

### **Problem Statement**

Covid-19 has forced a paradigm shift in teaching institutions across the world. Technology and infrastructure are trying to replicate offline teaching models in the online world. However, a fundamental challenge of social connections and bonding remains to be overcome. How do we go about addressing this aspect?

Step 1: Empathise Step 2: Define Step 3: Ideate Step 4: Prototype Step 5: Test Feedback Inclusion

Interactive: Click here to directly access



## Step 1: Empathise

#### How did we go about it?

We conducted a survey within student community of IIT Bombay on the effects of online teaching mode on their social interactions. <u>Click here to see the results</u>

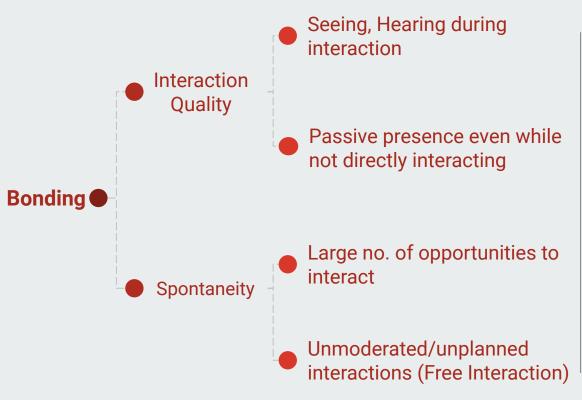
### **Core Insights**

- The dominant form of communication is texting. A majority of students value seeing and hearing while interacting. Thus, frequency of interactions feels inflated (more texting) but significantly less rewarding
- Unplanned casual social interactions (henceforth referred to as <u>spontaneous</u> <u>interactions</u>) <u>are absent</u>. These interactions are (by general consensus) the <u>most major</u> <u>source</u> of social interaction.

- Even at planned interactions, people <u>cannot interact</u> <u>freely</u> as these sessions may feel moderated and the natural "side-conversations" that emerge in group conversations are impossible. This leads to a <u>less</u> <u>rewarding</u> social experience.
- For the perennially busy student, non "social-need" focused, <u>passive interactions</u> such as commuting together, breaks between class and run-in interactions are <u>indispensable</u>. Even spending time with someone whilst working is socially rewarding as it contributes to bonding and maintaining relationships. This is <u>completely absent</u> online scenario.



# **Step 2: Defining Core Insights**



#### **Need Statement:**

University Students need more frequent and engaging social interactions with their peers to bond better and be comfortable in their social relationships

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### Step 3: Ideate

Idea #1: Classroom centric social media app - akin to 'Discord' but with teaching channels

Idea #2: Pairing students randomly for video, audio call via internet chatroom; 'Omegle' for college

Idea #3: Distressed Plushie, Inverting Plushie sends distress signal to friends prompting responses

Idea #4: Replicating the interaction in classroom prior and post classes based on proximity chat

Idea #5: Simulating the institute virtually where course resources are present at different locations

Idea #6: Food discounts which become valid only after talking to classmate for defined time intervals

Idea #7: App that matches you with colleagues based on common interests; platonic college 'Tinder'

	Idea #1	ldea #2	ldea #3	ldea #4	ldea #5	Idea #6	Idea #7
Seeing and Hearing	Good	Good	Poor	Good	Poor	Good	Okay
Passive Interaction	Okay	Poor	Good	Good	Good	Poor	Okay
Frequency of Interactions	Poor	Poor	Okay	Good	Poor	Okay	Good
Free Interaction	Good	Good	Good	Good	Good	Good	Poor



### Step 4: Prototype - Idea #4

Logic	<ul> <li>Since students are always online, prior to and between classes they can chit-chat</li> <li>By using proximity chat, we can emulate the passive interactions people crave</li> <li>People would enter others' bubbles as they could in real life, promoting spontaneity</li> <li>With increased video participation, interactions become more engaging and rewarding</li> <li>Social activities can be incentivised on the online mode via avatar cosmetics etc.</li> </ul>
Feasibility	<ul> <li>Video conferencing features are clearly well-established and developing</li> <li>Proximity chat is a feature that has been well tested in video games for years</li> <li>The concept of "bubbles" is also a conferencing feature that is pre-existing (breakout rooms)</li> <li>The true technical issue is feature integration with themselves and existing edutech platforms</li> <li>Training students and teachers to use the software and platform affects feasibility, but with our UI/UX design and minimum time investment, this is a welcome initial cost</li> </ul>
Relevance	<ul> <li>The platform is built to promote frequency and engagement in a student's daily interactions</li> <li>It solves the issue of classrooms having become online video conference lectures alone</li> <li>As a bonus, this platform would eliminate scrambling to multiple different platforms for lectures and tests by being a one-stop for all things school/college-related</li> </ul>

# Step 5: Testing and visualisation



### Feedback and development

"The system seems too constrained, maybe allow schools to set their own parameters wrt locations, maps and activities"	High customizability and modularity would be the future goals. For feasibility purposes we propose 3 versions (School, Residential University and Non Residential University) for the base model as there is low infrastructural variability across institutions		
"A lot of people attend online lectures through mobile phones/tablets. Would this platform be compatible with all devices?"	The feature that takes most processing power would be live time environment rendering. Most phones are capable of this, however the UI/UX would have to be modified for more intuitive experience.		
"This platform sounds data-intensive. What is the alternative for students with limited internet?"	The platform makes provisions for class recording and streaming. Those affected by resource constraints can and access the recordings at a more convenient time daily.		

Future iterations will systematically focus on bettering the:

- Data and processing optimisation to work on low-end/mobile systems.
- UI/UX and making it more aesthetically suited to help those who find new apps hard-to-navigate
- Customizability in mapping places, resources etc to fit any schools or even businesses
- Integration of various productivity apps and websites like Office, GSuite, Wikipedia, etc.