



DESIGN CHALENGE

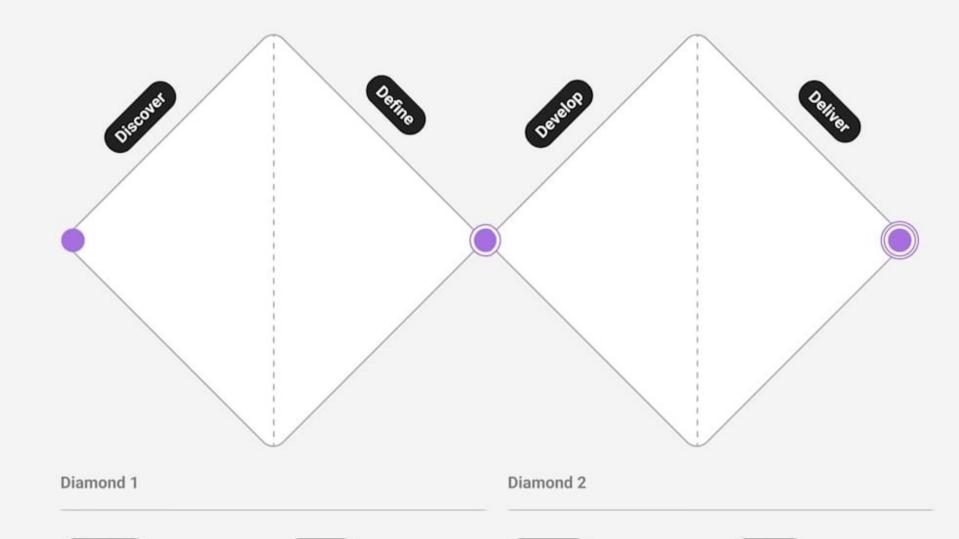
Srinidhi Bhat Goa College of Engineering, Goa

Process Planning

The Double Diamond Process

I decided to take up the task of identifying a problem in the field of 'Collaboration' in the Indian context. Since collaboration is a huge field to dive into, I decided to choose the domain of 'Communication' within collaboration and design an inclusive, accessible and useful solution to tackle the problem using digital technology.

I used the **Double Diamond Design Process** throughout the challenge.





- Problem exploration
- Foundational research
- User journey

Define

- · Synthesising research
- Customer archetypes
- Product requirements
- HMW...
- User stories

Develop

- Concept exploration
- User flows
- Wireframes
- Prototyping
- User testing
- Design reviews
- Recommendations & rationale



- · High fidelity design
- Design reviews
- Design documentation
- Handoff
- Design QA

The Problem Statement

"The increase of **decentralized communication** over **multiple platforms** due to the current situation has led to **problems** and irregularity in regular continuous collaboration, resulting in problems to students, teachers as well as parents."



*The problem statement was defined after thorough research, but is presented here for easy readability.

User Research: Interviews

I conducted 5+ in-depth **1-on-1 interviews** with potential users from various age groups, professions, work-styles etc. I also conducted a virtual **group discussion** with students from various colleges and backgrounds to identify their situation, understand their problems and how they have dealth with it so far so as to get a **diverse viewpoint** on their **pain points**, **needs** and **requirements**.

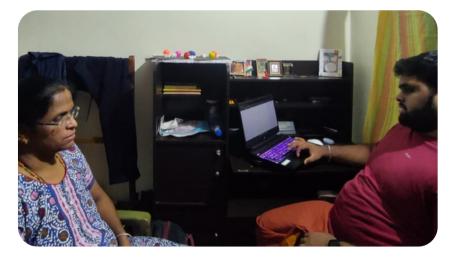
Instead of scavenging through different apps for my resources, if they are available at one place, it be great. The faculty prefer using apps that are easier for them to use and this results in them making us use multiple apps and platforms for the same tasks which is annoying. As a teacher, I handle multiple classes in a day, Younger people get used to new technology easily, but we have to struggle. So , we use apps that we find easier to use.









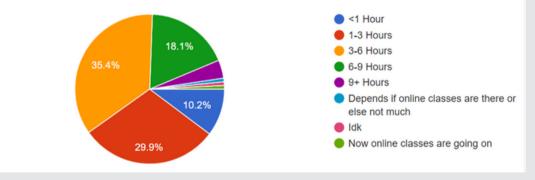




User Research: Survey

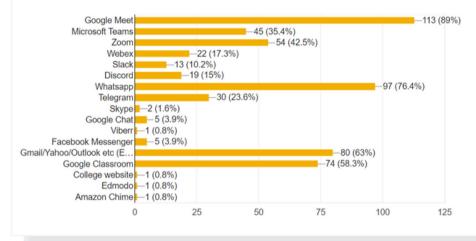
To get more insight on the potential users' pain points, I drafted a survey with 10 questions, that focussed on the daily life and average usage of various communication apps and the span of time they use it for. The data collected gave me new insights on the users' pain points and needs. The survey was answered by 127 people.

On average, how much time do you spend on the above apps per day? 127 responses



Which of the following apps have you used recently for official institute communication? (Select all that apply)

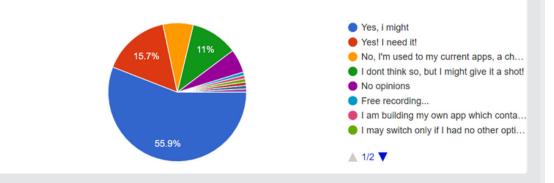
127 responses



Majority of the surveyees said they used communication apps for about 3-6 hours day whereas few others said they use it for 1-3 hours a day followed by almost 20% and more said they use it for 6-9+ hours a day! This confirmed my belief that the reliance of communication aps has increased along with the time spent on it.

The most interesting part of the survey was that even though 50% of the people were fine with communicating through multiple apps, around the same amound said they might consider using an app that can get all the different features of various apps into one, and 15% said they absolutely needed it! If you were to be presented one app from which you can handle features of multiple apps mentioned above, would you consider using it?

127 responses



How do you feel about communication through multiple apps?

127 responses



Contrary to my belief however, more than half the people said that they didn't actually mind using multiple apps for communication whereas about 14% said that they hate it and find it frustrating. Almost a quarter of the surveyees had no opinion on it.



User Persona

Based on my User Research, I mapped out a **Persona** to represent the target user group.

Having a persona eased the design task to a great extent. It enabled better ideation and helped me to create a better user experience for the target user group.



Age: 20 Occupation: Student Degree: B.E Location: Goa, India Hobbies: Reading. Writing, Travelling

Vivek Naik

Vivek is a 3rd year Engineering Student pursuing Mechanical Engineering from JS College of Engineering, Goa. They are a studious person who attend classes regularly. The pandemic seriously affected their way of studying as they had to switch to online classes. This problem grew worse when their faculties adopted to various non-conventional modes of communication like Whatsapp, Telegram, Google Meet, Teams, Zoom etc with no uniformity. They are extremely frustrated as the study resources are spread over 3-4 different apps which make it difficult for them to access them when needed.

Wants & Needs

About

- They want the classes to resume to offline mode very soon.
- They want uniformity in the way communication happens in their college.
- They want one app to do everything.
- They want resources to be accessible to them \when the time comes
- They want to study and excel in their academics

Frustrations

- Classes are stressful especially after they have shifted online.
- They don't have a high-end phone with a lot of storage to install multiple apps required by the faculty for the same tasks.
- They are getting more stressed and anxious due to the problems they face.
- They sometime have a hard time figuring out new apps and find it embarassing to ask others.

Problem Identification

Based on the user research, I zeroed down into 4 problems that I wanted to focus on to find solutions.

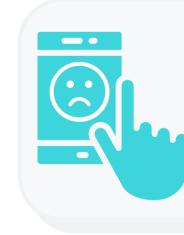


Too many apps in the market for the same tasks





Decentralised communication through multiple platforms



Disorganization among the shared resources

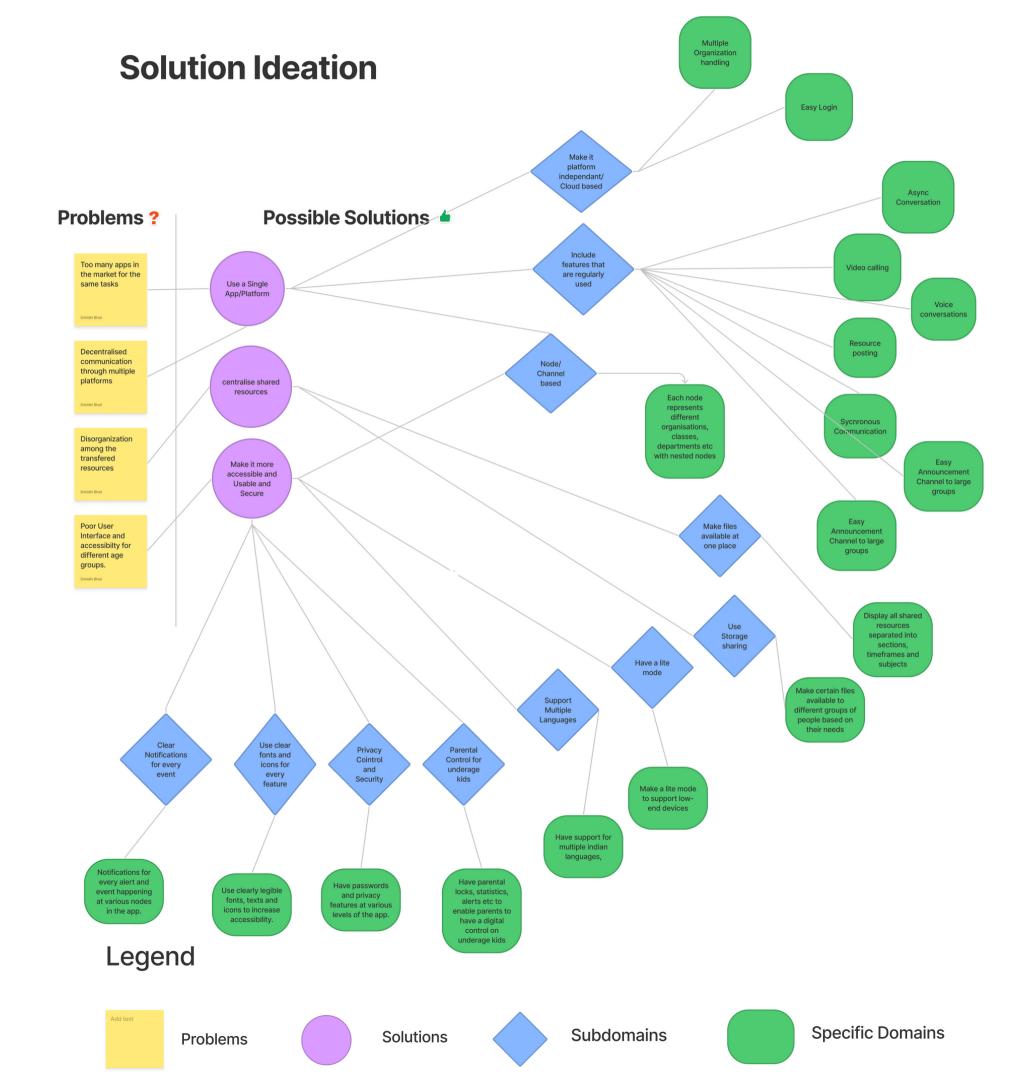
Poor User Interface and accessibilty for different user demographics.

Solution Ideation

Based on the problems identified, I decided to brainstorm and branch out these problems further, and list out the domains of the solutions. This resulted in me zeroing down on the specific features that could be implemented to be acessible and usable by most of the potential users like Vivek.

I decided to focus on creating a mobile app and a smartwatch app since these are some of the most used devices to consume digital technology.





Solution Description

"OneSpace is an app with a main focus on **Centralising Communication** like never before. It will cater to majority of the work classes and age groups by making it accessible and easy to use. It will focus on reducing the clutter and giving an all-in-one platform experience to the users."







Based on the problems identified, I envisioned 6 features to aim at catering to them.

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One app for everything. No clutter, no mess.



Centralised Communication space.



Unified storage system with systematic storing and sorting.



Easy Accessibility for different demographics and work and study classes





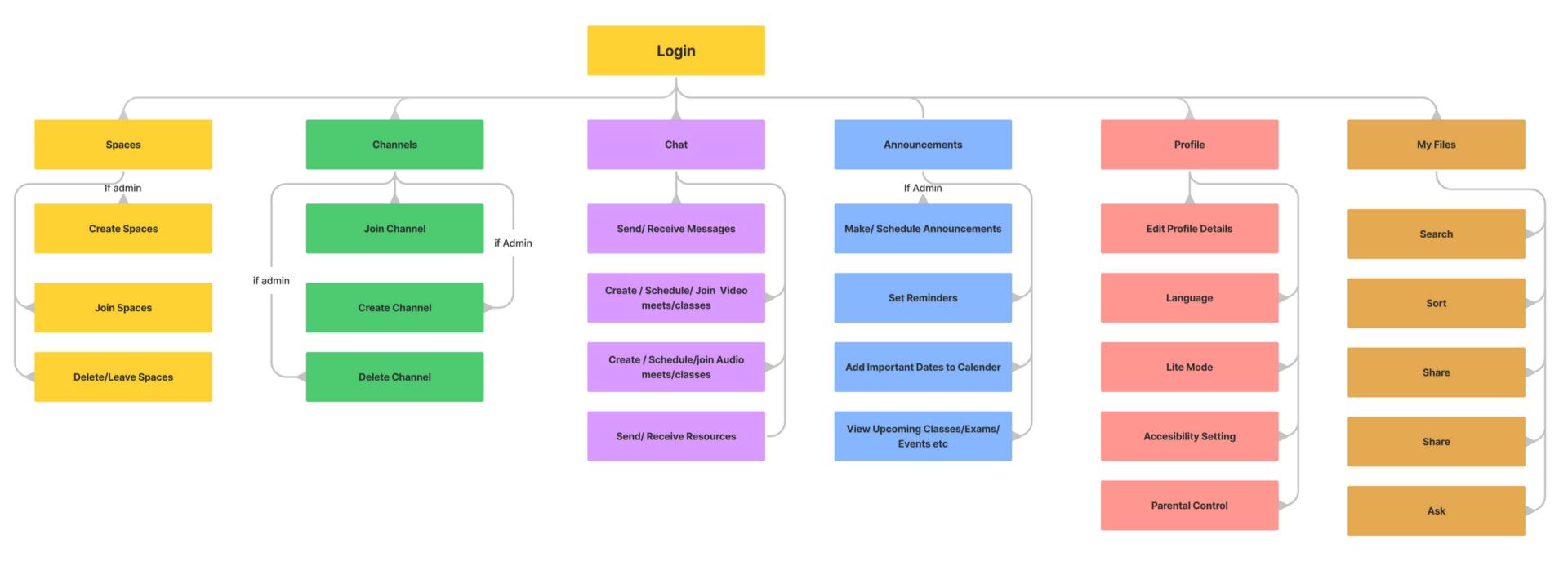
Node/Channel Based communication to handle multiple points fo communication.



Parental Lock and control for kids who are underage to monitor their digital well-being

Information Architecture

Next, I decided to lay out the User Flow or Information Architecture for the solution to aid me with the design process and flow of the solution.





Wireframes



I created **wireframes** to help get a better idea in solving the users' **frustrations** and **pain points** and zeroed down on some wireframes that I felt I could **improve** and convert into **High-fidelity design**.

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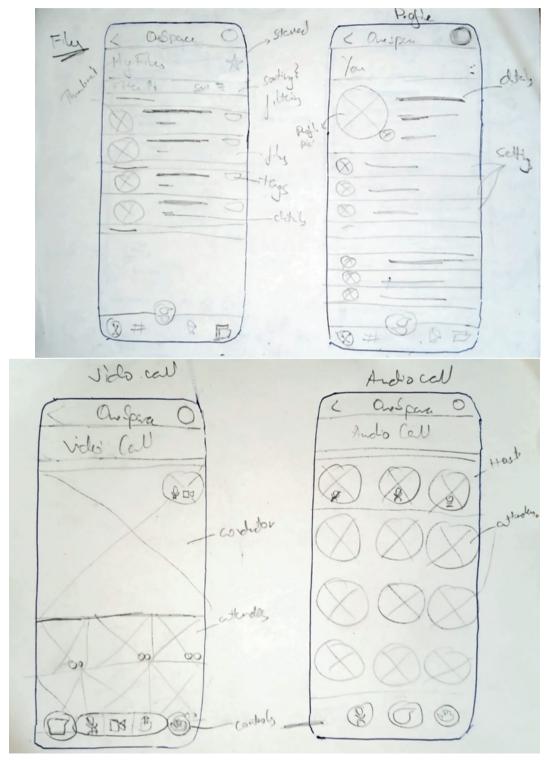
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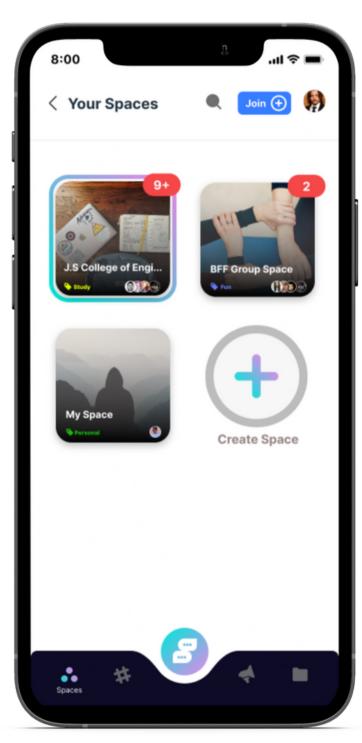
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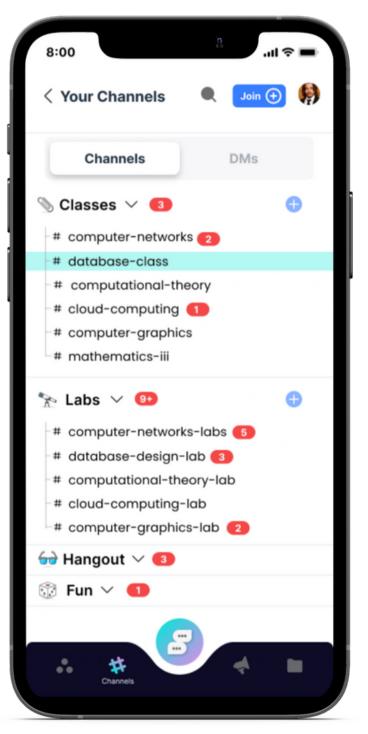


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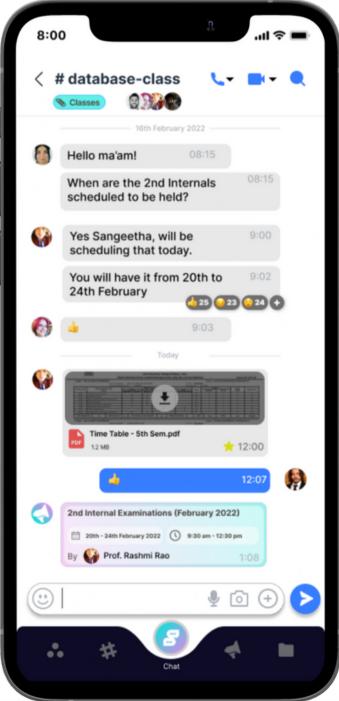


Spaces Selection for the user to switch easily between different spaces

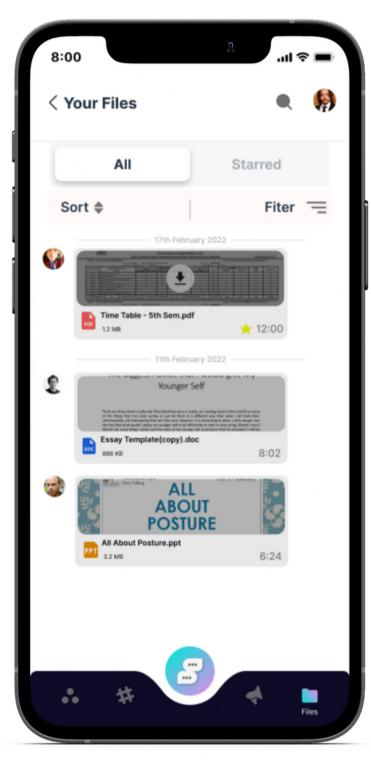


Different **channels** for the user to switch. Channels are also **categorised** for ease of accessibilty

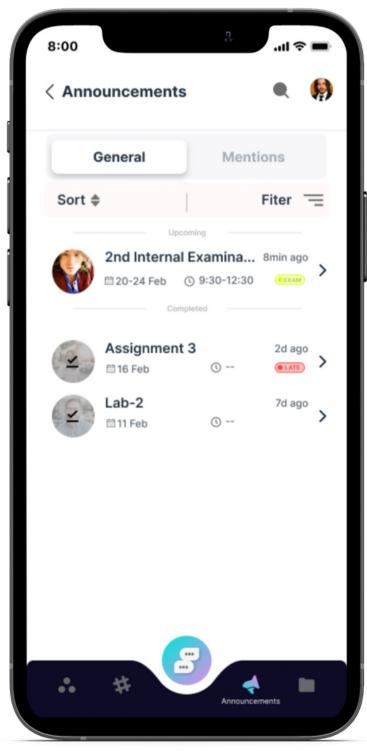




Chat section for a **channel/DM** with easy switch to **make/schedule audio/video** calls. The chat also highlights **announcements** and **files**



Unified Storage Space for all files to be one place, easilt sortable, filterable and searchable!



Announcements center at one place, so you never have to miss another **deadline** or important announcements ever again!

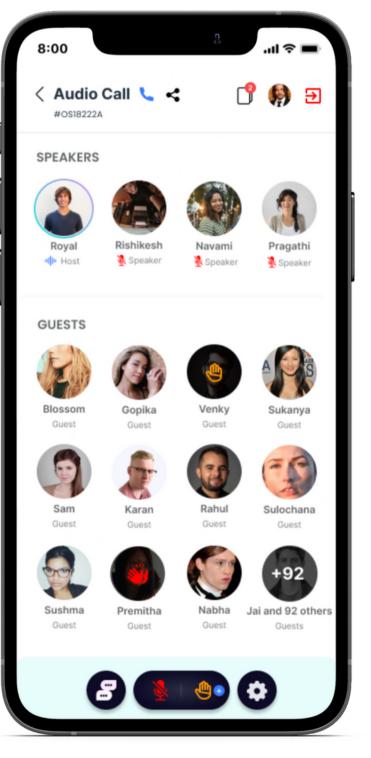


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Parental Control Center to proide insights and data of their offsprings' usage of the app and other controls



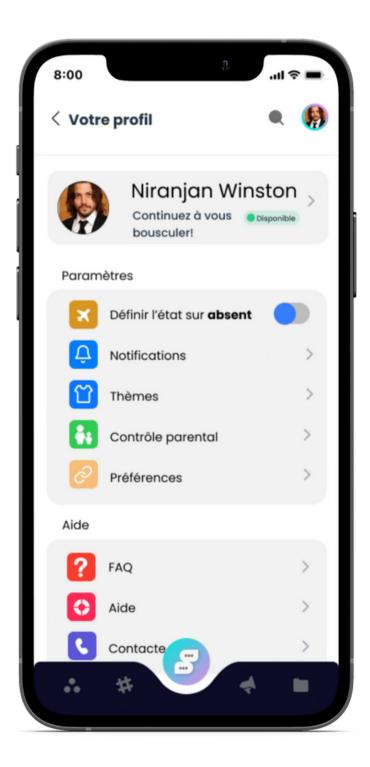
Audio Call Space to enable audio only meetings between people





Video Call Space to enable Audio Visual meeting space for classes and meetings between people





Multiple Language support for more accessibility and better usability for non-english speaking users iWatch app for further accessibilty and usability





Future Targets





dedicated app for PCs and Mac



studies with potential users.



Diversify User Groups to further make it more inclusive and easy to use for the next billion users



Approach non-educational institutions to suit the app for their needs



Work on a full on-cloud model along with a

Evaluate the current prototype in usability



OneSpace will ensure the **centralising** of communication like never before. It will ease the burden on Students, Teachers and Parents and make it a lot easier to **collaborate**, **communicate** and work together.

It will ensure that education reaches those with **limited resources**, taking a step towards a brighter and better future for young minds like Vivek and many more.

This is a small step towards Centralising Communication and Collaboration.





OneSpace

