

Team: Firebolt



Sanjana Kothapalli



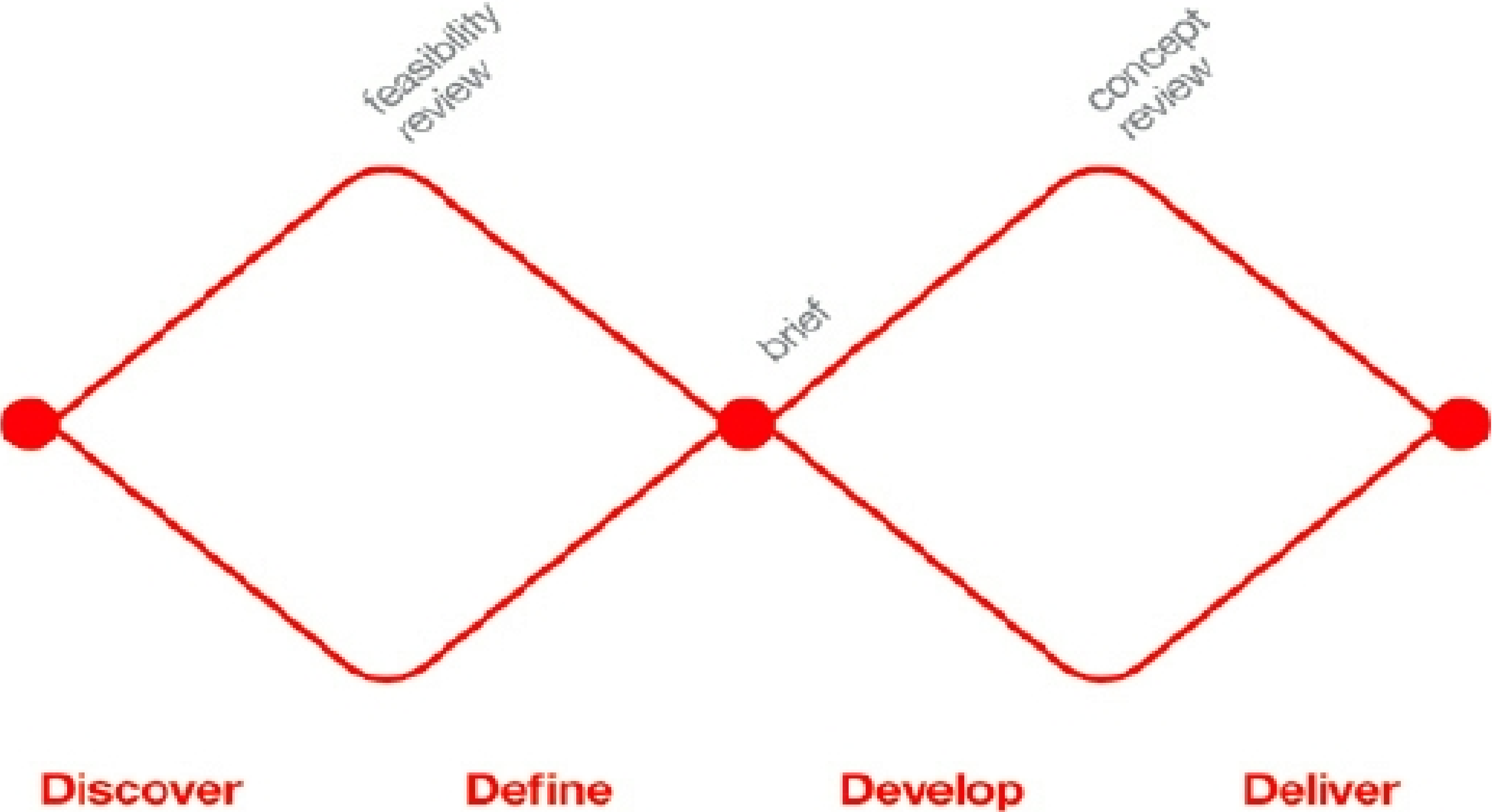
Sakshi Meena



Mrunali Ogriwala



Our Design Framework ^^



If you are a Potterhead like three of us...
This is our Marauders Map ;-P



PHASE 1: Understanding the brief and the challenge space

We began by understanding the brief in detail and key points to keep in mind while going forward with the challenge.

This is where we try to answer questions like:
How to define learning?
Who is being affected? What contributes to learning?
Which aspect of learning should we focus on?
Interactions around learning?



EXPLORING THE CONTEXT

Learning is defined as the process of acquiring new understanding, knowledge, behaviors, skills, values, attitudes, and preferences. The pandemic had brought in major cultural change in learning. The medium, processes and environment of learning has changed.

We tried looking at problems for learning during the pandemic and derived these insights:

1. Online learning can be a privilege - depends heavily on affordability and accessibility.
2. It is flexible in timing and can be too flexible to schedule at times.
3. It brought in a change of pedagogy which is hard to adapt quickly.
4. Co-learning atmosphere difficult.
5. It is resulting in more screen time.
6. High burnouts due to increasing stress levels due to loss of peer learning, change in environment, habits and routines, scheduling.
7. Need to stay self motivated.

There are some lessons to be learnt from the countries like Syria, and Kenya and other African countries who for reasons such as conflict, refugee and recurring epidemics like Ebola have the experience of making provisions for the education of children during difficult times. Over the years they have developed strategies to keep the schooling of students going. There is evidence to show that for children

Govindasamy (2001) says e-learning pedagogy should consist of a few important aspects: First content material should be in learning objects. It is an independent class room session comprising small instructions and independent to other learning objects. A test should be assigned before access is given to the learning object. Students that fail the test should be directed to relevant learning material enabling them to gain sufficient understanding to start the learning object. After the learning object is completed a test should be conducted to determine

A popular method of identifying the learning style of an individual is the VARK questionnaire. This process identifies a learning style of a student and categorises it as Aural, Read/Write, Visual and kinaesthetic. Aural (A) refers to students who prefer to learn through receiving

Students are not always learning, they are not always smart

The SWOC Analysis of Online Learning During Such Crisis, Note: SWOC = Strengths, Weaknesses, Opportunities, & Challenges.

- Accessibility
- Affordability
- flexibility
- self motivation
- learning pedagogy change
- policy

STRENGTHS

1. Year flexibility
2. Location flexibility
3. Catering to wide audience
4. wide availability of courses & content
5. Immediate feedback

WEAKNESSES

1. Technical difficulties
2. Learner's capability & confidence level
3. Time Management
4. Distraction, frustration, anxiety & confusion
5. Lack of personal/physical attention

OPPORTUNITIES

1. Scope for innovative & digital development
2. Designing flexible programs
3. Strengthen skills: problem solving, critical thinking, & adaptability
4. Users can be of any age
5. An innovative pedagogical approach (blended/multimedial) is of experts of education

CHALLENGES

1. Unequal Distribution of ICT Inf. infrastructure
2. Quality of Education
3. Digital Literacy
4. Digital Divide
5. Technology cost & Obsolescence

must address the concerns/ needs/ desires of people concerning learning and adapt to the changing world

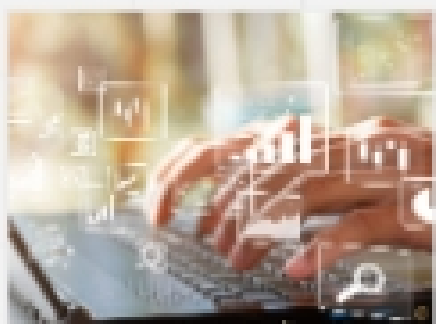
LEARNING: the acquisition of knowledge or skills through study, experience, or being taught.



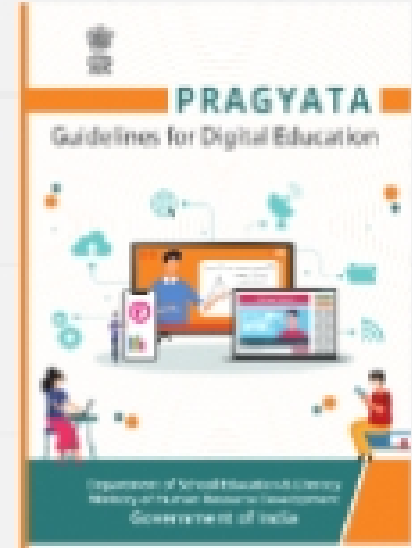
- Learning is fragmented across different segments
- Poor Connectivity issues
- Secure internet penetration
- almost 1.2 billion school children are affected by the closure of schools
- Smartphone, Tablet, computer requirement for online learning
- Difficult to stick with discipline
- Burnout, mental fatigue
- Digital divide across social, cultural area
- Rural & Urban setups are different
- Cyber-bullying, Online social abuse, privacy
- Social Media or learning platform misuse
- Time Management
- Teachers need to learn how to teach online
- Online tests
- Mental Strain



practices connect Learning journey...
COVID-19 and the Challenges of Virtual Mode of Education in India



www.educationtimes.com
Learn from home: A challenge or an opportunity?
Education is experiencing one of its biggest shifts during this period of the pandemic. Online teaching is a new thing for safe and continuous learning because education cannot be stopped. Learn from Home (LTH) therefore, is a necessity, which is real...



According to a recent E-learning research report, 70% of respondents said an internet connection that works well is essential for online learning. A lack of internet connectivity is one of the most common reasons why users stop using e-learning.

- Problem solving and learning skills
- Learn how to play with others through computer, social media and sharing
- Develop the soft skills, social skills
- Increase their creativity and imagination
- Develop their independence and problem-solving abilities

They are of an age when tablets are more important than family.

They are of an age when tablets are more important than family.

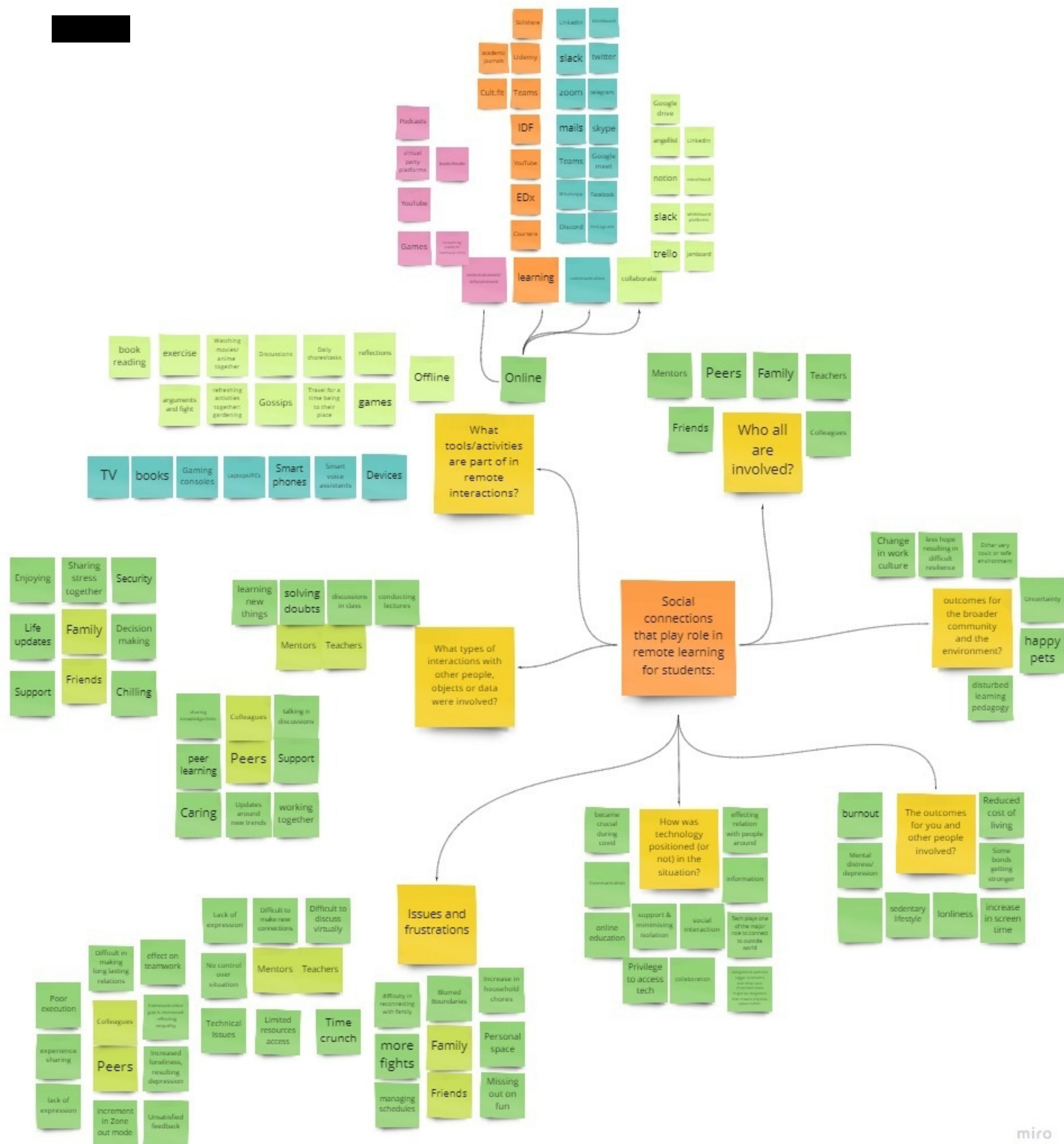
World Skills Challenge
Remote Learning - COVID-19 Design Challenge

9 Million Students Lack Home Internet for Remote Learning

1. Struggle with asking questions verbally. Students hesitate to ask questions in a whole-class setting, but when they see off on their own, questions may arise.
2. A desire to share with classmates more. Students expressed that they enjoyed the collaborative part of their school days and are motivated by their interactions with other students, which they miss in the online setting.
3. Students want to see how they are improving academically. One aspect of current products that students appreciate is a visual representation of their academic growth.
4. Students are motivated by playing games. We need (they don't need) hard data to validate these assumptions, but kids love games. Specifically tied to achievement, leveling-up abilities, and customization features.

- rural education in India
- Can games be a tool to make learning accessible in rural India?
- How do we redesign tech for elderly to use?
- How is learning happening in areas without internet?
- remote work, how to encourage people to learn new skills?
- What all learning things elderly are missing out?
- Can games be a tool to make learning accessible in rural India?
- How do we make sure take learn do not spend about covid19 through whatsapp?
- How is learning happening in areas without internet?

- challenges
- needs
- Students and faculty with low digital competence might find it difficult to make optimal utilization of the digital library



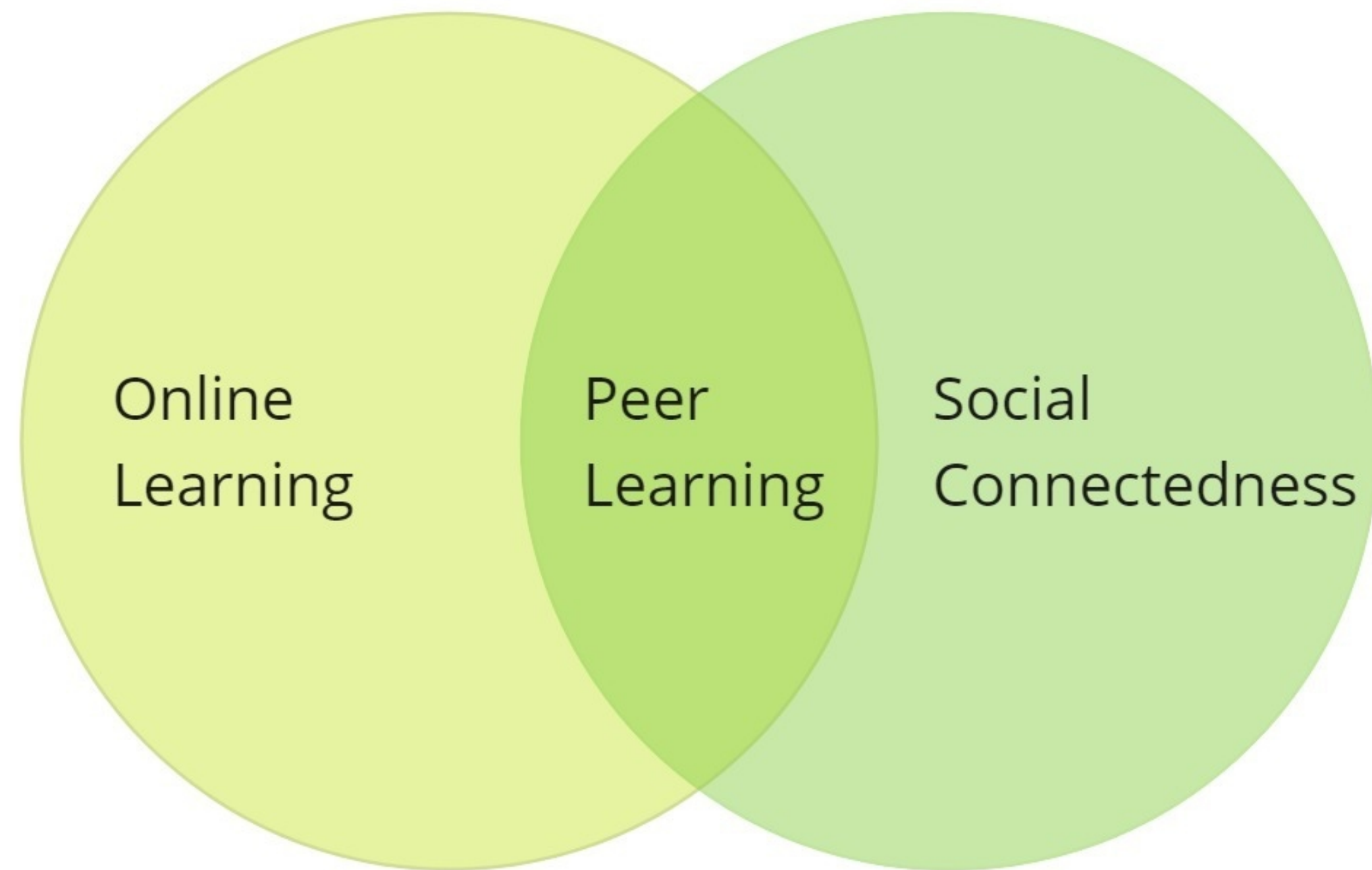
PHASE 2: Define

Upon brainstorming, we realized the difficulty to adapt to learning is affecting learning. We thought what if everybody is going through same thing, would staying connected with peers decrease stress levels?

We went on to understand Social Connectedness next:

Human beings are inherently social creatures. Early humans have traveled, hunted, and thrived in social groups; humans who were separated from their tribe often suffered severe consequences. Social groups provide us with an important part of our identity, and more than that, they teach us a set of skills that help us to live our lives. Feeling socially connected, especially in an increasingly isolated world within pandemic, is more important than ever as it is resulting in student burnouts.

Social interaction plays an important role in learning. Interacting with other people has proven to be quite effective in assisting the learner to organize their thoughts, reflect on their understanding, and find gaps in their reasoning. Underneath the broad umbrella of social interactions and learning, variants can range from peer learning, reciprocal teaching, learning by teaching, learning by observation, learning by doing, and self-other monitoring.



We started by understanding impact of learning through social connection in different user groups and areas of life.

We started by understanding impact of learning through social connection in different user groups and areas of life and explored on these: (refer to the picture above)

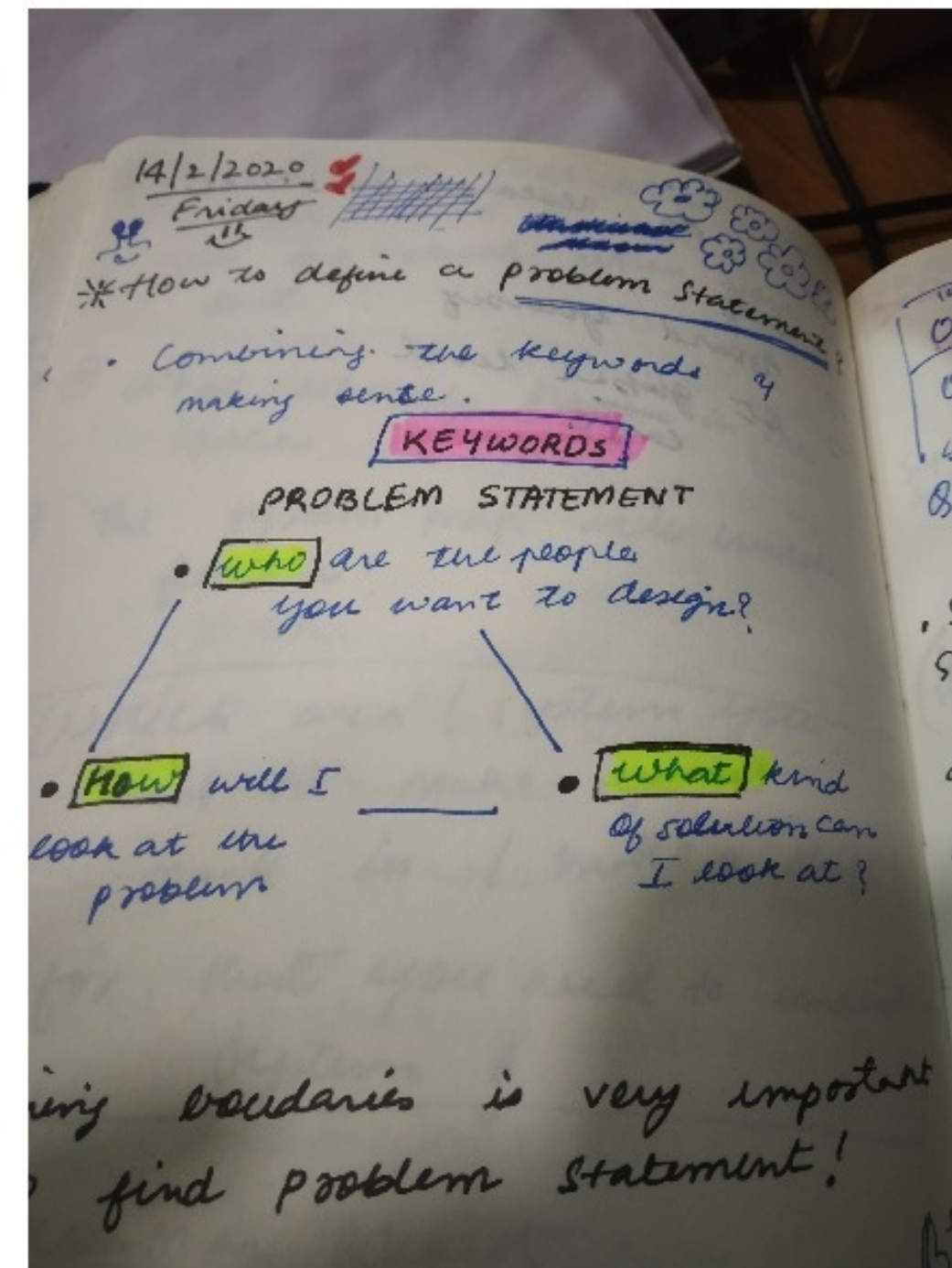
1. Role of social connection in students life.
2. Understanding the factors and interactions involved - interactions with people, technology role, interactions with object and data.
3. Outcomes of these interactions - physically, mentally, emotionally and on environment.
4. Does this part of Miro board look like Tetris game when you blur your eyes? :-0

(Mind Blown!!! May be we need coffee break now?!!)

The above exercise helped us identify the user group as graduate and undergraduate students. A mental health study done on over 8,000 individuals in Delhi found that college students were the most affected by the pandemic and the lockdown. Students registered 41 per cent increase in emotions of anxiety/fear/worry, 54 per cent increase in anger/irritability/frustration, 27 per cent in hopelessness, sense of sadness was increased by 17 per cent, and 38 per cent increase in the feeling of loneliness/boredom.



benefits from peer to peer learning	before COVID	after COVID	effects
team work & group studies	easy, quick and transparent; hands on learning	less engaging, longer, resource dependent	time consuming deadlines - seem scary
Knowledge sharing	was more verbal and then online resource sharing	Collaborative tools increased; more visual now, recording	More information is received, but inability to process it alone makes you feel lonely
Communication skill	Easier one to one interaction	Mostly verbal; other forms of communication & expression is difficult	Anxious to connect with new people - hard to be the first one to contact
Network building	Simple way to meet new people was during conferences, fests, cross-collaborative classes, workshops, events, etc	interacts with known people mostly and difficult to reach out to new people online even when enrolled in the same class.	Was easy to catch up people over chat... how to schedule the new - loss of informal environment, feel alienated from cool things
Peer Feedback & Mentoring	better refined concepts with more ppl to discuss, helps in developing practice, deeper engagement	need to look for new ways to give feedback; discourages to participate - decreasing empathy	feel less motivated to give solid feedback; also feel anxious when they don't get honest feedback
Emotional Support	Easy and effective ways to get the peer help in the same physical environment	Difficult to approach for support due to uneven distribution of schedule, timing issues	Feel lost on inability to share and support - Loss of physical space makes it difficult to identify if a friend is feeling low



NARROWING DOWN TO THE PROBLEM STATEMENT:

Online learning platforms have managed to provide education and collaboration to the college students, but peer to peer learning is still limited in online mode and have affected student's holistic growth and performance in academics and personal space.

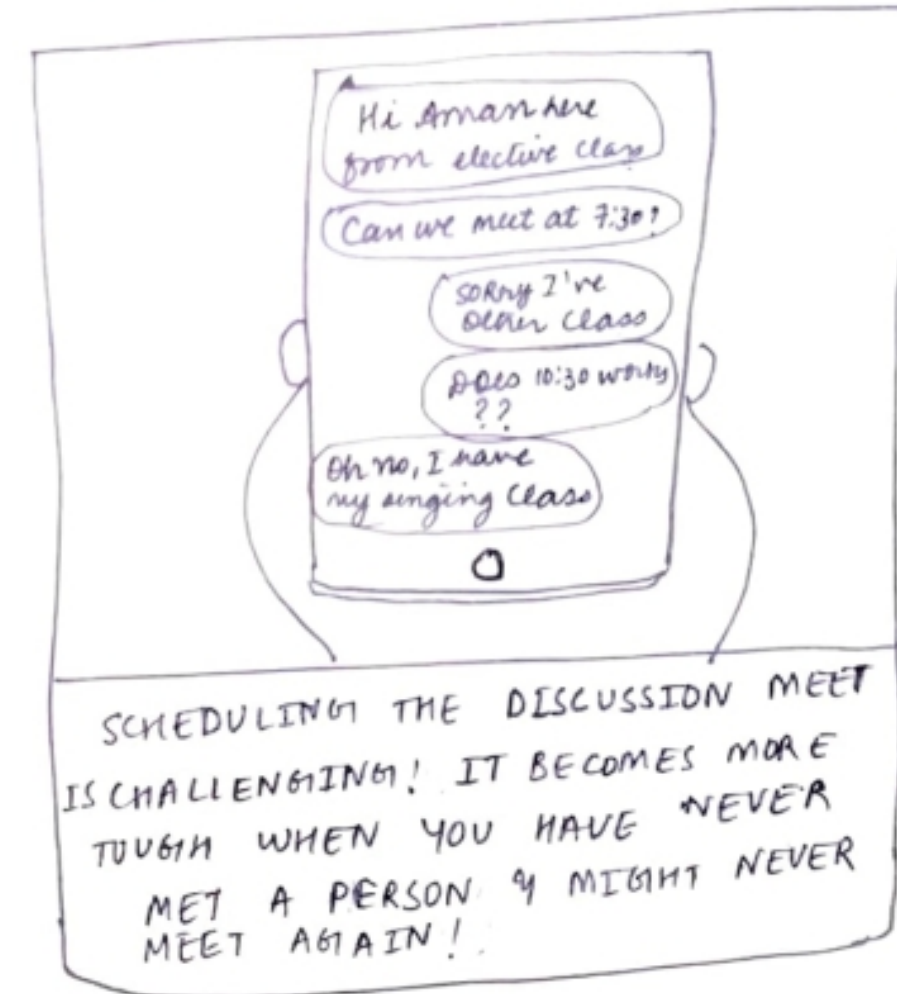
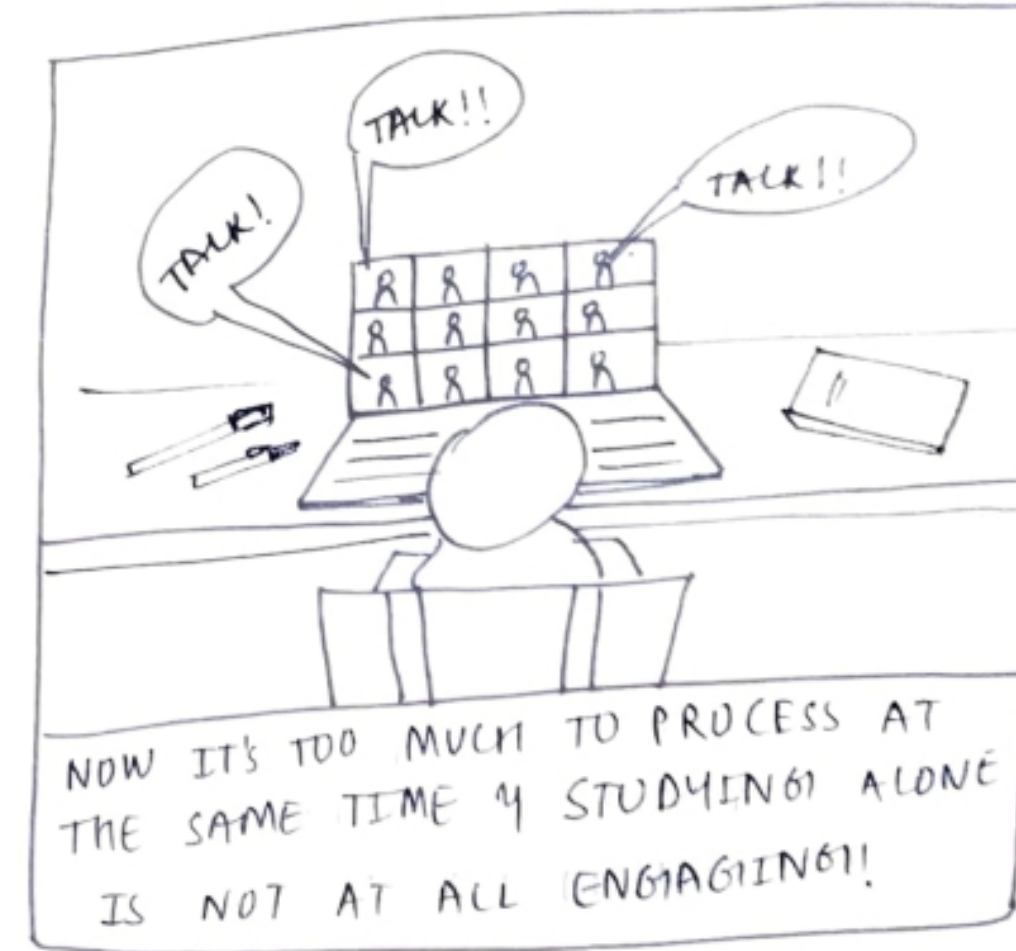
Regular interactions with peers might keep them motivated to learn and also have relevant social interactions to avoid feelings of loneliness or isolation.

DEFINING THE DESIGN CHALLENGE:

We realized they need a space to feel comfortable, discuss, study and share knowledge and emotions. Hence we came up with the following design statement :

To create an environment where college peers feel more comfortable in meeting new peers and also share learning & knowledge resources with each other.

Story boarding the design challenge.



Phase 3: Develop and sketch

After defining the challenge statement focus and goals,

We created 4 HMW's to guide our ideation direction:

1. How might we encourage team work and mentoring?
2. How might we make peers feel comfortable in approaching other peers ?
3. How might we inform them the value of peer to peer learning?
4. How might we modify peer to peer learning online?

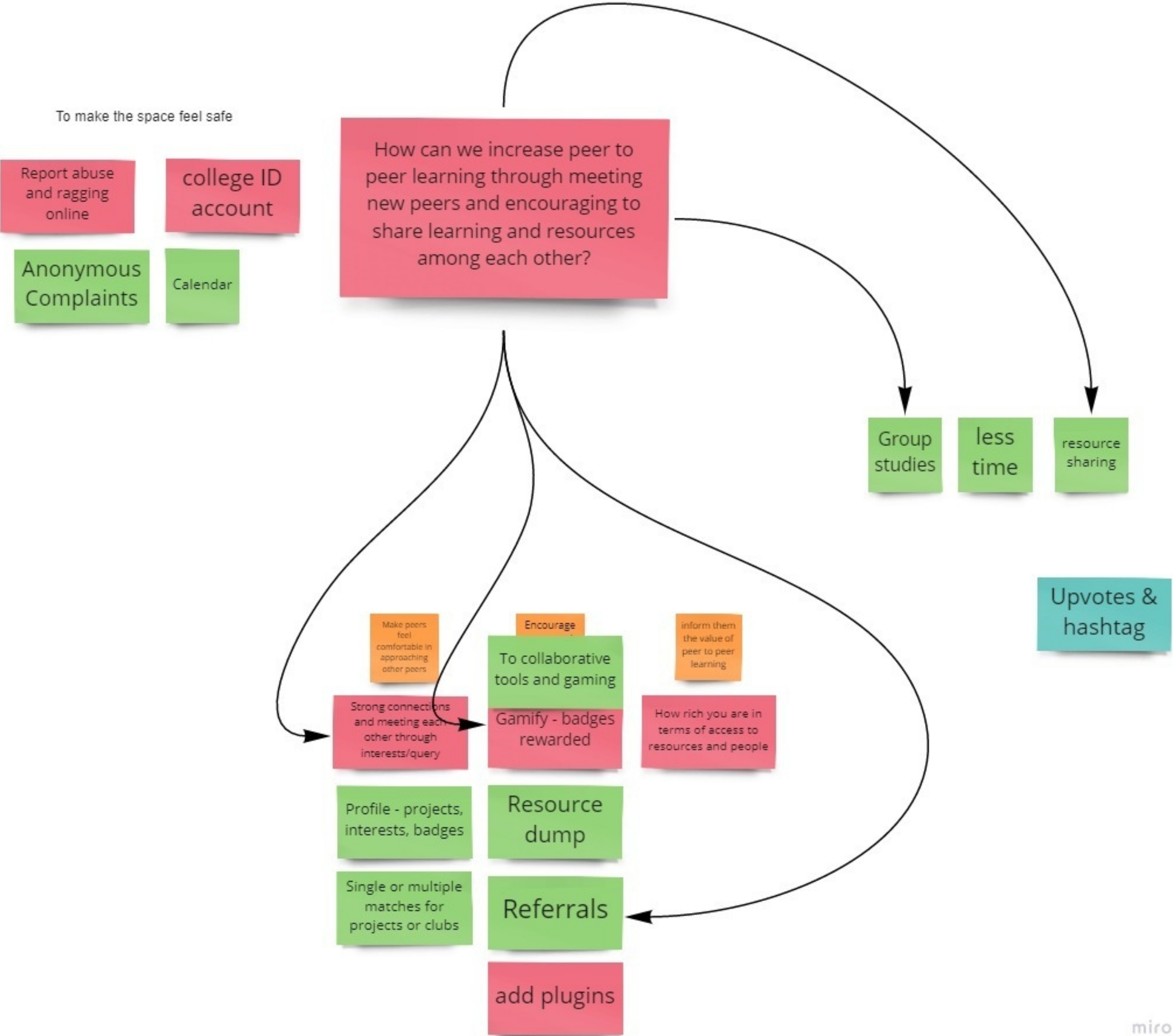
This helped us generate multiple ideas and build challenge focused concepts together.

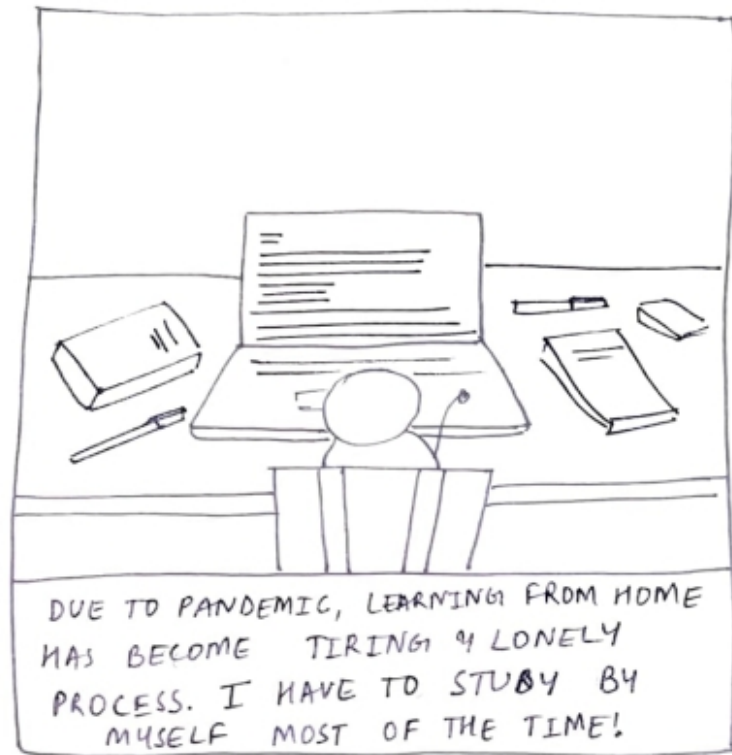


Ideas to concept

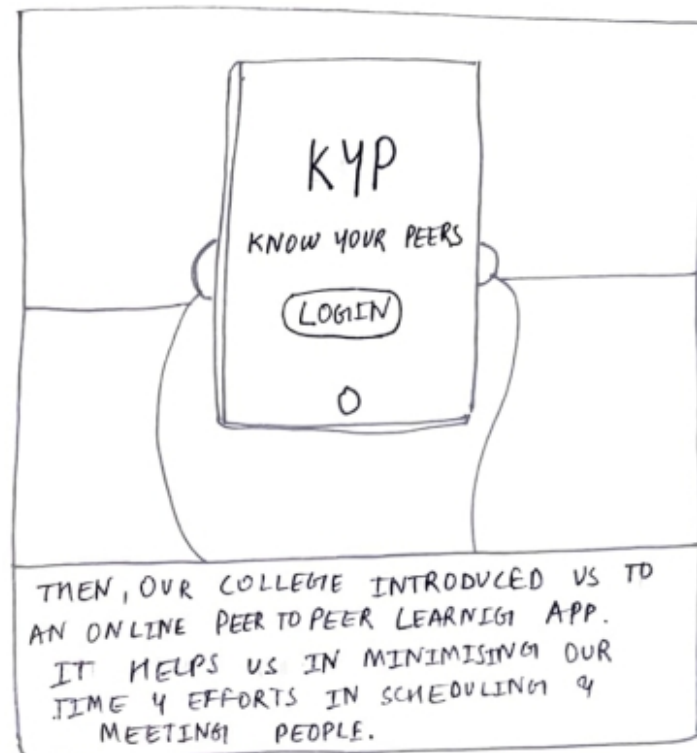
After some tinkering and research, we thought it is best to create this environment like a social media platform as students are very active here and would find this environment easy to adapt. Any physical space ideation we had seemed dangerous to try under the current circumstances.

We brainstormed on some possibilities of what points help us deliver a safe, easy and collaborative environment. Narrowing down to identifying major challenges we wanted to solve in the context, we selected need to make strong connections and new connections - this would help people develop interpersonal skills and that would give them confidence to communicate, in turn developing social connections & networks. Encourage students to share knowledge with each other. Create study groups to tackle pressures of assignments, deadlines and exams supporting each other. Create a safe environment.

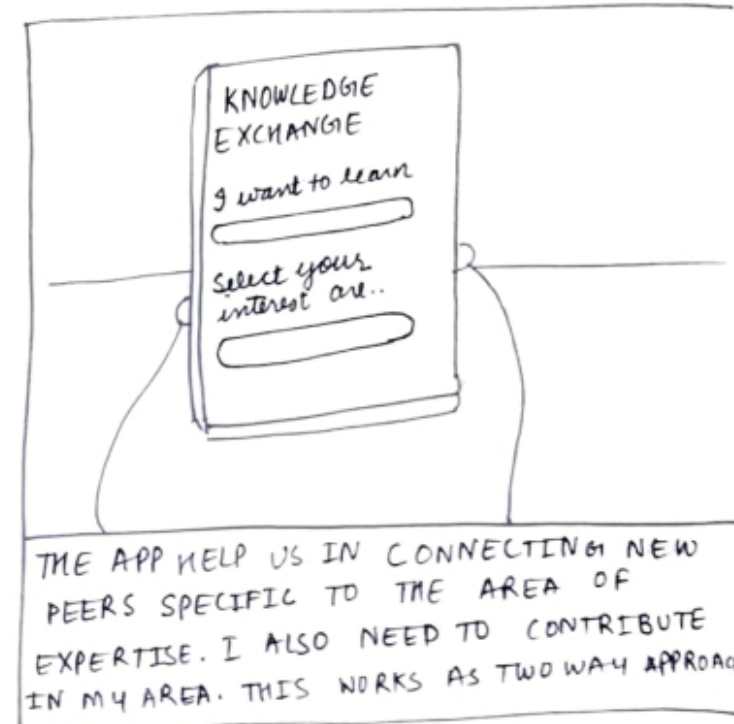




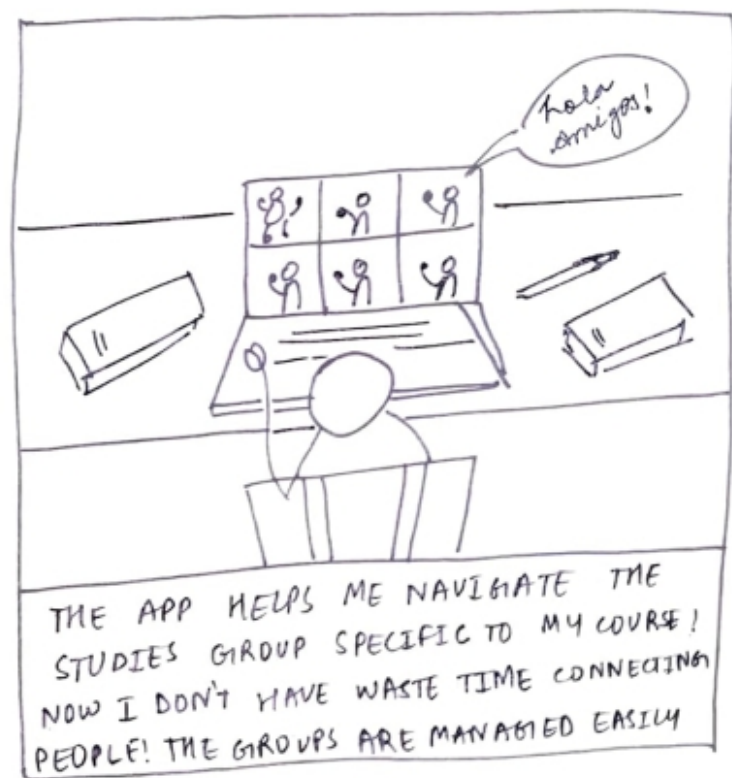
DUE TO PANDEMIC, LEARNING FROM HOME HAS BECOME TIRING & LONELY PROCESS. I HAVE TO STUDY BY MYSELF MOST OF THE TIME!



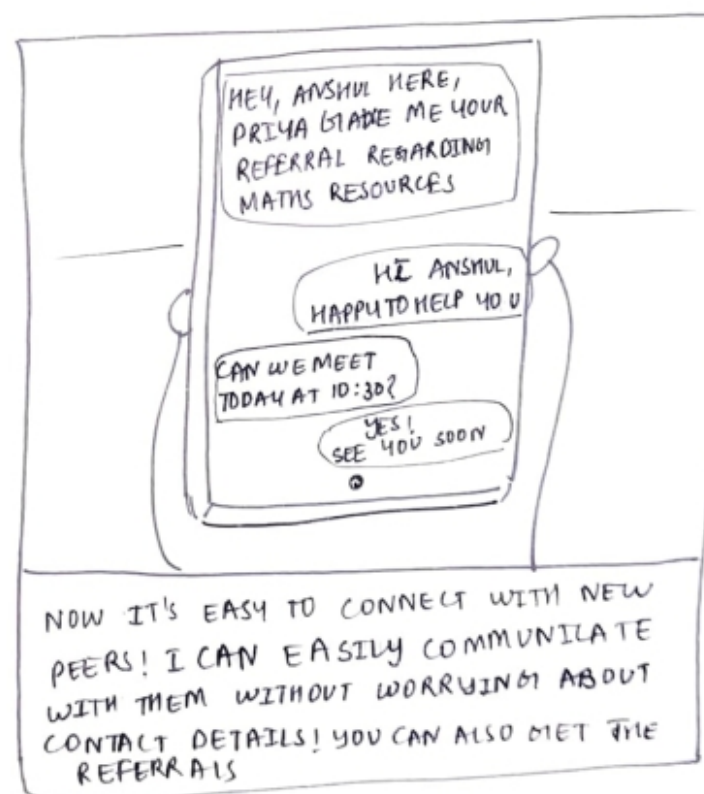
THEN, OUR COLLEGE INTRODUCED US TO AN ONLINE PEER TO PEER LEARNING APP. IT HELPS US IN MINIMISING OUR TIME & EFFORTS IN SCHEDULING & MEETING PEOPLE.



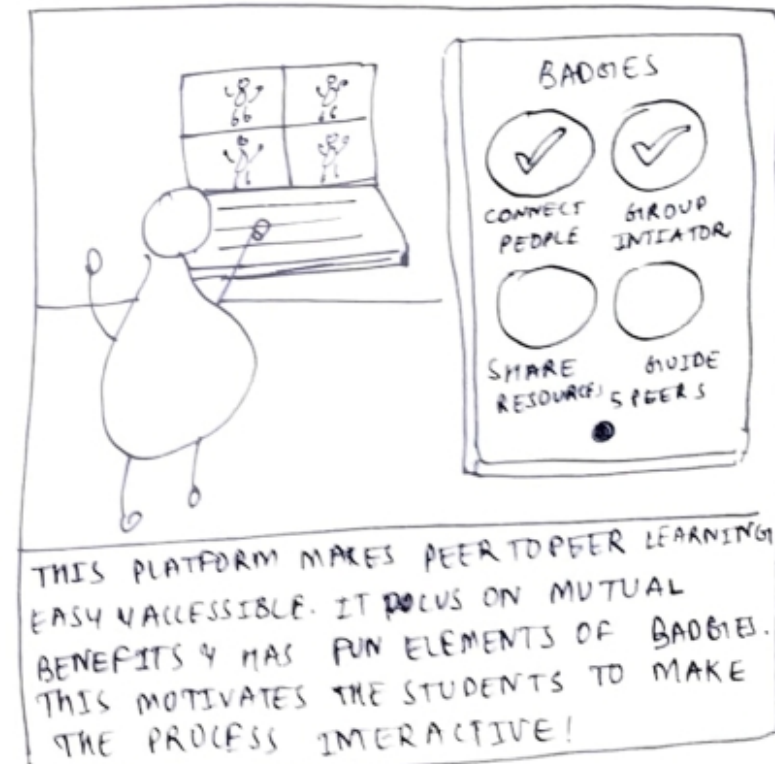
THE APP HELP US IN CONNECTING NEW PEERS SPECIFIC TO THE AREA OF EXPERTISE. I ALSO NEED TO CONTRIBUTE IN MY AREA. THIS WORKS AS TWO WAY APPROACH



THE APP HELPS ME NAVIGATE THE STUDIES GROUP SPECIFIC TO MY COURSE! NOW I DON'T HAVE WASTE TIME CONNECTING PEOPLE! THE GROUPS ARE MANAGED EASILY



NOW IT'S EASY TO CONNECT WITH NEW PEERS! I CAN EASILY COMMUNICATE WITH THEM WITHOUT WORRYING ABOUT CONTACT DETAILS! YOU CAN ALSO MEET THE REFERRALS



THIS PLATFORM MAKES PEER TO PEER LEARNING EASY & ACCESSIBLE. IT FOCUS ON MUTUAL BENEFITS & HAS FUN ELEMENTS OF BADGES. THIS MOTIVATES THE STUDENTS TO MAKE THE PROCESS INTERACTIVE!

STORYBOARDING CONCEPT: USING KNOW YOUR PEER TO ENCOURAGE LEARNING AND

In order to address these concerns, we created KYP-Know Your Peers, a digital platform in form of an app that enables and encourages peer to peer learning through meeting new peers & stay connected with old ones; also sharing learning and knowledge among each other.

This kind of learning enables development of interpersonal and communication skills. This would help them participate in more social discussion tackling the stress of deadlines, exams, assignments, finding resources in the new pedagogy. And the best part is they are not alone in the process, they work with each other and save each other from burnouts and mental fatigue to ensure the boat doesn't drown. While sharing the learning and growing experience, they also build organic connections with each other.

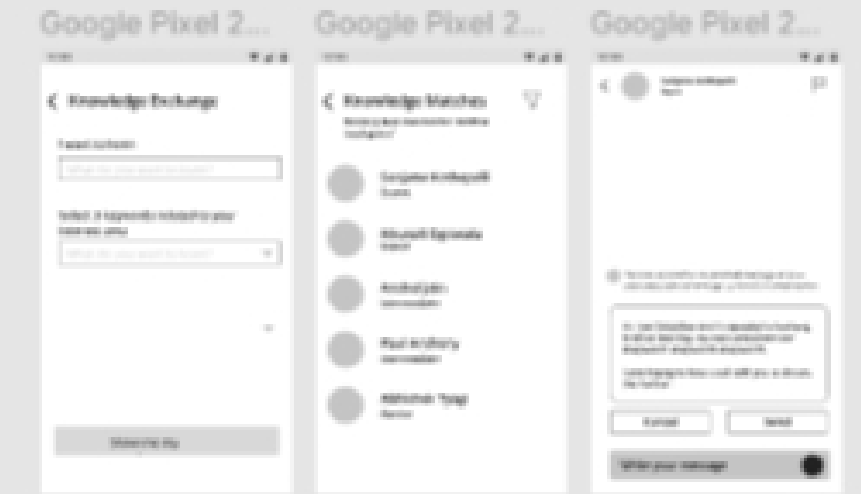


Create low-fi wireframes

Setting up



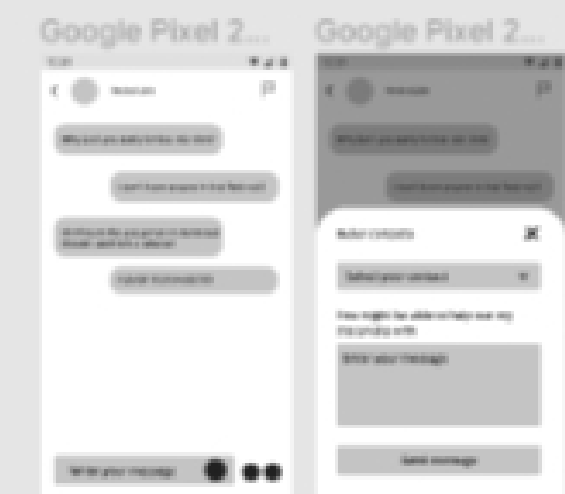
Meeting new peers



Study groups



Refer a peer



Badges





Phase 4: Deliver (please click on the images to view in full mode)

We designed high-fidelity screens for our developed concept and wireframes, and validated the features by connecting back to the gaps identified in the process.

Setting up the profile

Using college ID to sign up and setting up profile using interest areas, skillsets, knowledge areas etc.

Meet new peers and learn

Don't know whom to approach? Through Knowledge Exchange, get matches for mentoring/meeting peers with similar interests or knowledge.

Refer a peer to other peers

Know someone who can help your friend in their field? Refer your known contacts to your peers to help them, and increase their networking circle by connecting through yours.

Form study groups to share resources and learn/teach each other

Make study groups according to courses registered and help each other stay on track and share resources with each other, engage in discussions, review each other work and get quick peer help.

Earn badges and show your skills in resume

Every time you connect a peer to your contact, help a peer, create study groups etc., you get closer to earning badges on the platform, which are verified and can be put on the resume to show management, team work and other soft skills.

Team Firebolt Signing off!!!!



<https://teamfirebolt.tumblr.com/>