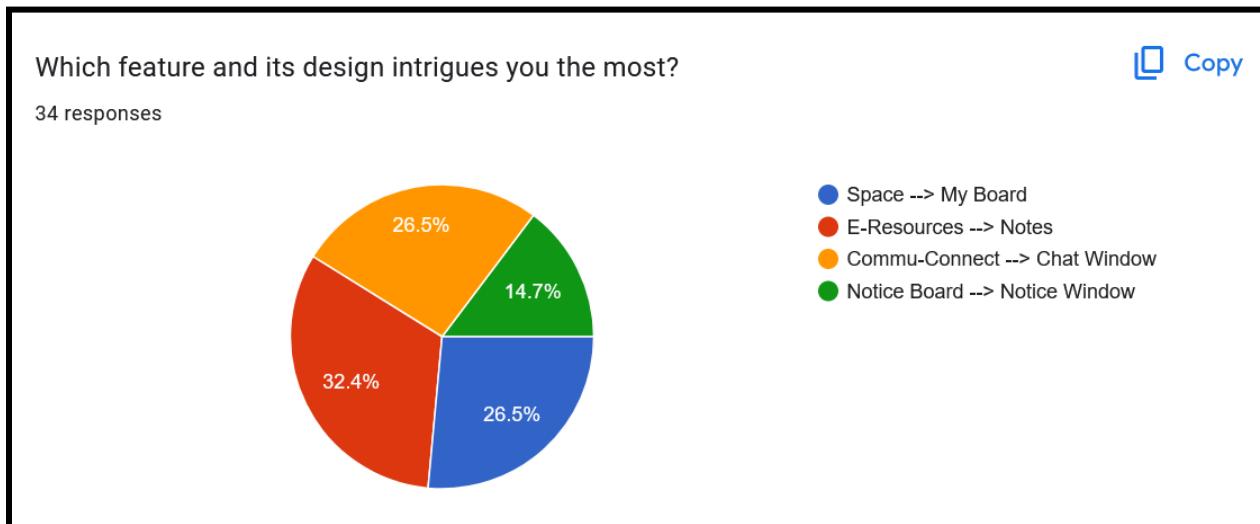
Concluding the interview it is clear that Sarthak is facing issues in finding the relevant information out of 100 of mails that are received daily. He said in an interview that there are many instances where he wasn't able to participate in events of his interest as he missed the mails regarding them and couldn't keep up to the deadline. After knowing about the concept he wanted to explore it and was curious about the concept.

Interview 3

Aarush Rastogi

As Aarush told in an interview he faces issues in collaborating with people whether it be for assignments, note making, etc. After telling him about the app that will provide him a platform where he can collaborate with people like him with common interests he was overwhelmed and wanted to know more about it. As I told him about more features of the application like commuconnect, notice board and e-resources He became more interested in the concept and find it very useful for him which proves the effectiveness of the application.

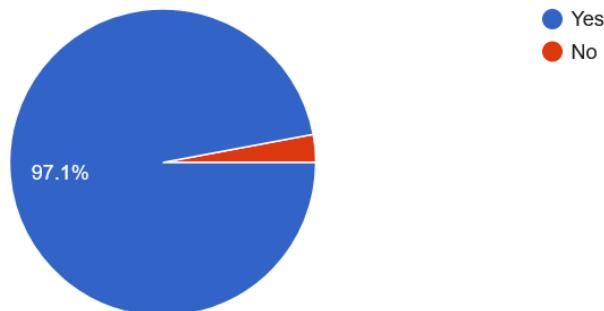
Google Form used for testing: <https://forms.gle/dAtABxwNpqzfRJyX6>



Do you think the design of 'E-Resources --> Notes' enhance your experience as a user?

Copy

34 responses



If 'No', then suggest some improvements:

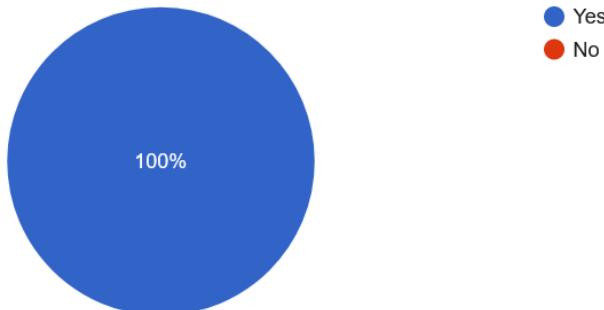
1 response

Order of the icons should be kept from most used on top to least used at the bottom

Do you think the design of 'Commu-Connect --> Chat window' enhance your experience as a user?

Copy

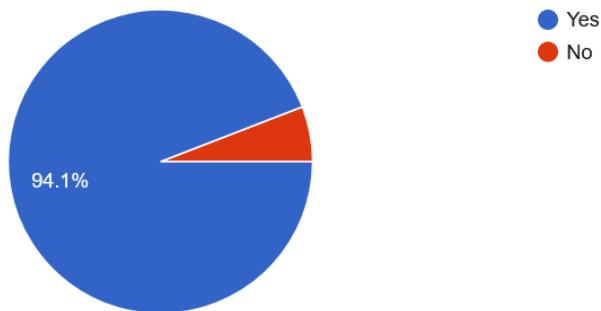
34 responses



Do you think the design of 'Notice Board --> Notice window' enhance your experience as a user?

 Copy

34 responses



If any suggestion regarding the design, do mention:

7 responses

The items on my board can become more relevant to the user

Arrows can be used so that it is easy to understand next action after clicking tabs in chat window like 'HCl' or tabs in E-Resources.

Social media handles can be provided in profile so that if user wants he/she can put their account links

Result using SpreadSheet:

https://docs.google.com/spreadsheets/d/1-ydNzuRGL3Ej7Qj_mgn5OC1N8yWwuUYrDjkytsU30dg/edit?resourcekey#gid=109793546

We used Google forms, one-to-one interviews and a discussion among ourselves to evaluate the design. We compared the features of the app to different, already existing applications like Whatsapp, Reminder, ebook apps, etc.

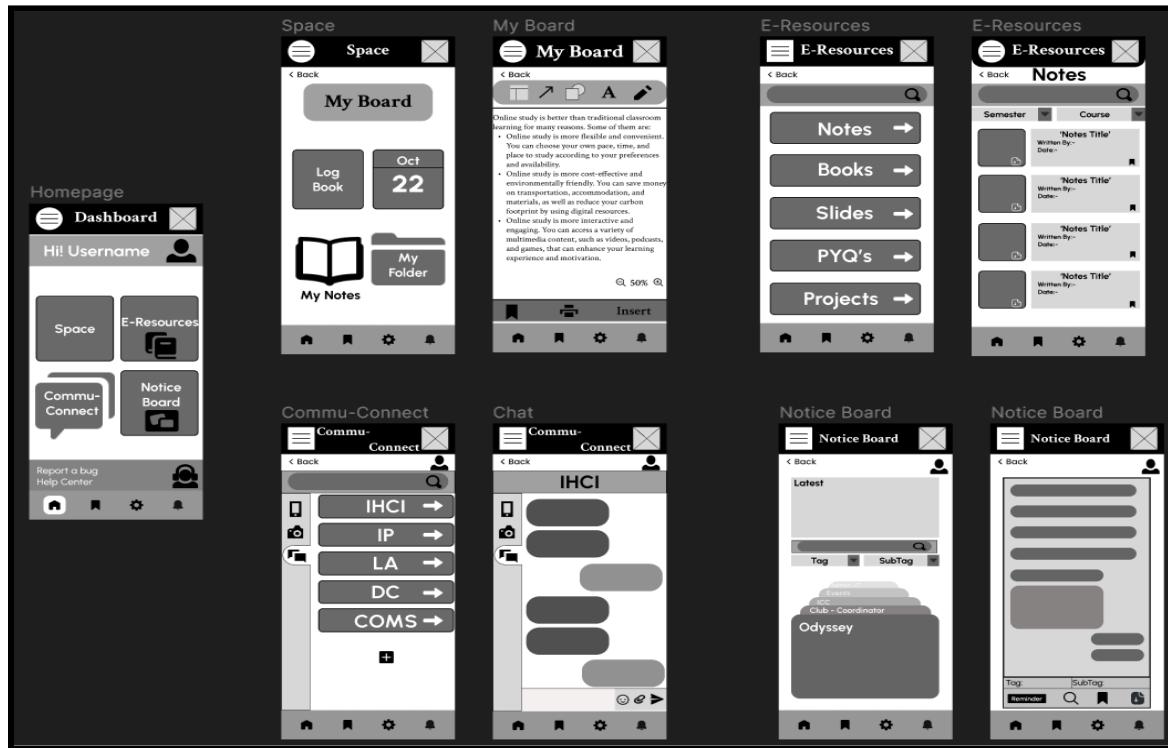
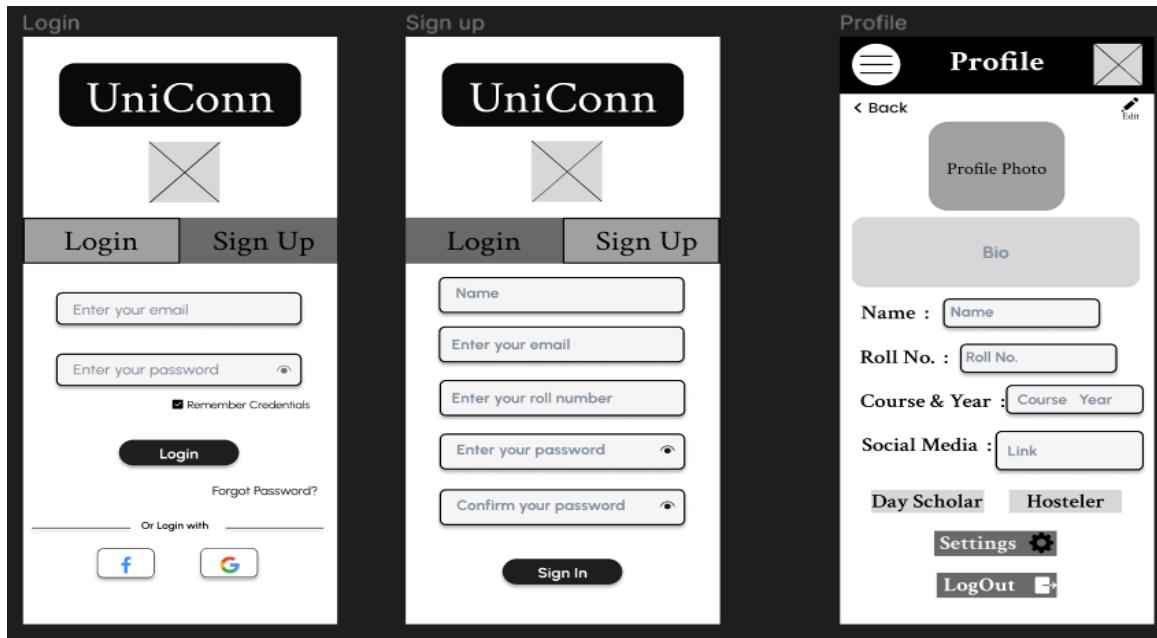
The result was overwhelming with few suggestions mentioned here and there and based upon them we prepared an alternate design. As shown in the pie chart, the design and functionality of 'E-Resources' is what intrigued people the most. 'Space' and 'Commu-Connect' are next in the line.

The changes which are basically our observations have been listed out in the next section.

Alternate Design

Figma link:

<https://www.figma.com/file/K2CwPLwXNHOLN7Wwk1xR5f/UniConn?type=design&node-id=0-1&mode=design&t=5LGa47FYEGpmc2pW-0>



Following observations and changes were made after the testing and survey:

- 1) Bio has been added to profile to make it better for users to know about others. Users can include information they want to share with everyone in it too.
- 2) Arrows have been added to the Commu-Connect window(in front of group names) as well as E-Resources to make it easier for users to understand.
- 3) Order of icons has been changed in E-Resources based on general priority.
- 4) Tabs of Dashboard like Commu-Connect, E-resources and Notice Board have been changed to make it more interactive.
- 5) Task bar containing the ‘Dashboard’ button, ‘bookmark’ button, ‘Settings’ button, ‘Notification’ button has been added at the bottom.
- 6) Roll number has to be given while signing up
- 7) College tab has been removed from profile and Social media tab has been added to the profile along with settings button.

Contributions

- 1) Aakanksha(2023004) : Brainstorming, Information architecture, Google form survey, Lofi-design, Task flow
- 2) Abhinav Kashyap(2023022) : Brainstorming, Mindmap(both), Lofi(sketch), Alt-design, Google form survey, Storyboard, Task flow
- 3) Aditya Bhandari(2023040) : Brainstorming, Lofi(sketch), Interview(1), Storyboard, Google form, Survey
- 4) Akshat Bhatt(2023059) : Brainstorming, Mindmap, Lofi, Alt-design, Google form survey
- 5) Aman Sachdeva(2023077) : Persona, Empathy Mapping, Lofi(sketch), Task flow
- 6) Anish Kumar(2023095) : Brainstorming, Lofi(sketch), Interview(2 & 3), Storyboard, Google form, Survey, Mindmap(2)