

vilëarn

Product Design • Branding • Web UX

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DESIGN OPPORTUNITY

When the Pandemic hit!

When the pandemic hit, all things including schools transitioned online. K-12 school students were particularly affected.

“A lot of them went to school one day, and the next day it was just ... over!!” – Parent



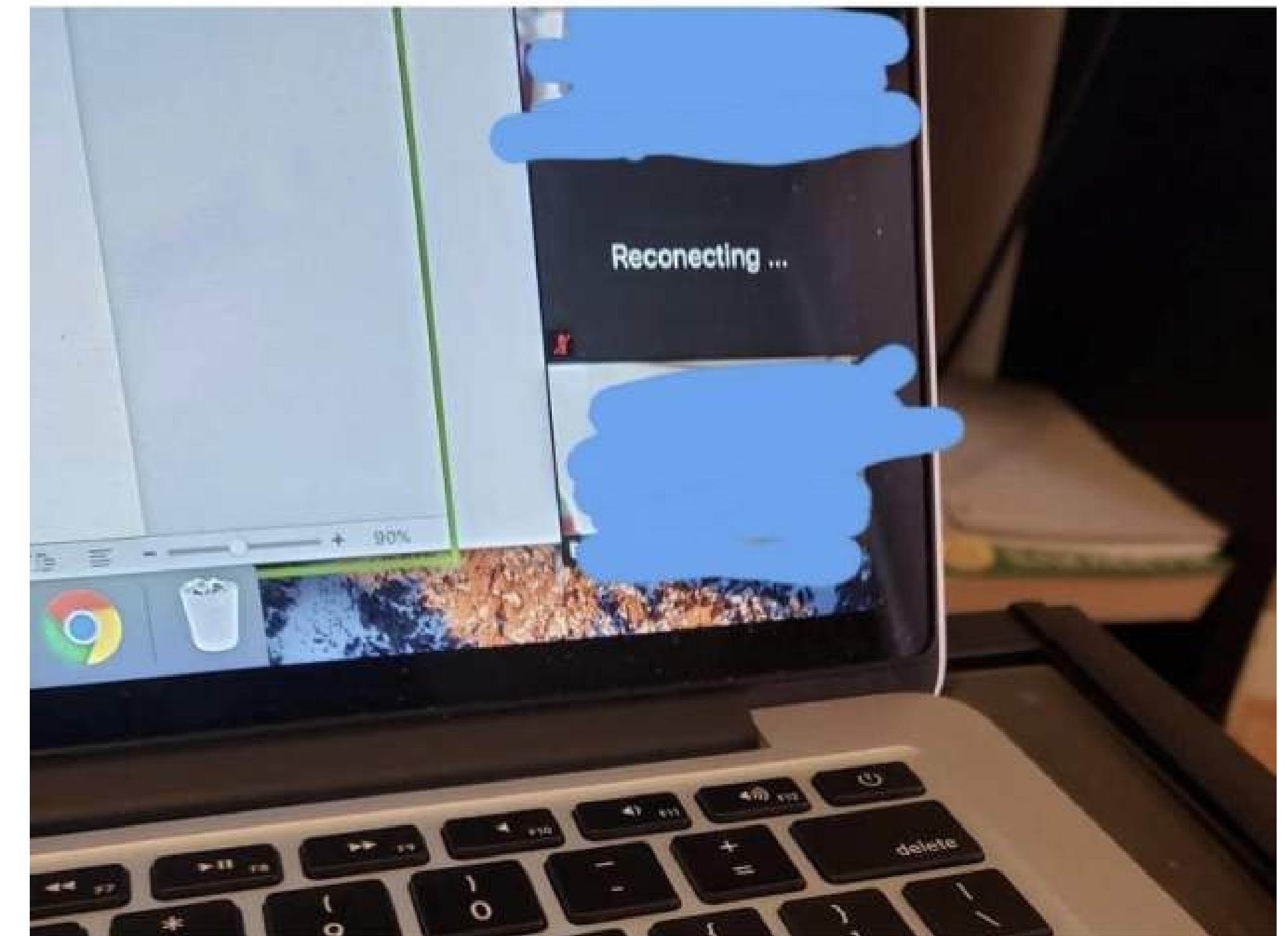
Research & Discovery

INITIAL ASSUMPTIONS

What we thought the problem was.

- 01 Lack of discipline
- 02 More distractions = lesser concentration
- 03 Lack of motivation
- 04 Lack of extracurricular activities

Today one of my 4th grade students renamed himself "reconecting ..." on our Zoom call and pretended that he was having internet issues to avoid participating in our lesson.



PARTICIPATORY OBSERVATIONS

Observing a virtual classroom session

We got an opportunity to attend a virtual classroom session for grade 7 and conducted a workshop for middle school girls and had two key takeaways:



Delhi Public School, New Delhi

One way interaction

Most of the classroom sessions were a one way directed interaction which resulted in kids losing interest very quickly.

Hesitant and shy

The kids felt shy when asked for an introduction or speaking up, as they were hesitant to be alone in the group to say something



CEW&T, Indiana University

Talking to kids revealed a different story



01

The social needs weren't fulfilled: Kids miss their friends.

“School used to be so fun! I used to enjoy a lot with my friends and knowing what they are up to”

02

Students need personal attention and a need for self-expression

“I really miss my Karate & Swimming classes, it's not the same online”

03

Low engagement with online platforms results in low attention span.

“Usually, I just shut my video and eat breakfast during class, many students do that”

PERSONA

Say hello to Alexandra & Katie!



Alexandra Huston

Middle-Schooler

Active

Distracted

Friendly



Katie Martinez

Class Instructor

Focused

Adaptable

Dedicated

Alexandra is a teenager in ninth grade, who has just transitioned to complete remote learning. She finds it hard to concentrate in classes, loses her interest sometime after the class begins. She misses her friends and it becomes frustrating to catchup with everything.

Katie is the instructor for grade ninth students. She found it tough to transition to the virtual teaching methodology but she has now adapted to it. The main challenge for her is to keep the kids engaged and motivated enough to understand difficult concepts.

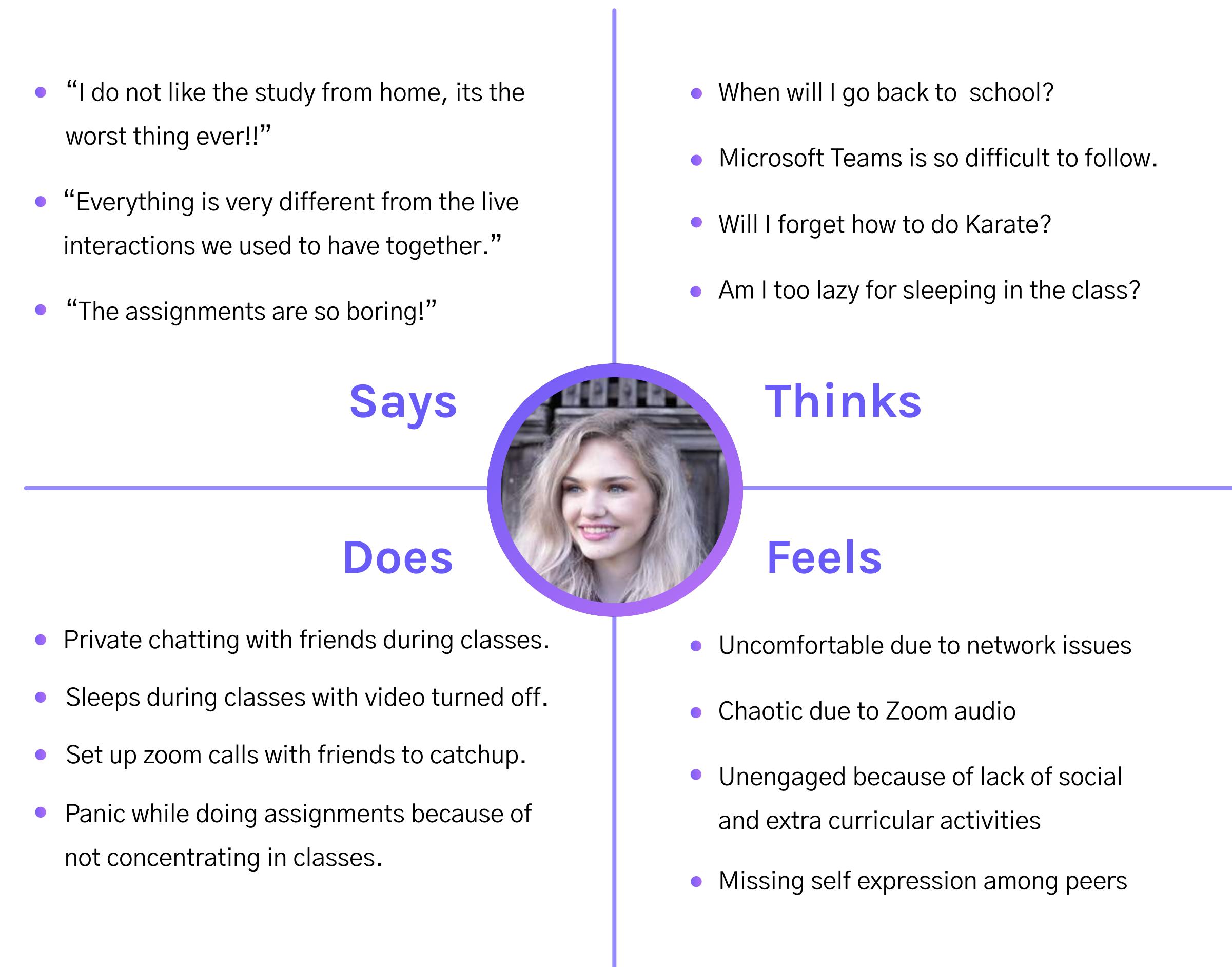
EMPATHY MAP

Stepping into her shoes

Since our research was focused more towards students, we decided to synthesize it and plotted an empathy map for Alexandra.

Key Takeaway

Students are unable to engage and connect during the current format of online classes. They are unable to express themselves and often lose interest.



COMPETITIVE ANALYSIS

But wait, there are so many products already!

The insights generated from the interviews guided us in evaluating the existing products against the metrics that came up frequently.

Key Takeaway

Most platforms were less engaging for kids and had almost no social balance. Although Classcraft seemed promising as it had gamified the complete learning experience it lacked the balance of academic learning.

| | canvas | zoom | Microsoft Teams | Classcraft |
|----------------|--------|------|-----------------|------------|
| Remote | ○ | ✓ | ✓ | ✓ |
| Hybrid | ✓ | ○ | ○ | ✓ |
| Engagement | ○ | ○ | ○ | ✓ |
| Gamification | ○ | ○ | ○ | ✓ |
| Social Balance | ○ | ○ | ○ | ○ |

PRINCIPLES

Core values that need reinforcement



Social Balance

Social ethics and development is an essential component of a child's growth.



Personalization

Teenagers exhibit a need for self expression and developing their identity.



Engagement

Existing learning platforms lack engagement and kids lose interest due to short attention span.



EXEMPLAR COLLECTION

We looked for some inspiration

I. GAMIFICATION & ENGAGEMENT

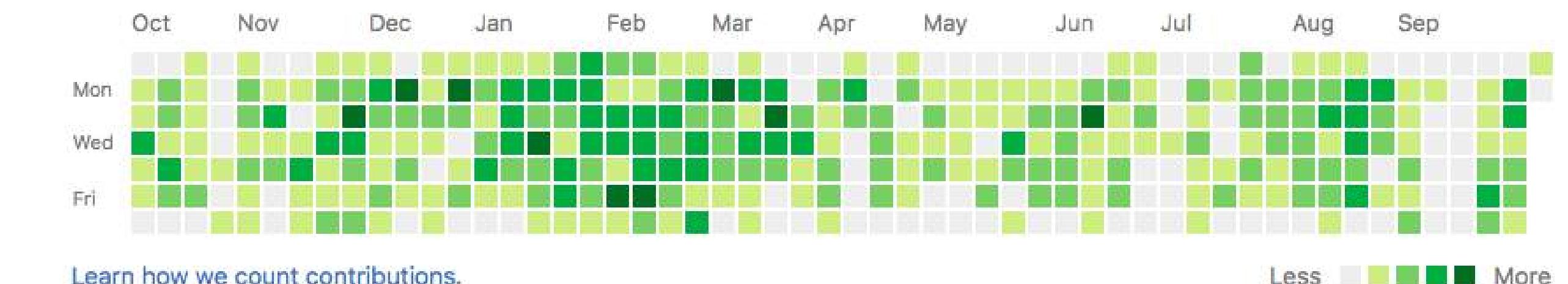
We took inspiration from diverse platforms from language learning platforms like Duolingo to games like Hay Day and even Github. All these platforms help boost engagement while making the tasks much more fun.

“I like Hay Day because you can customize your farm the way you like and make it look beautiful, and it’s easy to play too!”

Duolingo's streaks & points



Hay Day's farm building



Github's contribution streak

EXEMPLAR COLLECTION

And then some more..

II. SOCIALIZATION & PERSONALIZATION

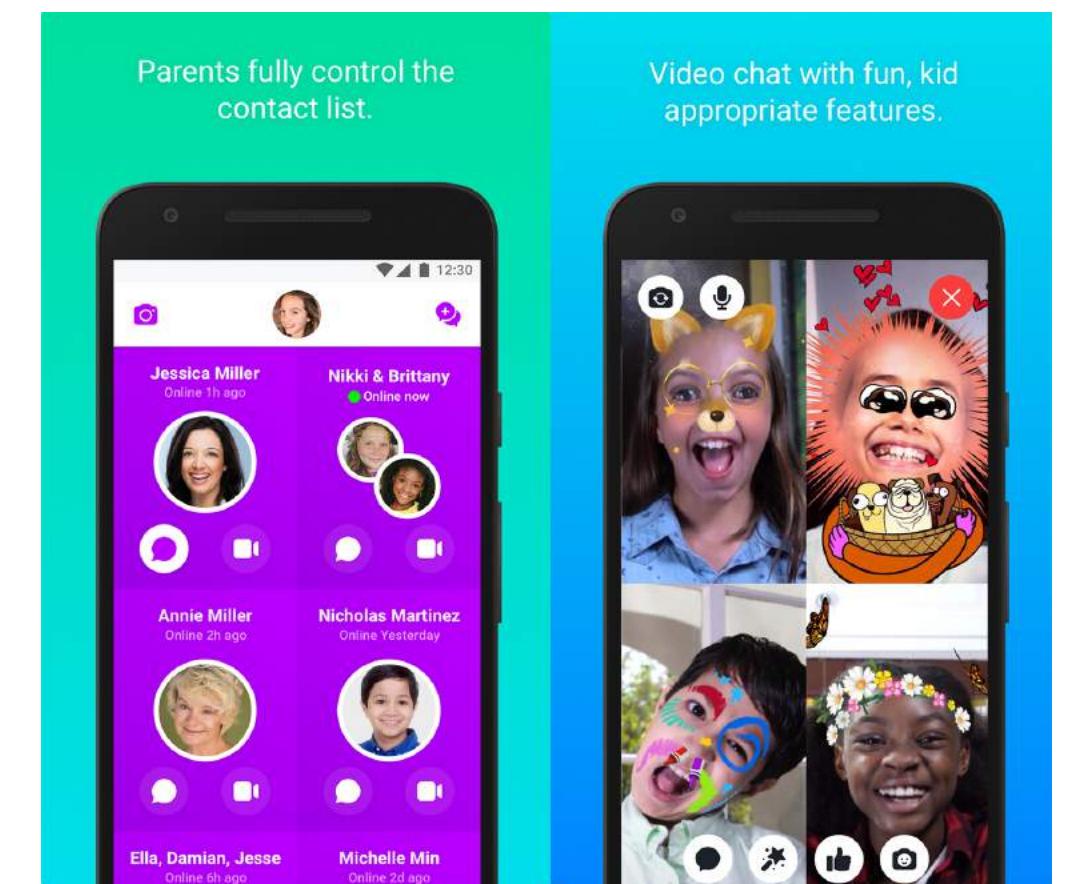
Flipgrid soared during the pandemic because of it's personalized style of creating educational videos and giving children creative freedom. Other apps such as Anne Frank's 3D tour combined with Facebook's messenger Kids features would also make for the perfect collaborative learning environment.

"I like that I can atleast chat with my friends on personal chat on Zoom. We also do Zoom calls to work together."

Flipgrid's creative video making



FB Messenger's Kids social app



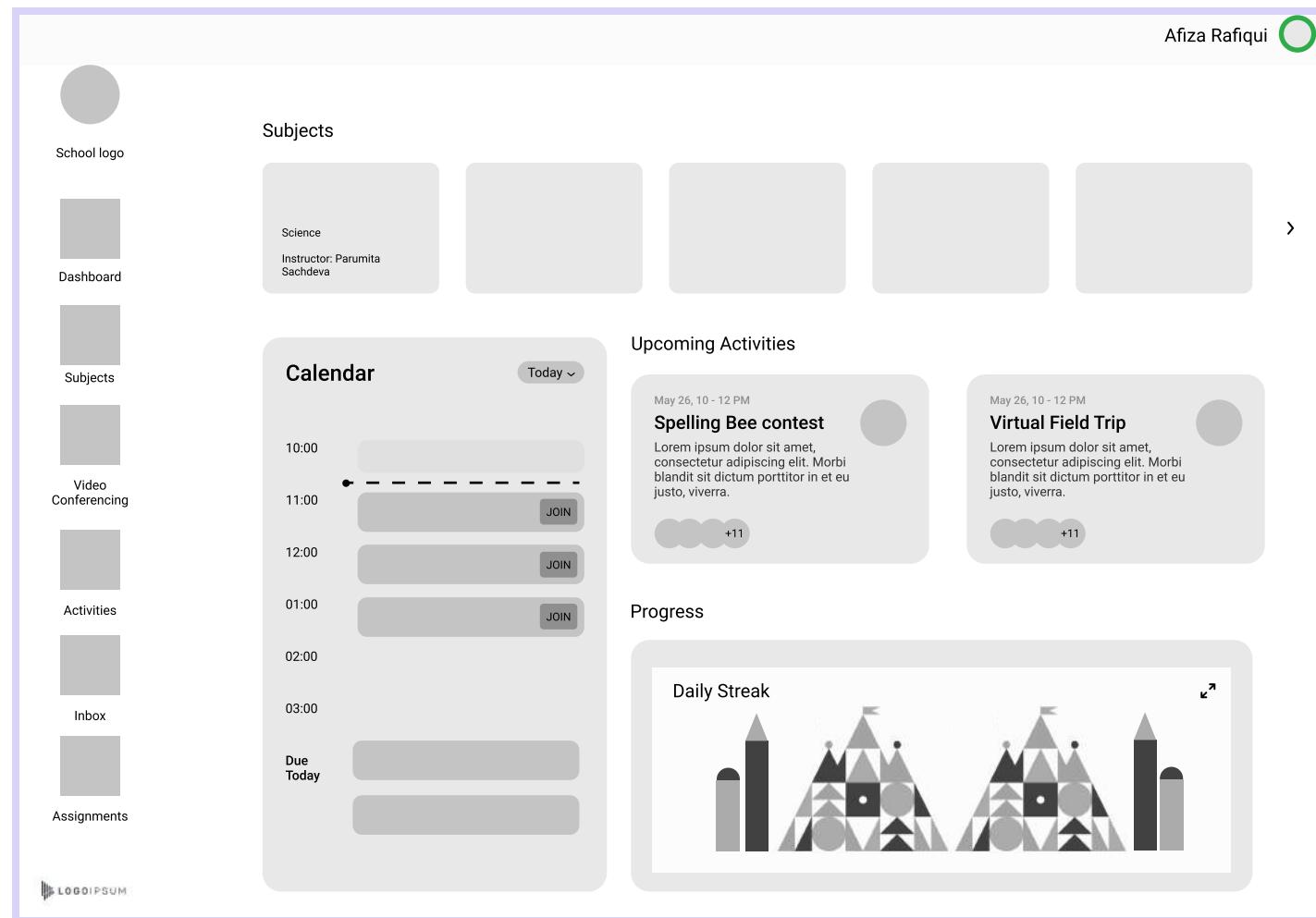
Anne Frank's House 3D Tour

Ideation & Prototyping

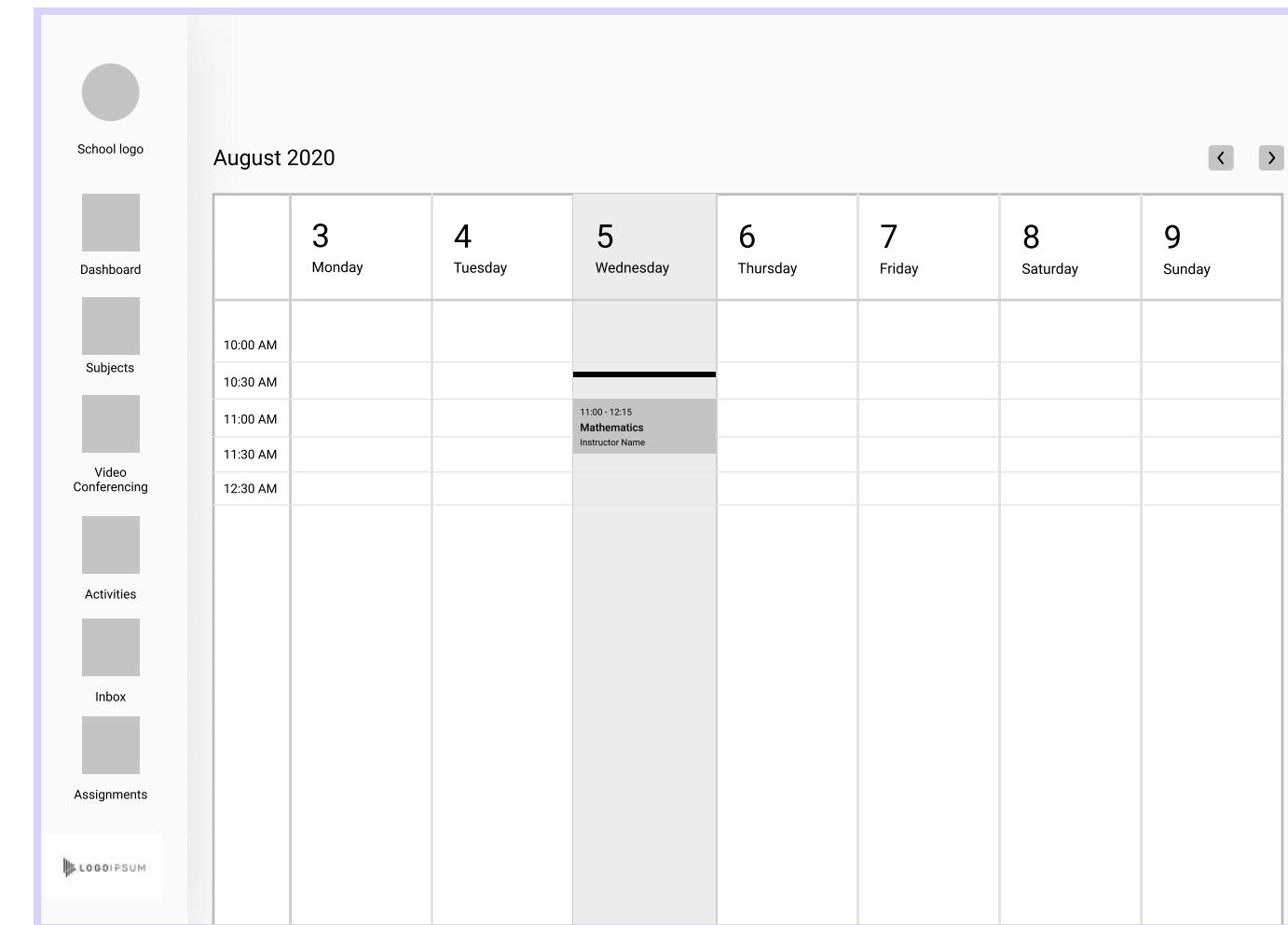
ITERATION I

Sketching out the product

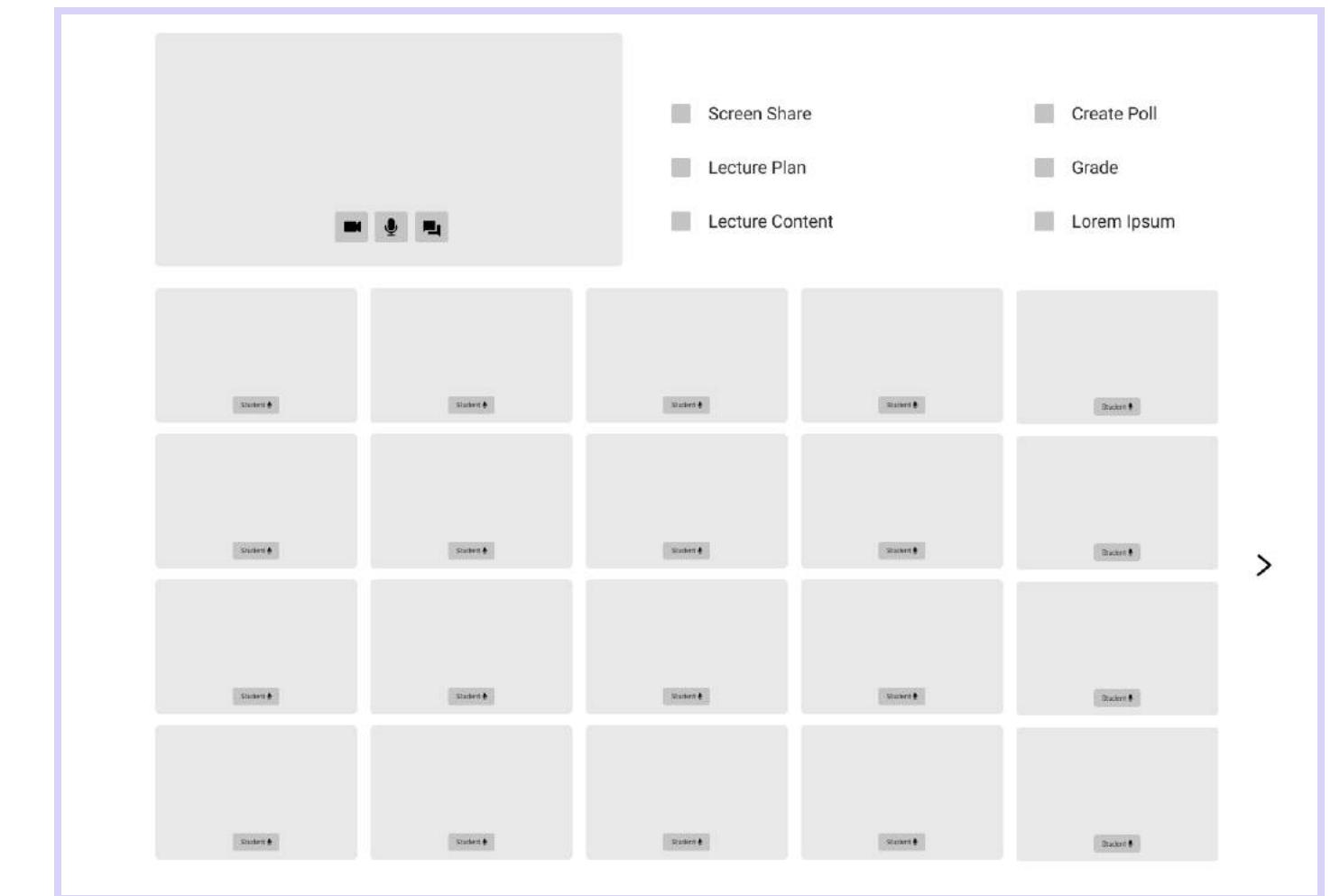
We started ideating by making some low fidelity sketches. This was mainly done to get some initial feedback.



Student Dashboard



Calendar View

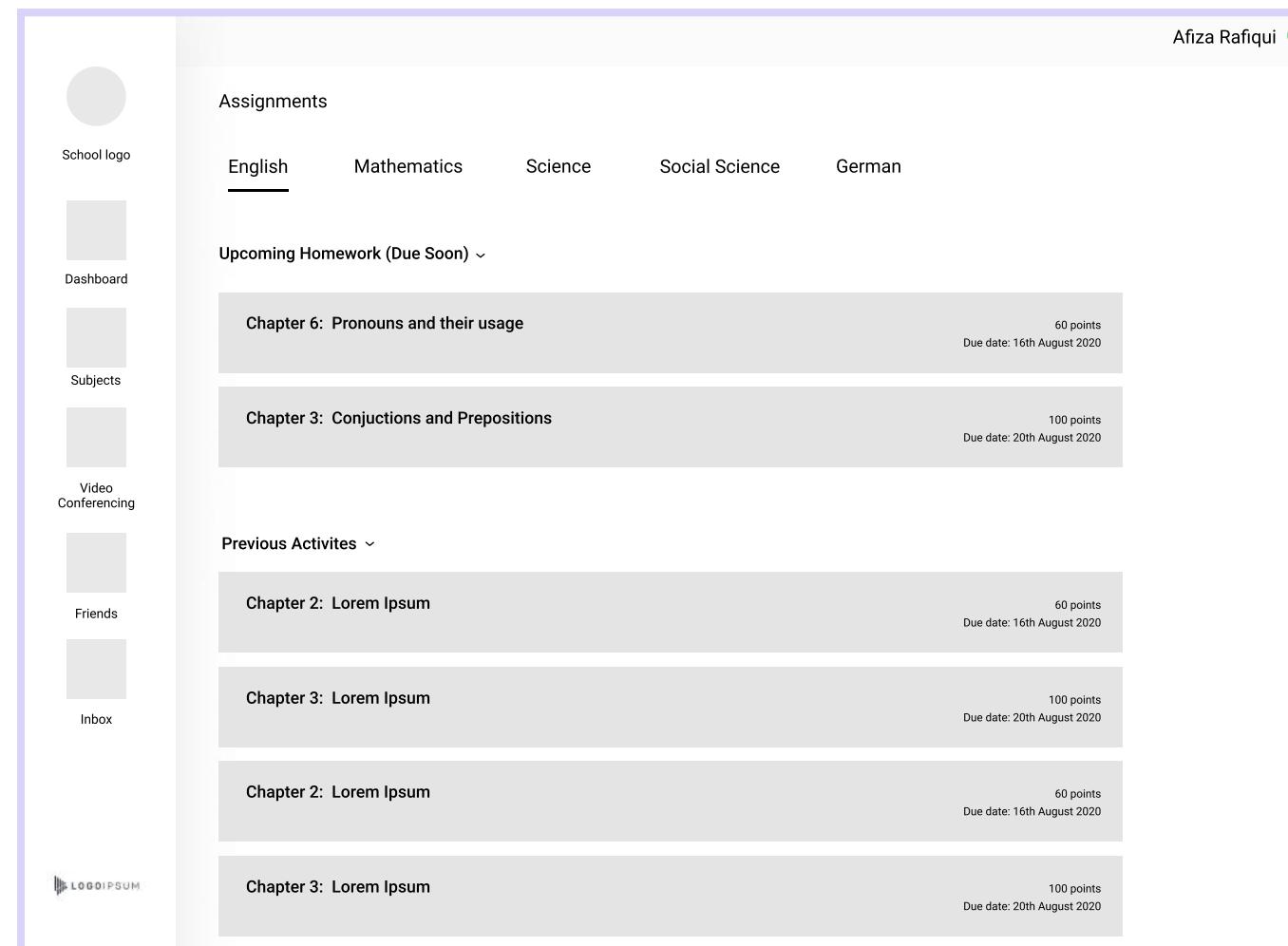


Video Call View

ITERATION I

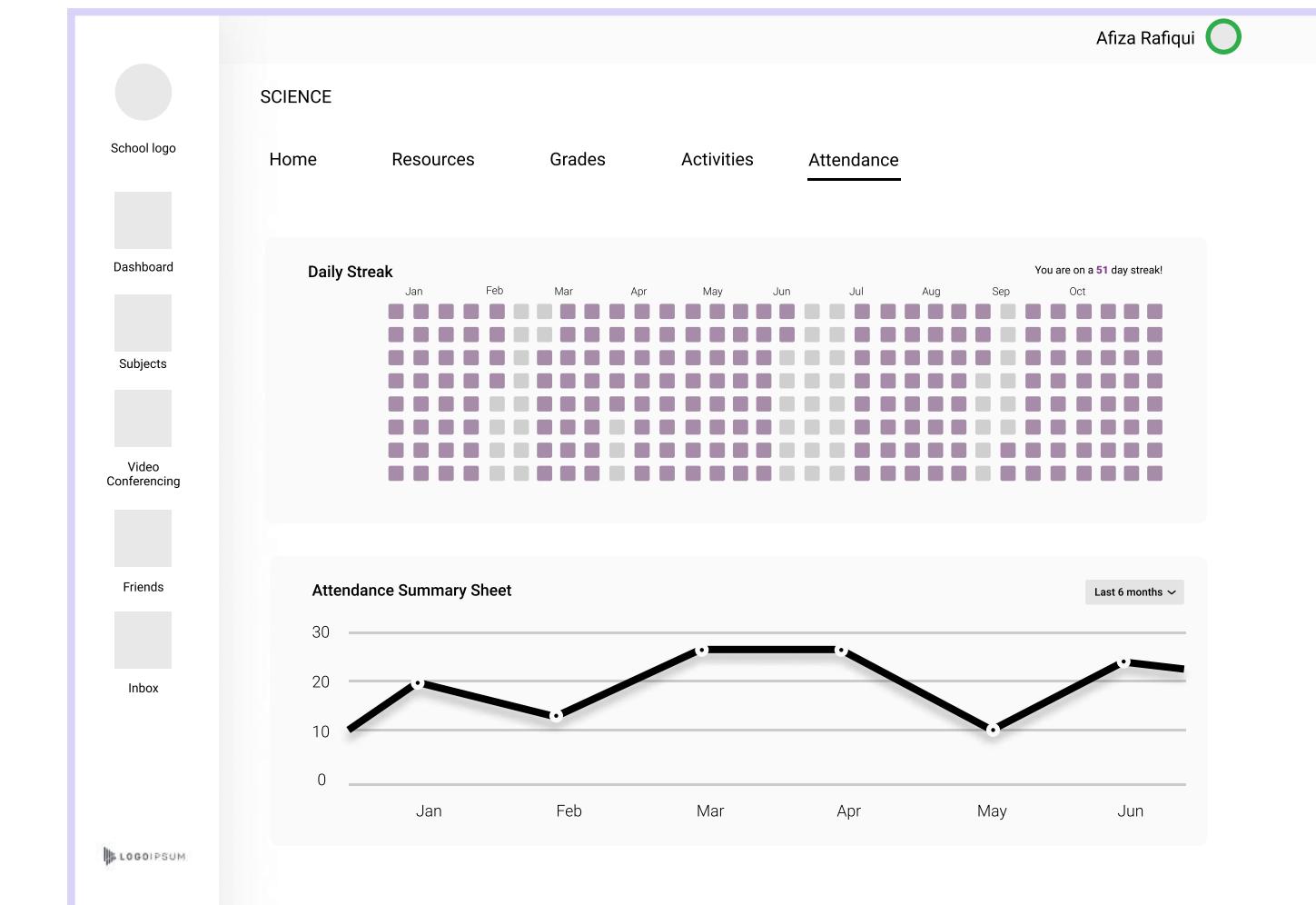
Sketching out the product

We started thinking divergently and from different perspectives of both students and teachers.



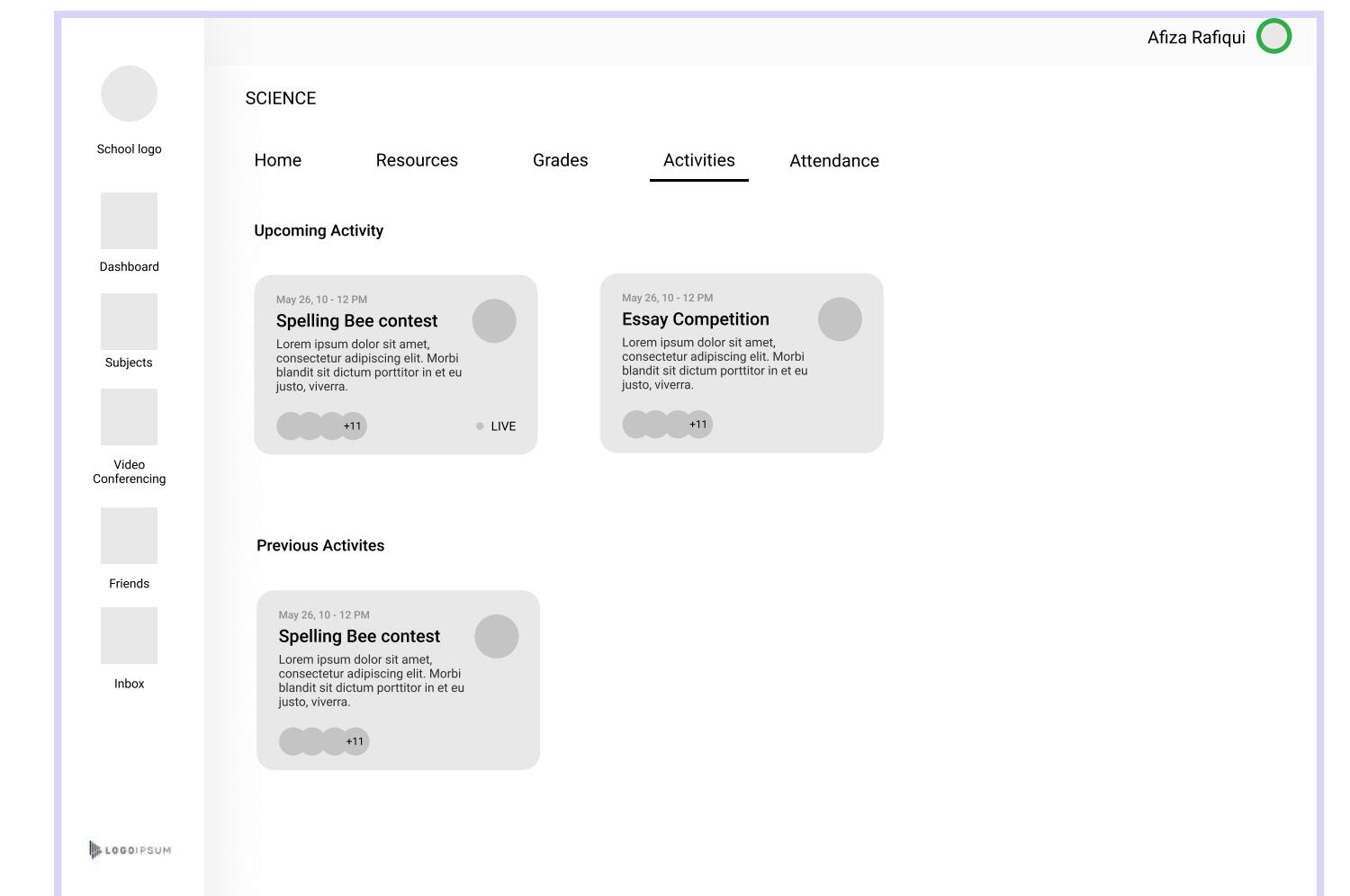
A wireframe sketch of a student dashboard titled "Assignments". The top navigation bar includes "School logo", "Afiza Rafiqui", and a green circular profile icon. The main content area shows a list of assignments under "Upcoming Homework (Due Soon)": "Chapter 6: Pronouns and their usage" (60 points, due 16th August 2020) and "Chapter 3: Conjunctions and Prepositions" (100 points, due 20th August 2020). Below this is a section for "Previous Activities" with three entries: "Chapter 2: Lorem Ipsum" (60 points, due 15th August 2020), "Chapter 3: Lorem Ipsum" (100 points, due 20th August 2020), and "Chapter 2: Lorem Ipsum" (60 points, due 15th August 2020). A sidebar on the left lists "School logo", "Dashboard", "Subjects", "Video Conferencing", "Friends", and "Inbox".

Assignment Tab



A wireframe sketch of a teacher dashboard titled "SCIENCE". The top navigation bar includes "School logo", "Afiza Rafiqui", and a green circular profile icon. The main content area shows a "Daily Streak" chart for the month of October, indicating a 51-day streak. Below this is an "Attendance Summary Sheet" showing attendance data for the last 6 months. The top navigation bar has tabs for "Home", "Resources", "Grades", "Activities", and "Attendance", with "Attendance" being the active tab. A sidebar on the left lists "School logo", "Dashboard", "Subjects", "Video Conferencing", "Friends", and "Inbox".

Attendance View



A wireframe sketch of a teacher dashboard titled "SCIENCE". The top navigation bar includes "School logo", "Afiza Rafiqui", and a green circular profile icon. The main content area shows an "Upcoming Activity" for "May 26, 10 - 12 PM Spelling Bee contest" (status: LIVE) and an "Essay Competition" (status: +11). Below this is a section for "Previous Activities" with two entries: "Spelling Bee contest" (status: LIVE) and "Essay Competition" (status: +11). A sidebar on the left lists "School logo", "Dashboard", "Subjects", "Video Conferencing", "Friends", and "Inbox".

Activities Tab

Feedback and revisions

We took feedback from 10 people of different age groups and experience. Some key takeaways were as follows:



How is it different?

The current version looked very similar to canvas or any ordinary CMS platform.

What were we bringing new to the table?



Self Expression & Individuality.

The low fidelity sketches gave a very monotonous vibe and lacked our concept to support individuality.



Supporting Creativity.

We wanted to support creativity of individuals, but the activities and assignments did not reflect it.



Feature Prioritization.

We were focusing on too many things altogether, rather than pinning down what was important for our primary user.

We realized our designs weren't tying back to our principles.

Back to the drawing board.

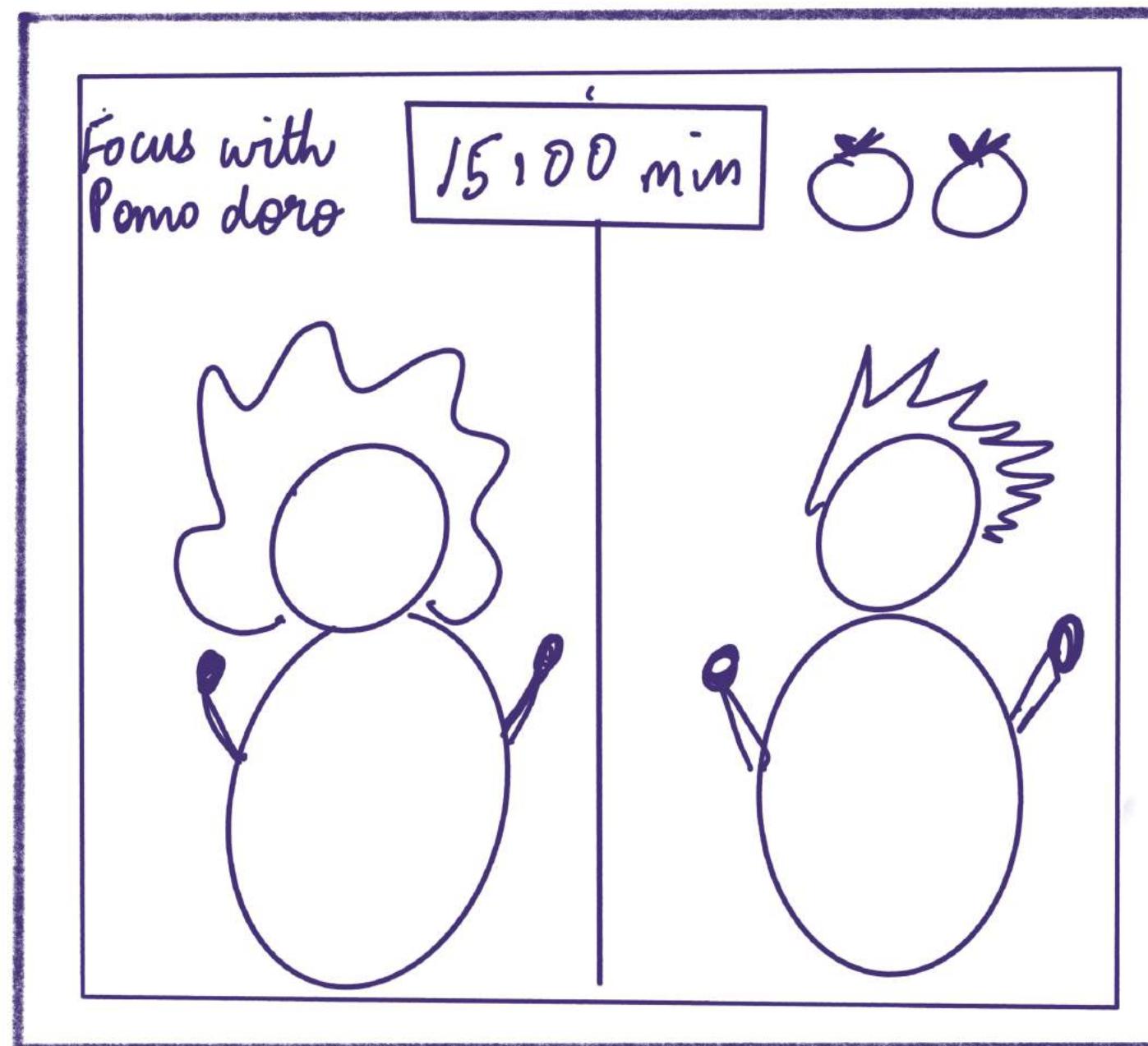


REVISITING

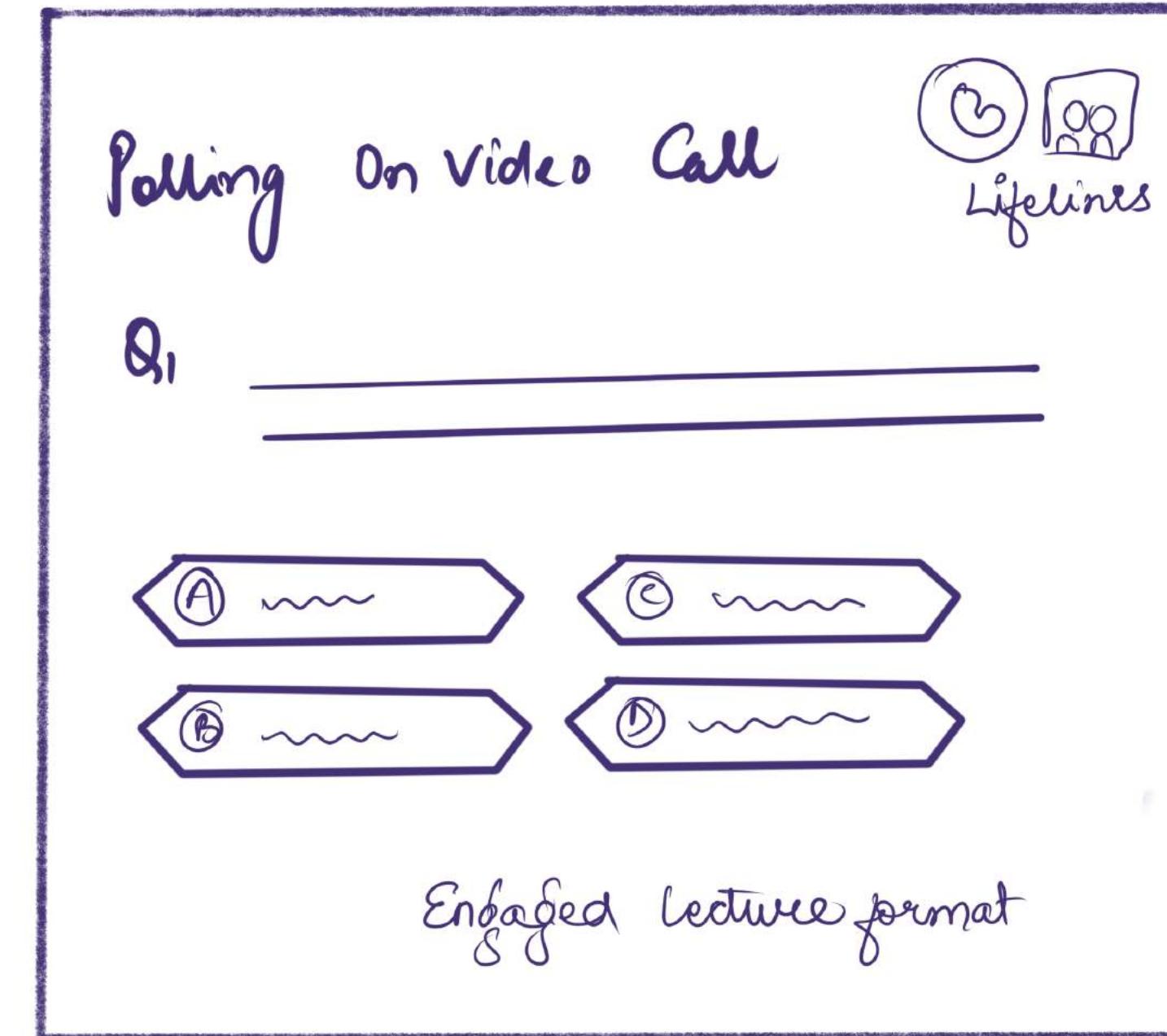
How might we fulfill the social
needs of children to help promote a
more holistic growth & learning?

ITERATION II

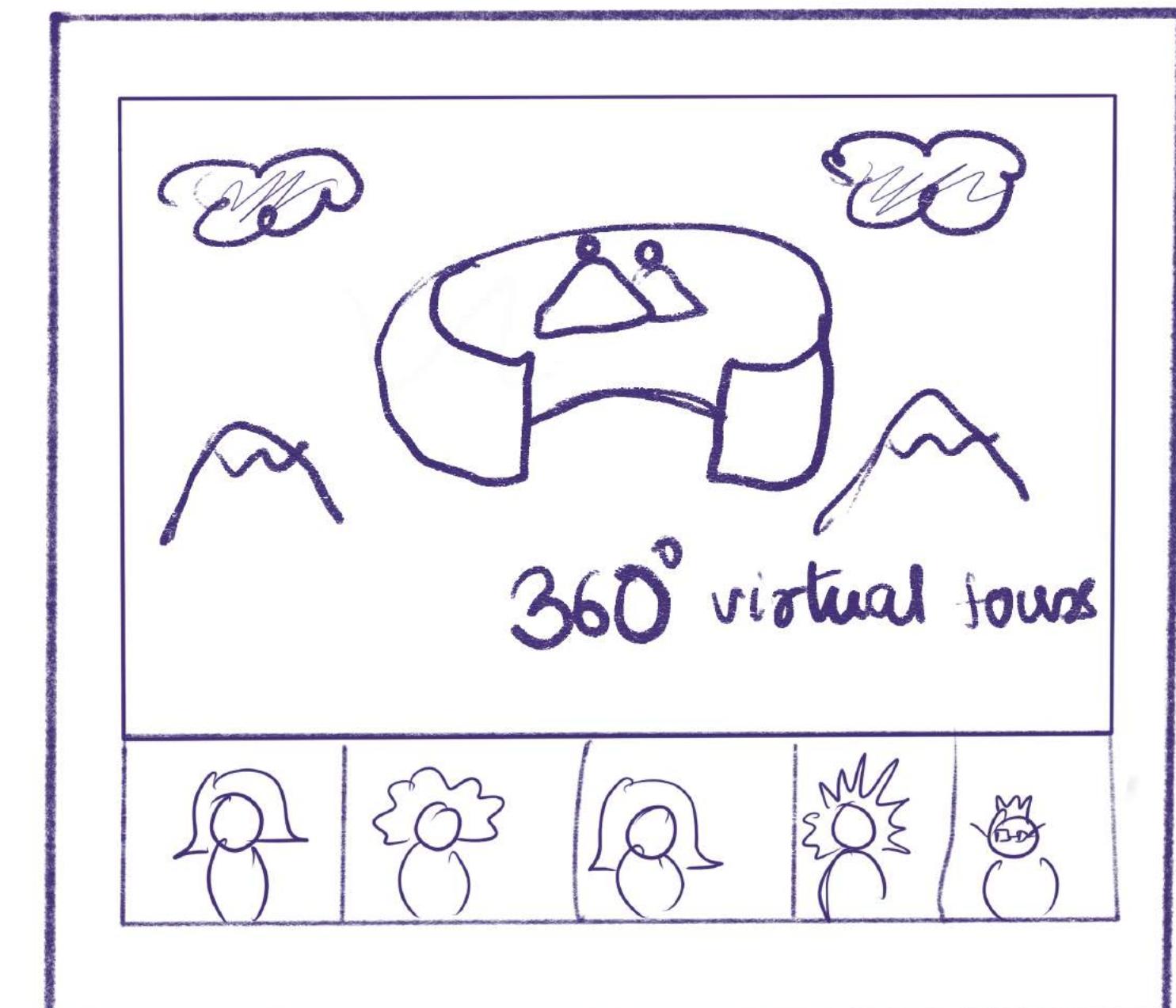
Ideating socialization & collaboration



Pomodoro focus sessions



Live Polling and Quizes



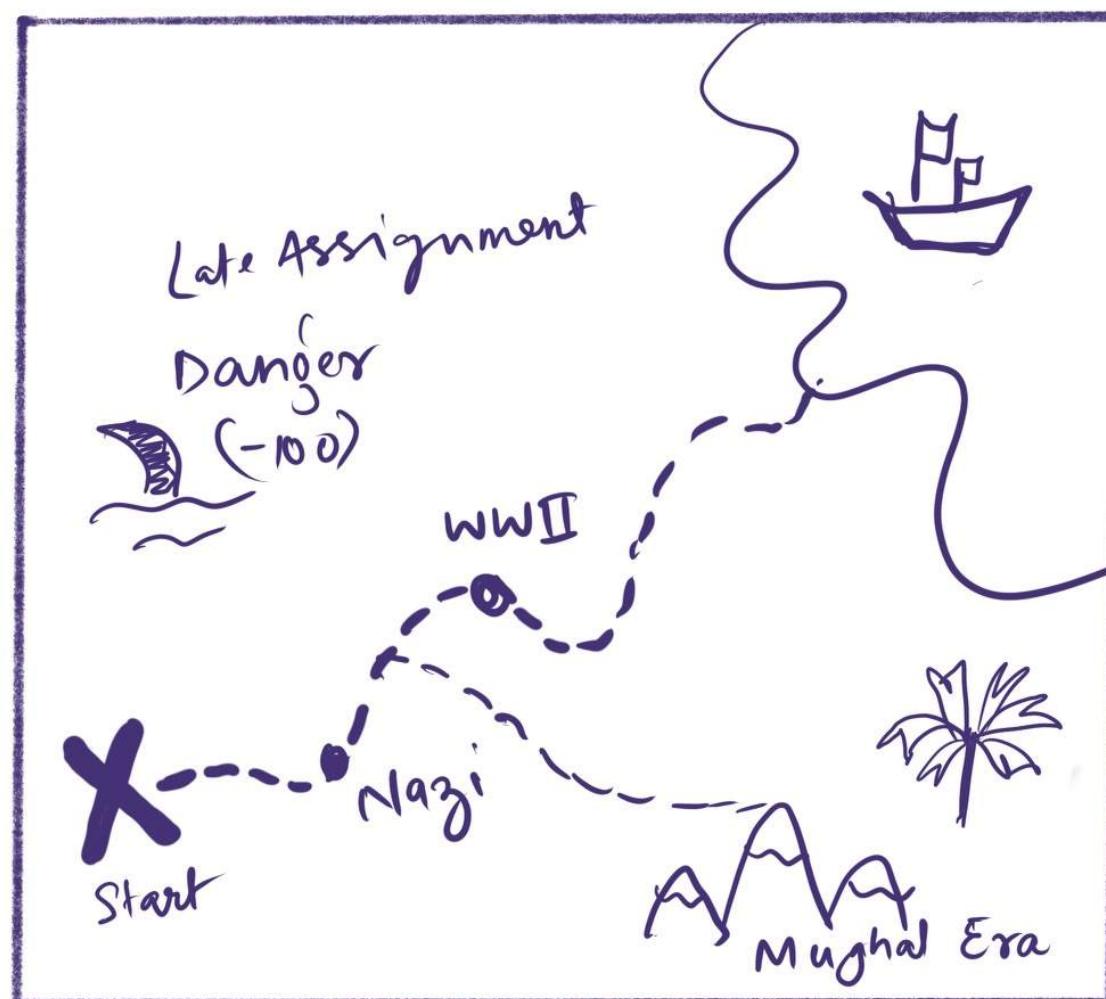
360 virtual tour

REVISITING

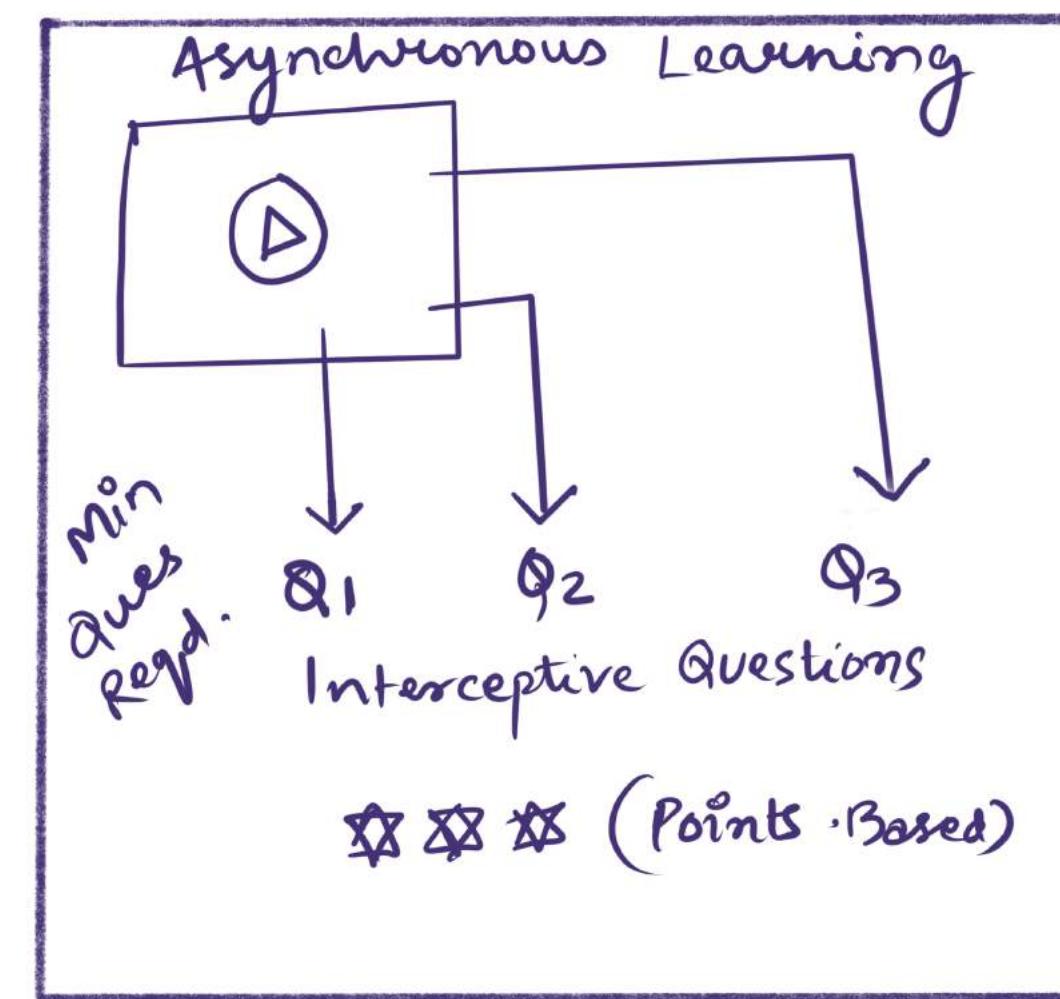
How might we cultivate
engagement among middle
schoolers to facilitate a better
learning experience?

ITERATION II

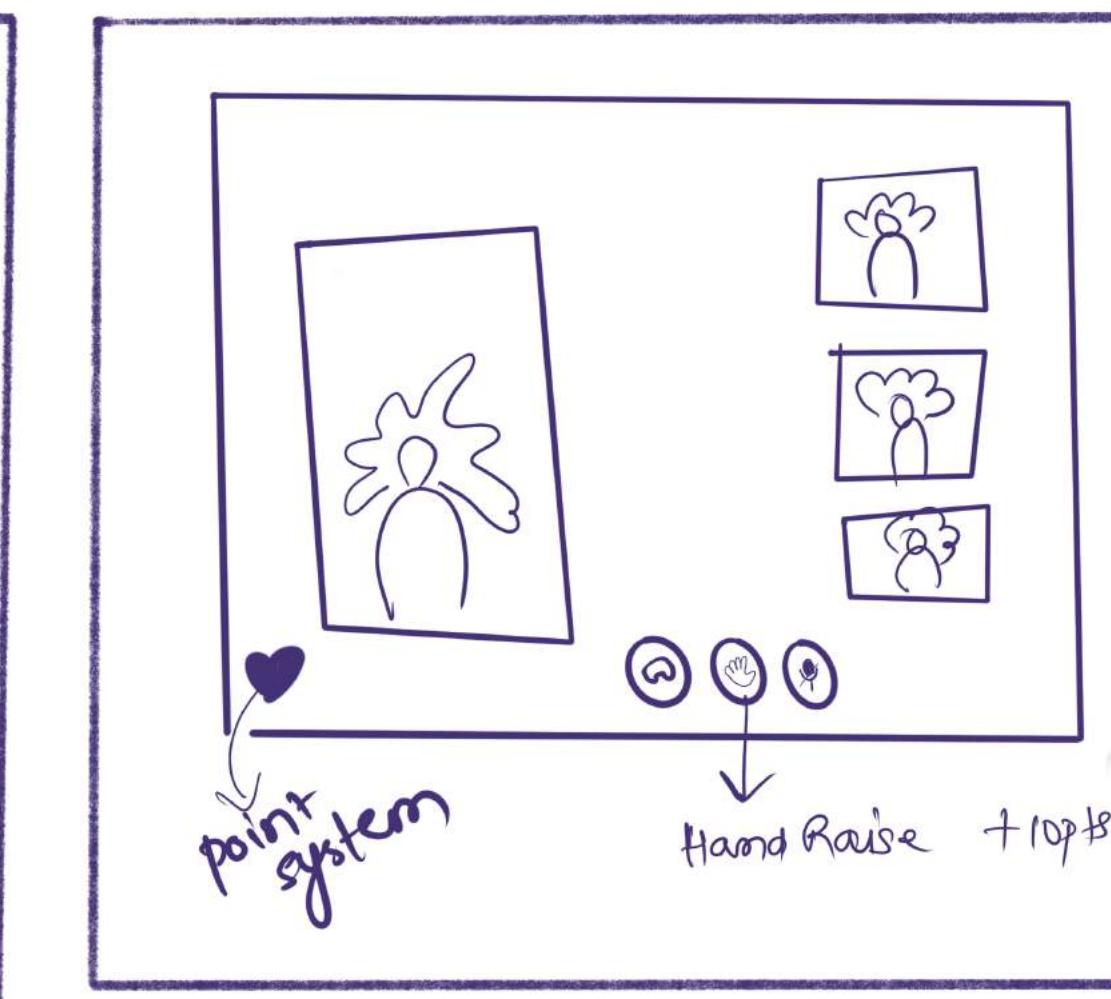
Brainstorming engagement ideas



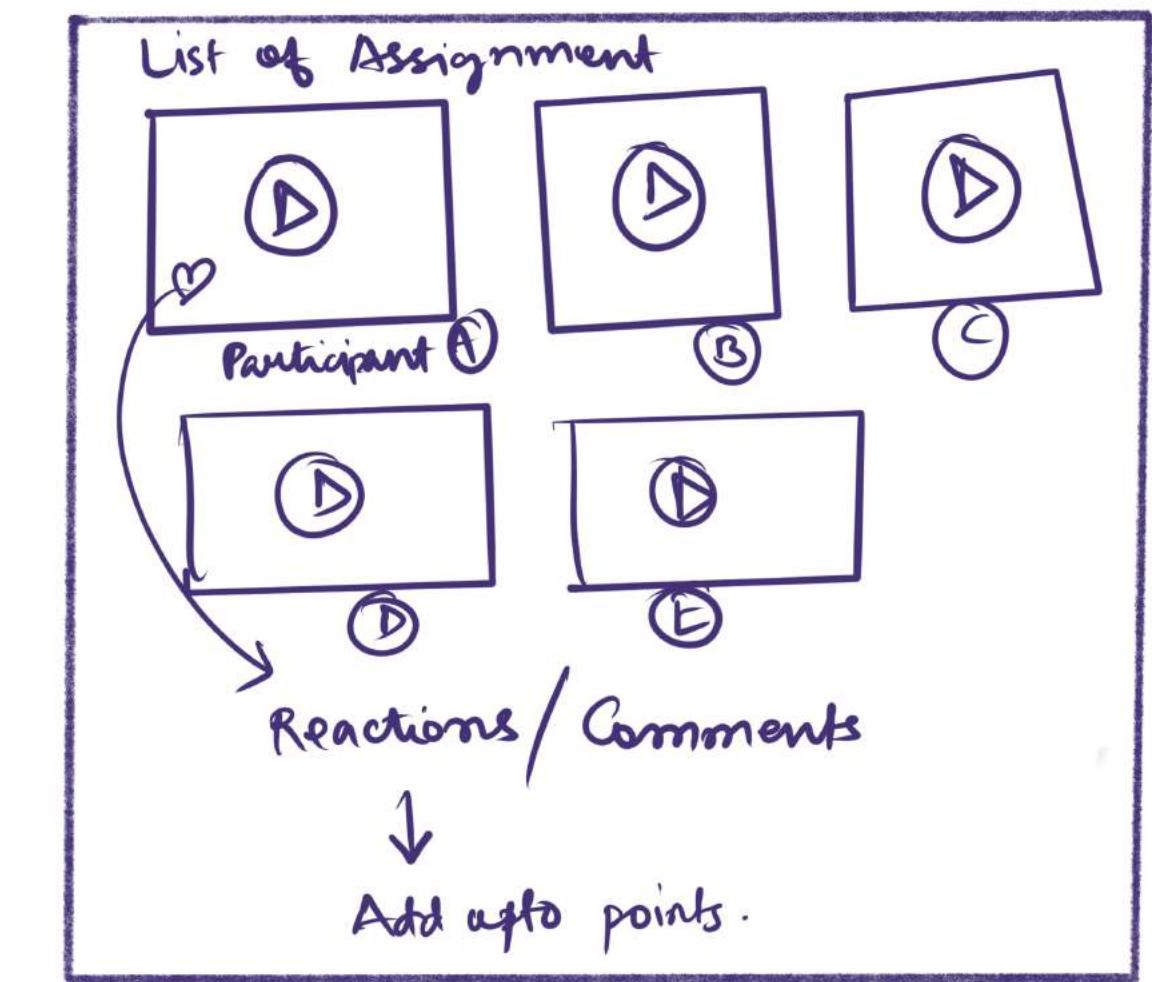
Scenario based treasure hunt



Interceptive questions in videos



Engagement based point system



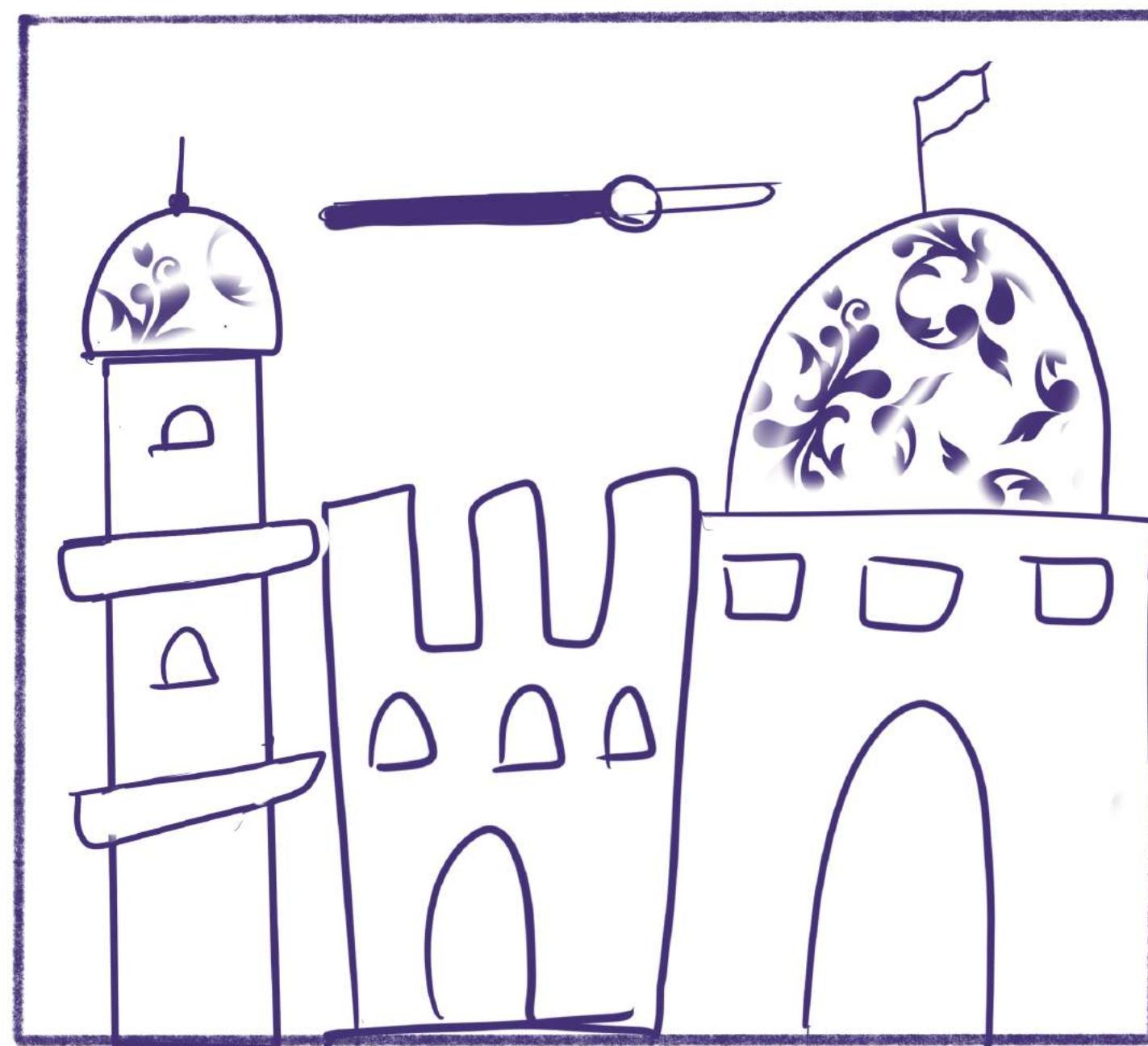
Reactions in recorded videos

REVISITING

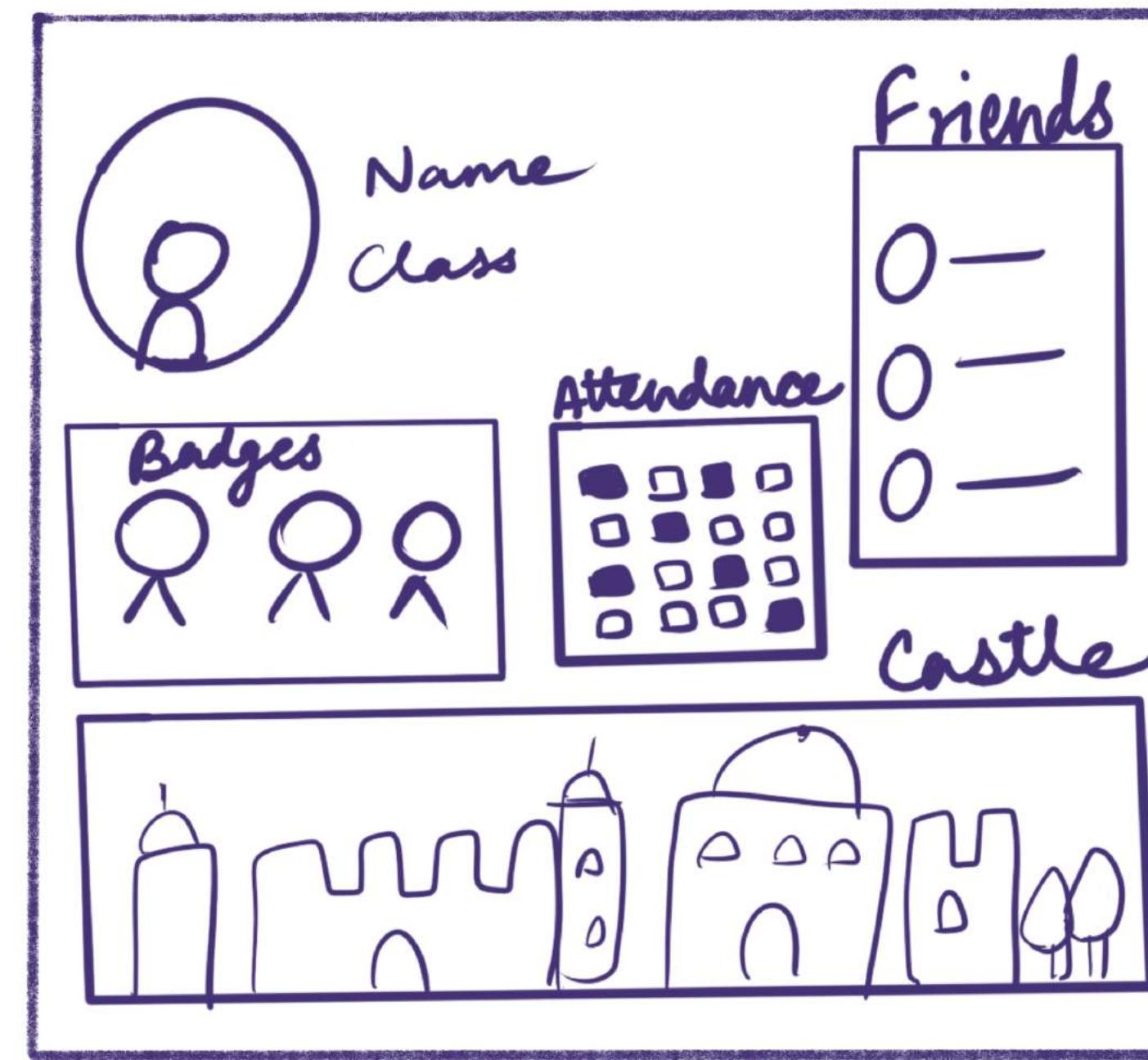
How might we encourage
self-expression to provide a more
personalized learning environment?

ITERATION II

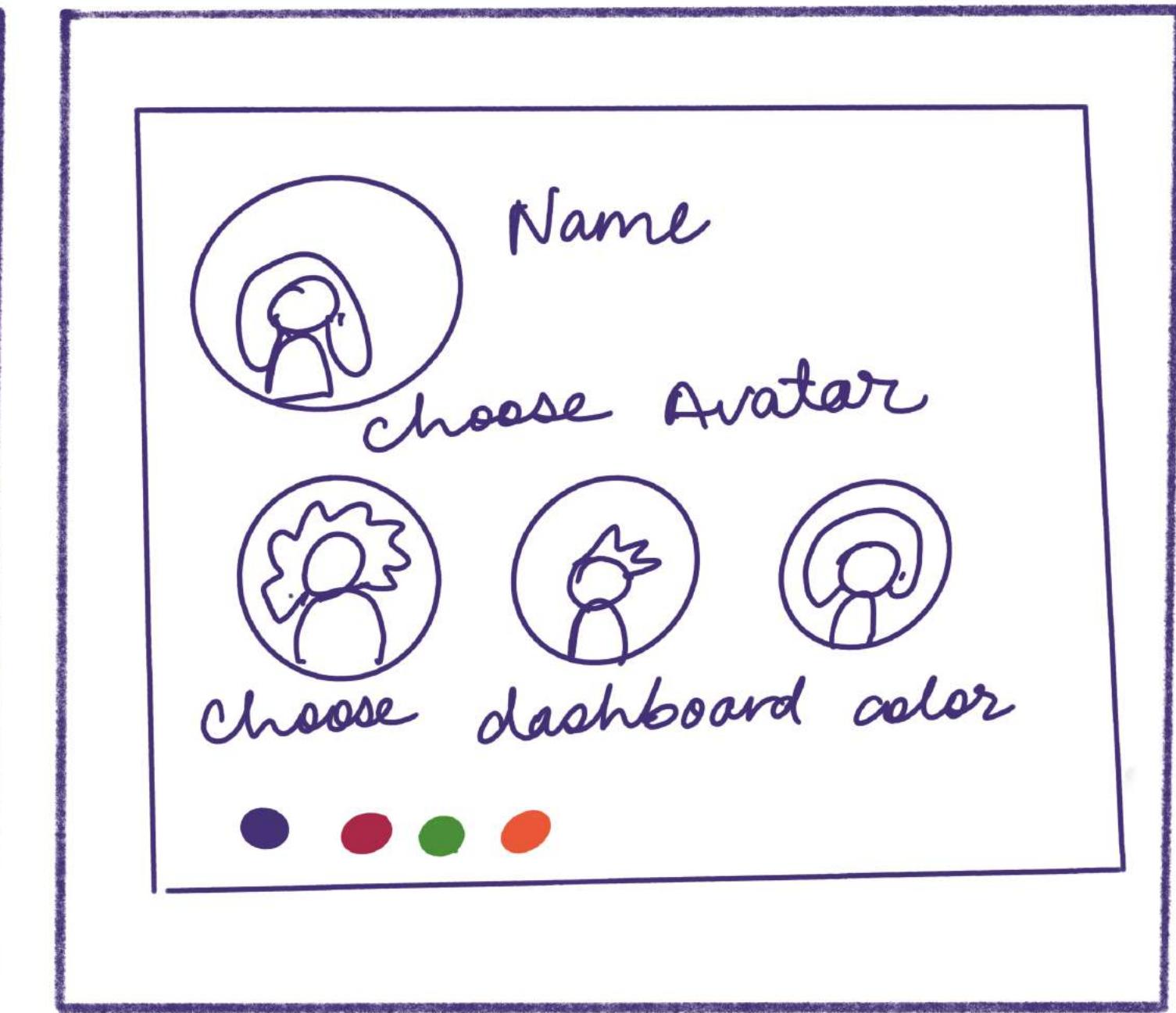
Personalization to fuel individualism



Castle building and point system



Student Profiles



Dashboard Personalization



Prioritizing the features

We wanted to make sure we choose features with high reward and low effort to begin with. We asked kids to rate their favorite features and discussed the engineering efforts with a few developers to move forward with our final design decisions.

Key Features

- 01 Gamification through points, castles & badges
- 02 Engaging learning through live quizzes, 3D tours and other extracurricular activities
- 03 Socialization through clubs, groups, direct messaging, & collaborative activities

High Reward / Low Effort

- Live 360 virtual tours
- Pomodoro focus sessions
- Badges and awards
- Live polling & quizzes

High Reward / High Effort

- Extempore & timed activities
- Castle building & point system

Low Reward / Low Effort

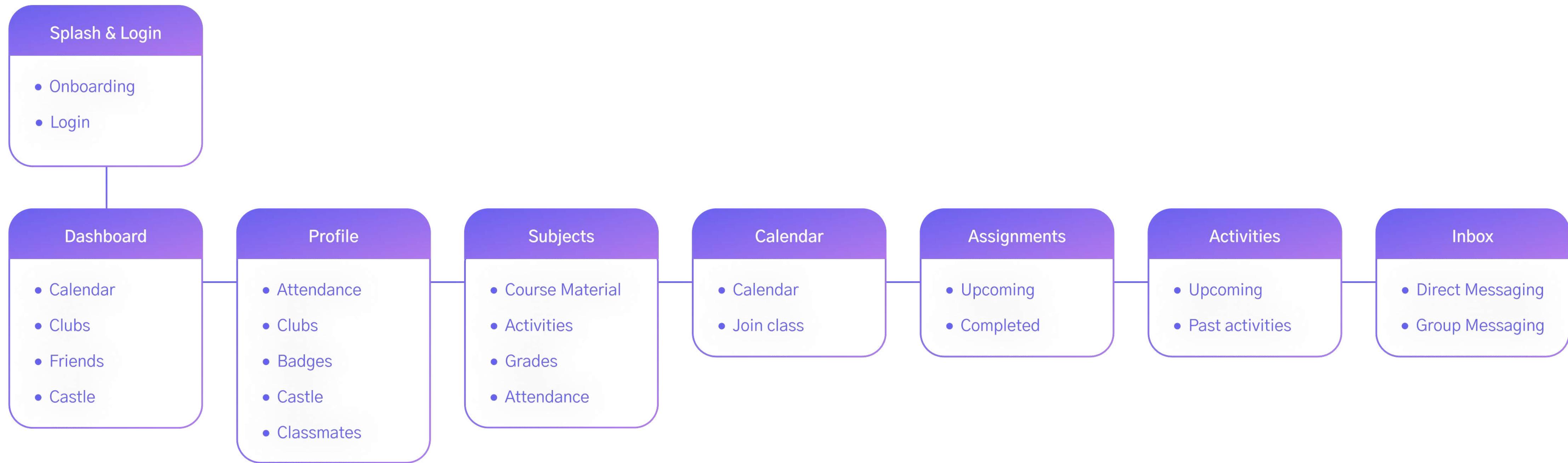
- Interceptive question videos
- reactions in recorded videos
- critiquing each other's work

Low Reward / High Effort

- Scenario based treasure hunt
- citing each other's work

Information Architecture

Based on our design principles, and the feature prioritization we built our information architecture with a dashboard for quick access to highlighted features and a vertical navigation to jump to other categories.



INSPIRATION BOARD

Setting up the mood



STYLE GUIDE

Defining ViLearn's brand

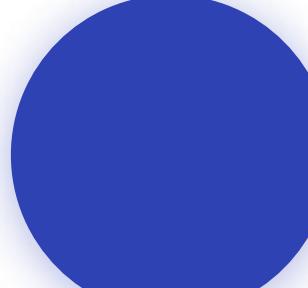
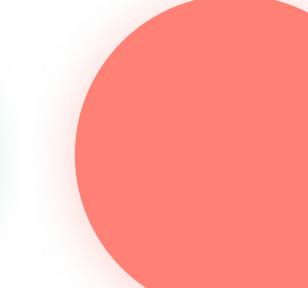
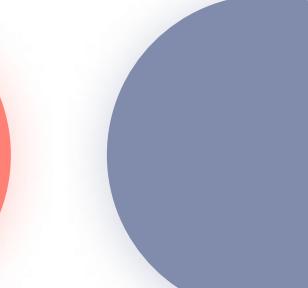
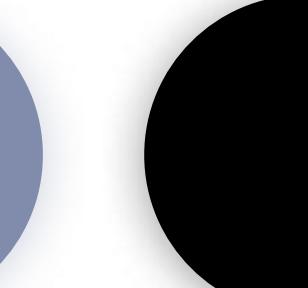
01 Brand Values

Playful Encouraging Collaborative

02 Colors & Typography: Our chosen colors are not only legible but also fun and poppy. To match this style, we chose fonts that gave a friendly and comforting vibe.

03 UI & Layout: Following our brand values, we used buttons and components with rounded corners for a fun and inviting interface.

04 Logo: The logo supports our rounded style. The wordmark style is used to give a clean look on an overall crowded dashboard. The three dots on the 'e' represent kids learning together.

| colors | #2E42B4 | #33CAAC | #FF8175 | #818CAC | #000000 |
|---------|---|---|---|---|---|
| Primary |  |  |  |  |  |
| type | H1 | H2 | H3 | Paragraph | |
| | AaBbCc | AaBbCc | AaBbCc | AaBbCc | AaBbCc |
| | 30 pt - Bold, Karla | 22 pt - Bold, Karla | 20 pt - Bold, Karla | 14 pt - Regular, Mulish | |
| Buttons | Primary Button | Primary Button | | | |
| |  |  | | | |
| Logo |  |  | | | |

FINAL SOLUTION

Presenting ViLearn



The image shows a mobile application interface for "ViLearn". The top navigation bar includes a search icon, a search bar with the placeholder "Search", a notification bell icon with a red dot, and a user profile picture.

The main content area features a greeting "Howdy, Alexandra!" and several sections:

- Calendar:** Displays a timeline from 10:00 to 03:00 with three scheduled subjects: Science (11:00 AM - 11:45 AM), Mathematics (12:00 PM - 12:45 PM), and Music (01:00 PM - 01:45 PM). Each subject has a "JOIN" button.
- Clubs:** Shows two club posts:
 - Henry in the Football Club: "Yoo check out my new trick" with a video attachment.
 - Joey in the Chemistry Club: "New soil experiment here" with a video attachment.A "view all" button is at the bottom.
- Friends:** Lists three friends with their profiles and progress bars:
 - Rachel Fang (110 points) with a blue progress bar and a camera icon.
 - Rachel Fang (110 points) with a green progress bar and a green circular icon.
 - Rachel Fang (110 points) with a green progress bar and a bee icon.

The sidebar on the left contains navigation links: Dashboard (highlighted in blue), Subjects, Calendar, and Assignments.

User Dashboard

① Highlighting profile & progress in navigation to encourage self-expression & engagement

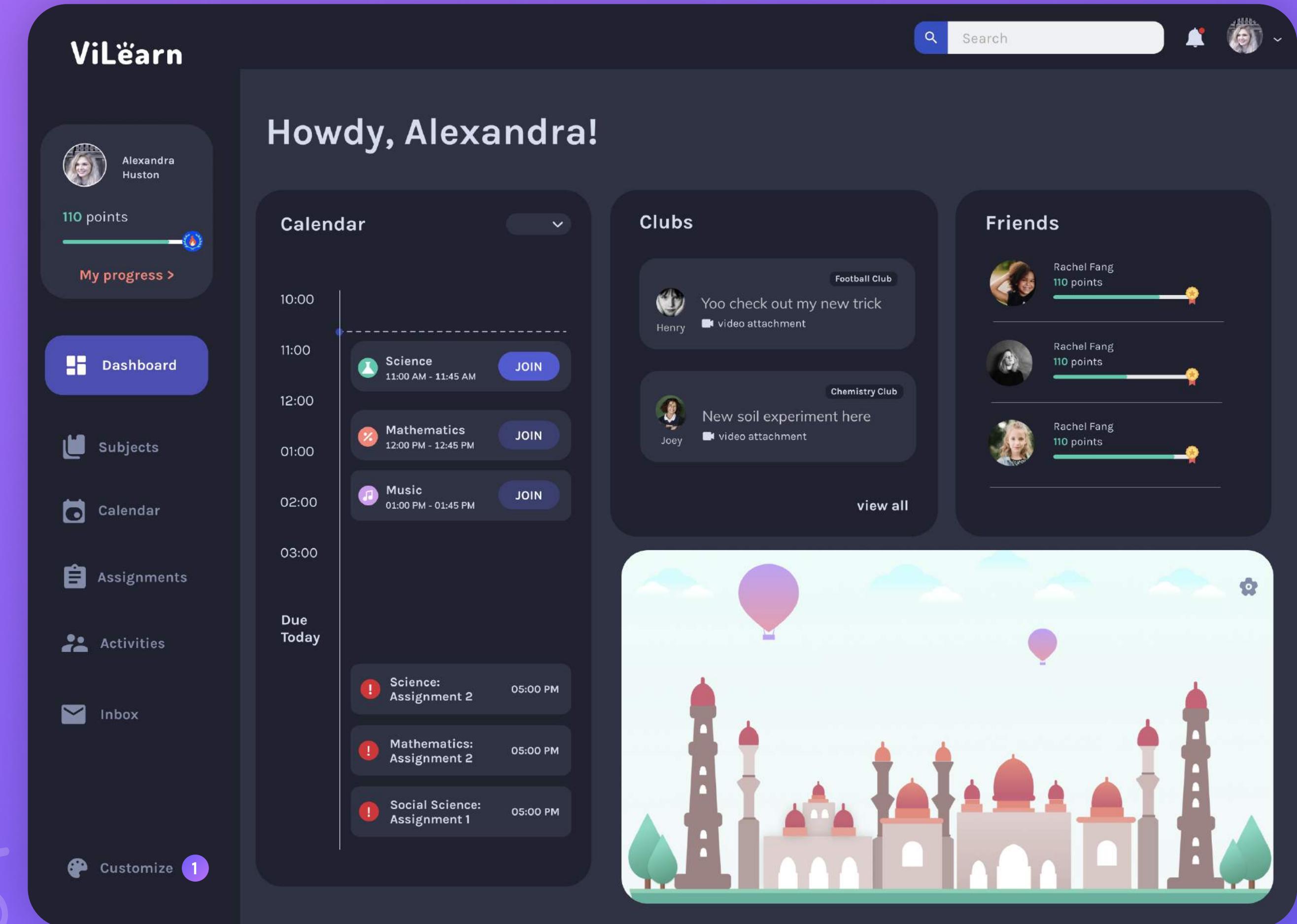
The screenshot displays the ViLearn user dashboard. At the top left is a sidebar with a user profile picture of Alexandra Huston, 110 points, and a progress bar. Below are links for Dashboard, Subjects, Calendar, Assignments, Activities, Inbox, and Customize. The main area features a greeting "Howdy, Alexandra!" and three main sections: "Calendar" showing events like Science, Mathematics, and Music; "Clubs" showing posts from Henry (Football Club) and Joey (Chemistry Club); and "Friends" showing profiles for Rachel Fang with 110 points each. A decorative illustration of a city skyline and hot air balloons is at the bottom.

② Castle progress to keep students motivated and have a little more fun

③ Join clubs and see what friends are upto and their progress

Personalize with dark mode & themes

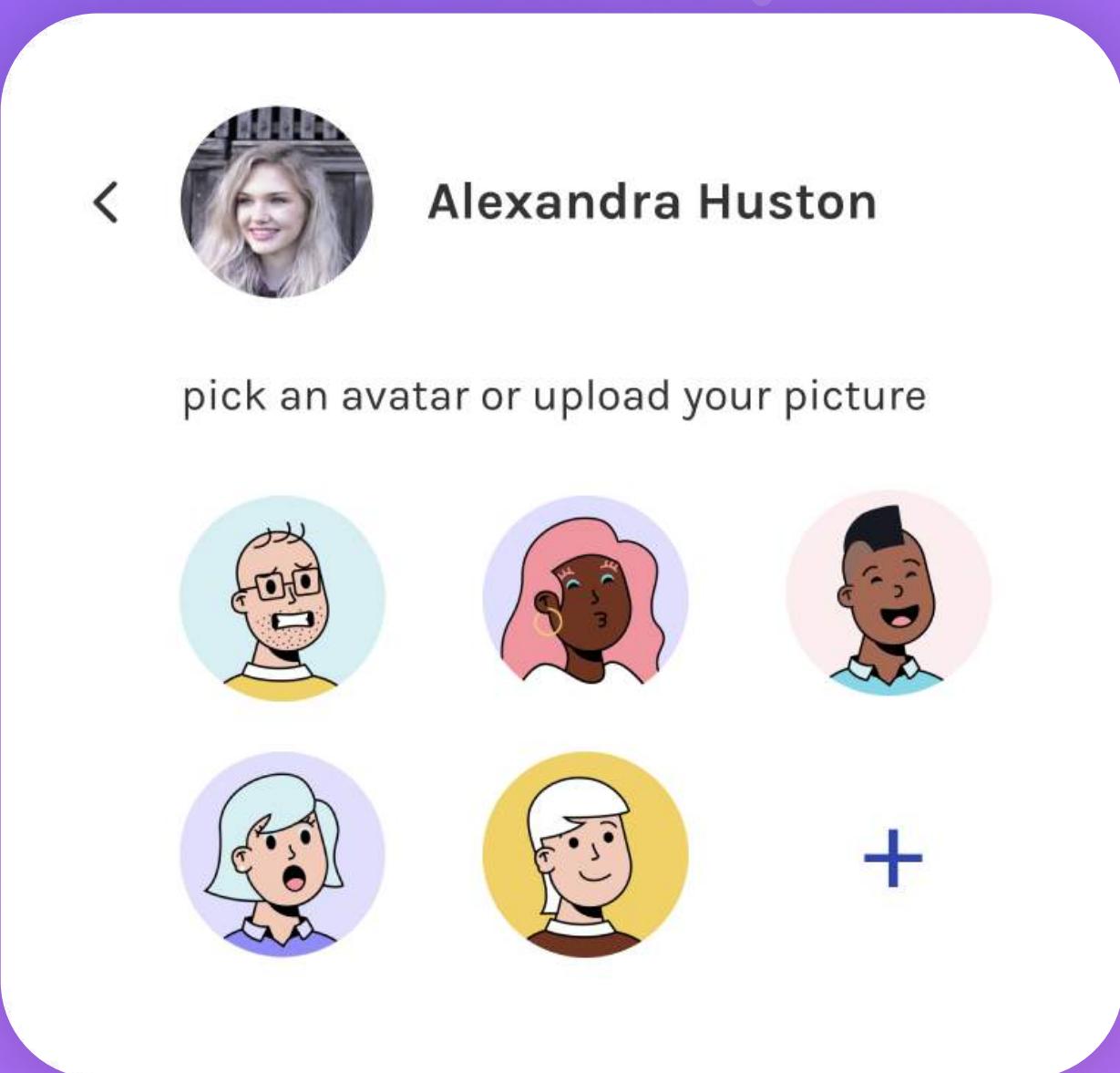
- 1 Customize and personalize the app through dark mode and color changing options



Profile view & socialization

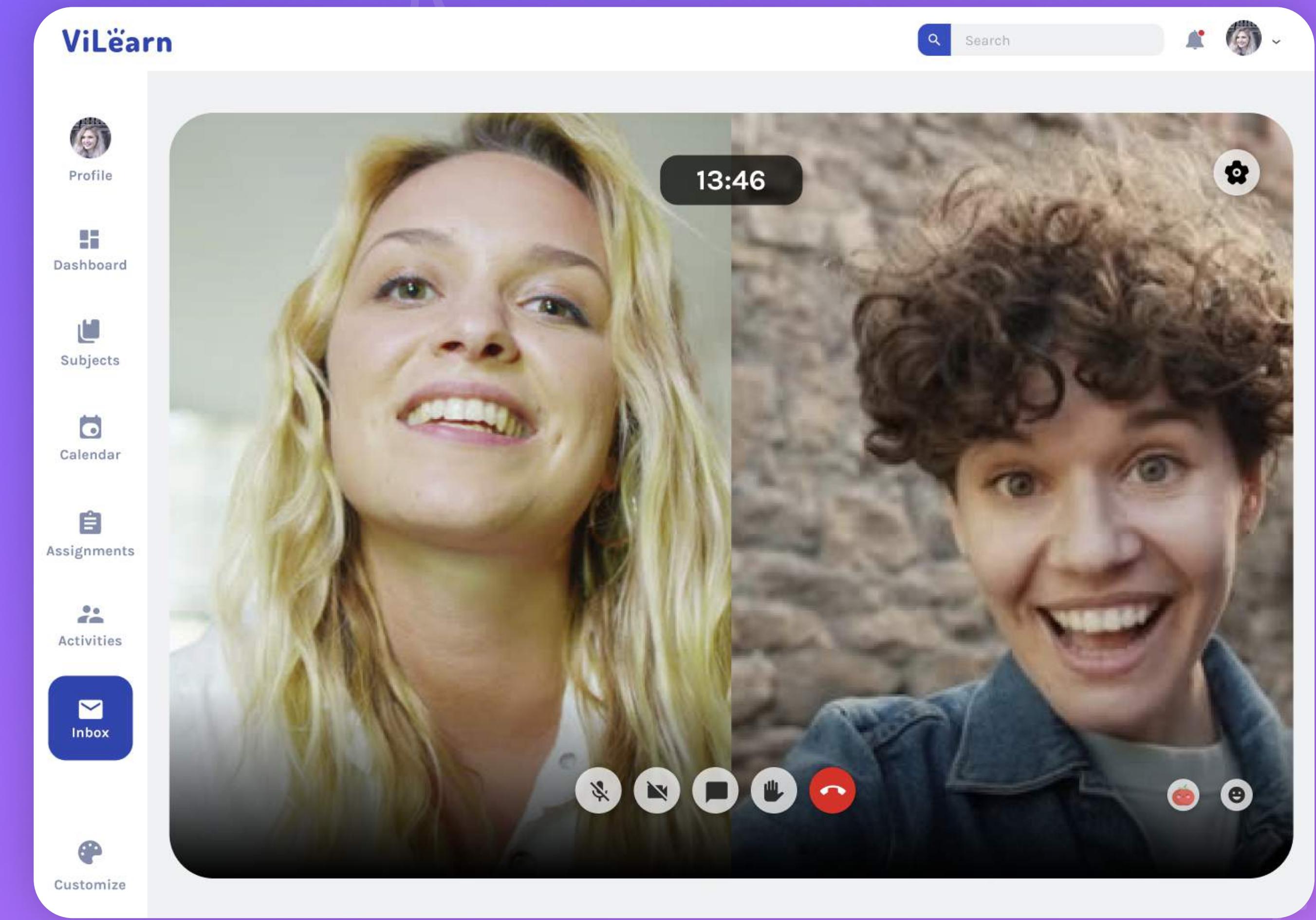
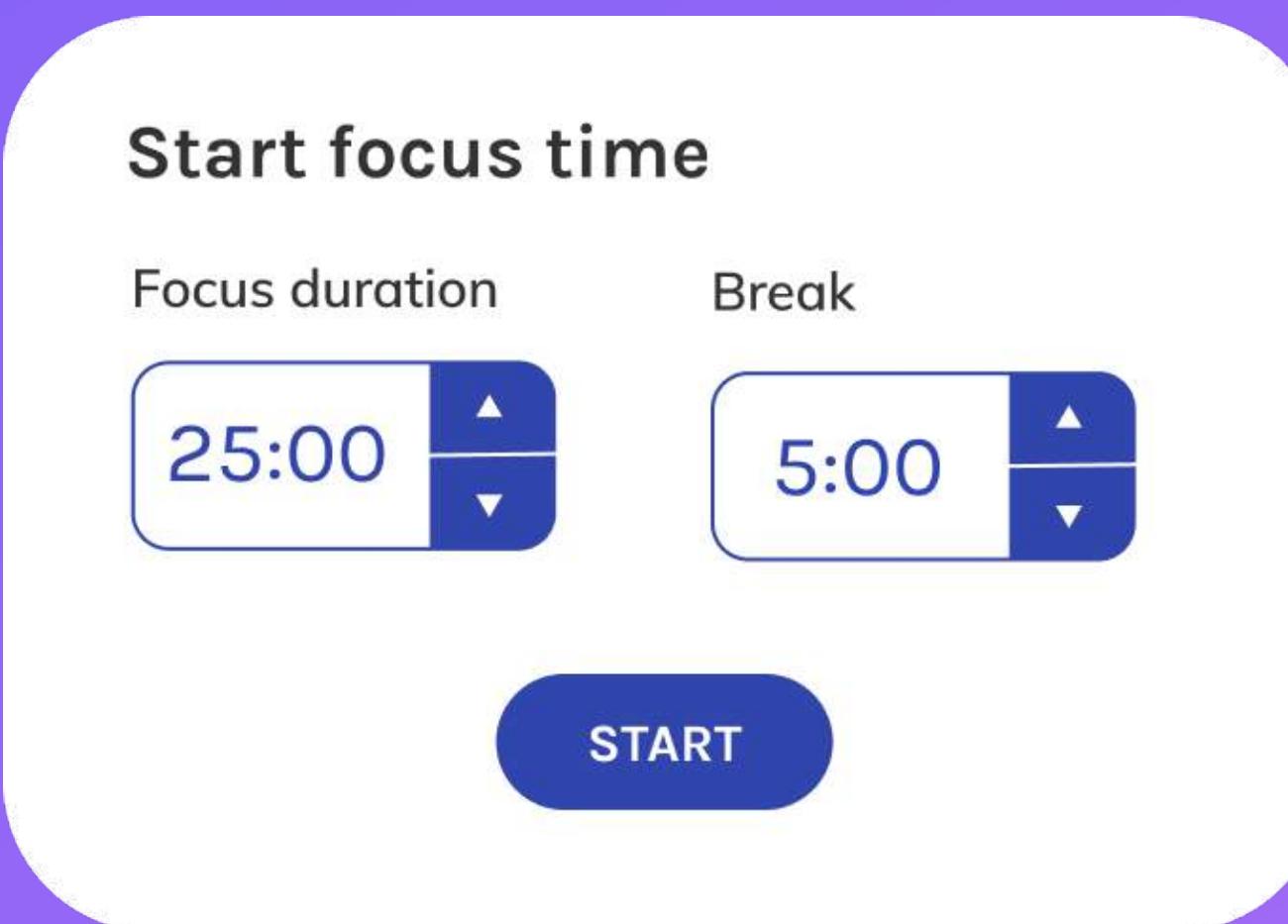
Profile offers ways to personalize through avatars and track progress through points and castle. Students can also view their friend's badges, castle and attendance streaks.

The screenshot shows the ViLearn profile dashboard for a student named Alexandra Huston. On the left, a sidebar menu includes Profile (selected), Dashboard, Subjects, Calendar, Assignments, Activities, Inbox, and Customize. The main area features a banner with a soccer ball and a portrait of Alexandra. Her name and class (Class 9 A) are displayed. Below the banner are sections for Accomplishments (Points 120/150, Next Castle goal), Clubs (Football Club, Astronomy Club, Piano Club), Attendance (December 2020 streaks of 5 days and 15 days), and Classmates (Henry George Horton and McDonald Nash).



Work together with focus time pomodoro

Collaborate and study together using focus sessions in a pomodoro format



Exciting activities & virtual tours

Watch 360 tours of places around the world with all your classmates and share your reactions!

ViLearn

The screenshot shows the ViLearn interface. On the left, a sidebar lists navigation options: Profile, Dashboard, Subjects, Calendar, Assignments, Activities (which is selected and highlighted in blue), Inbox, and Customize. The main content area is divided into two sections: "Upcoming Activities" and "Past Activities".

Upcoming Activities:

- Virtual Tour - World War II**: Social Science, May 26, 10 - 12 PM. Description: Lorem ipsum dolor sit amet, consectetur adipiscing elit. Participants: +1. Buttons: JOIN.
- Extempore**: English, May 26, 10 - 12 PM. Description: Lorem ipsum dolor sit amet, consectetur adipiscing elit. Participants: +1. Buttons: JOIN.
- Football Match**: Football Club, May 26, 10 - 12 PM. Description: Lorem ipsum dolor sit amet, consectetur adipiscing elit. Participants: +1. Buttons: JOIN.

Past Activities:

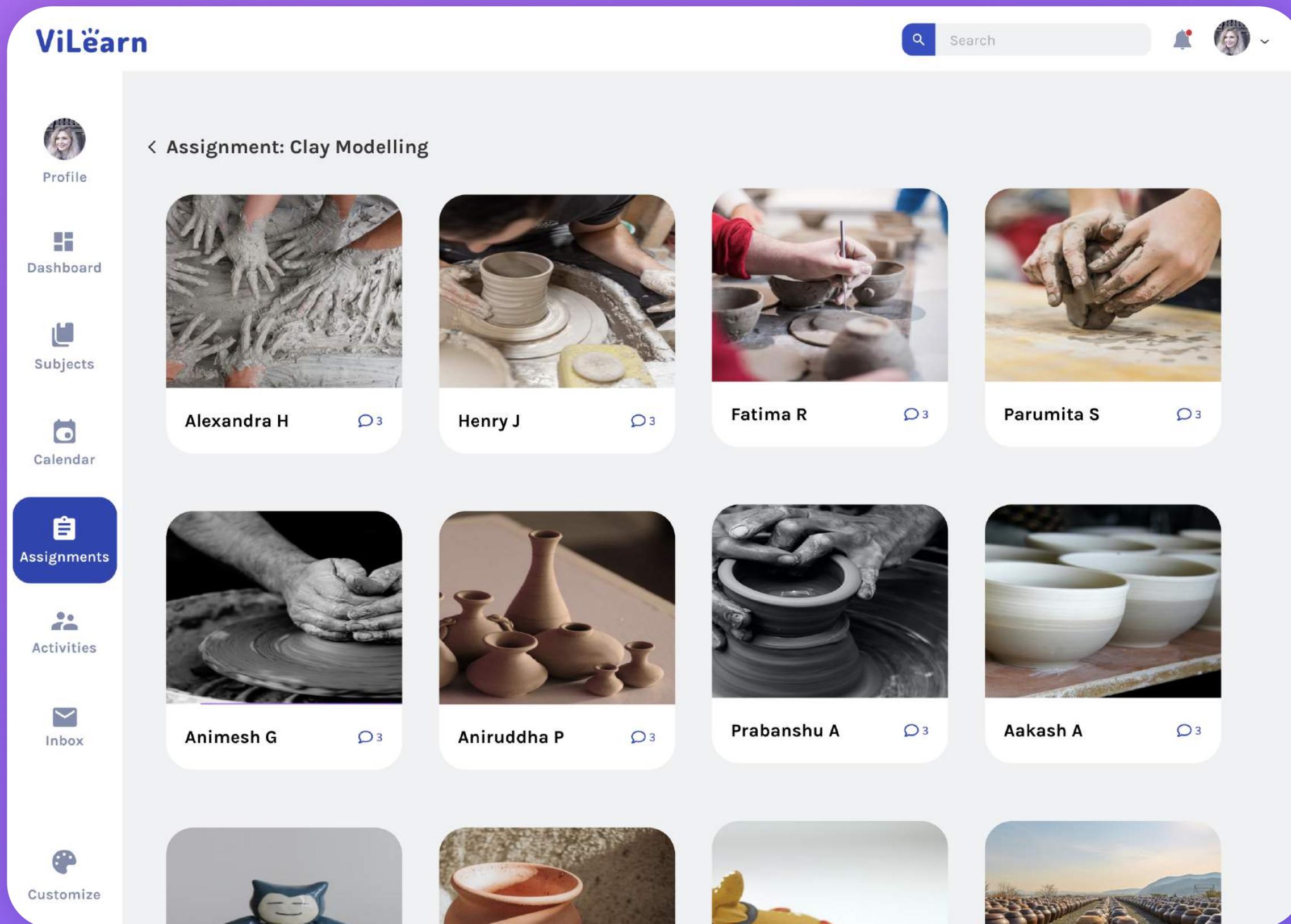
- Clay Modelling**: Art, May 26, 10 - 12 PM. Description: May 26, 10 - 12 PM. Buttons: VIEW SUBMISSION.
- Ballet**: Art, May 26, 10 - 12 PM. Description: May 26, 10 - 12 PM. Buttons: VIEW SUBMISSION.
- Theater**: Art, May 26, 10 - 12 PM. Description: May 26, 10 - 12 PM. Buttons: VIEW SUBMISSION.
- Chemistry**: Art, May 26, 10 - 12 PM. Description: May 26, 10 - 12 PM. Buttons: VIEW SUBMISSION.

ViLearn

The screenshot shows the ViLearn interface under the "SCIENCE" subject. The sidebar includes Profile, Dashboard, Subjects, Calendar, Assignments, Activities (selected), Inbox, and Customize. The main content area is titled "Field trip to the Annex" and indicates it is LIVE. A large 3D model of a building is displayed with a "Front section" button. To the right, a vertical sidebar lists building sections: Prinsengracht 363, Warehouse, Warehouse, Tree, Office, Office, Staircase, Kitchen, Toilet, and Private office. At the bottom, five student photos are shown with their names: Emily, Emma, Astrid, Park, and Michelle. A message "press spacebar to react" is visible above the student photos.

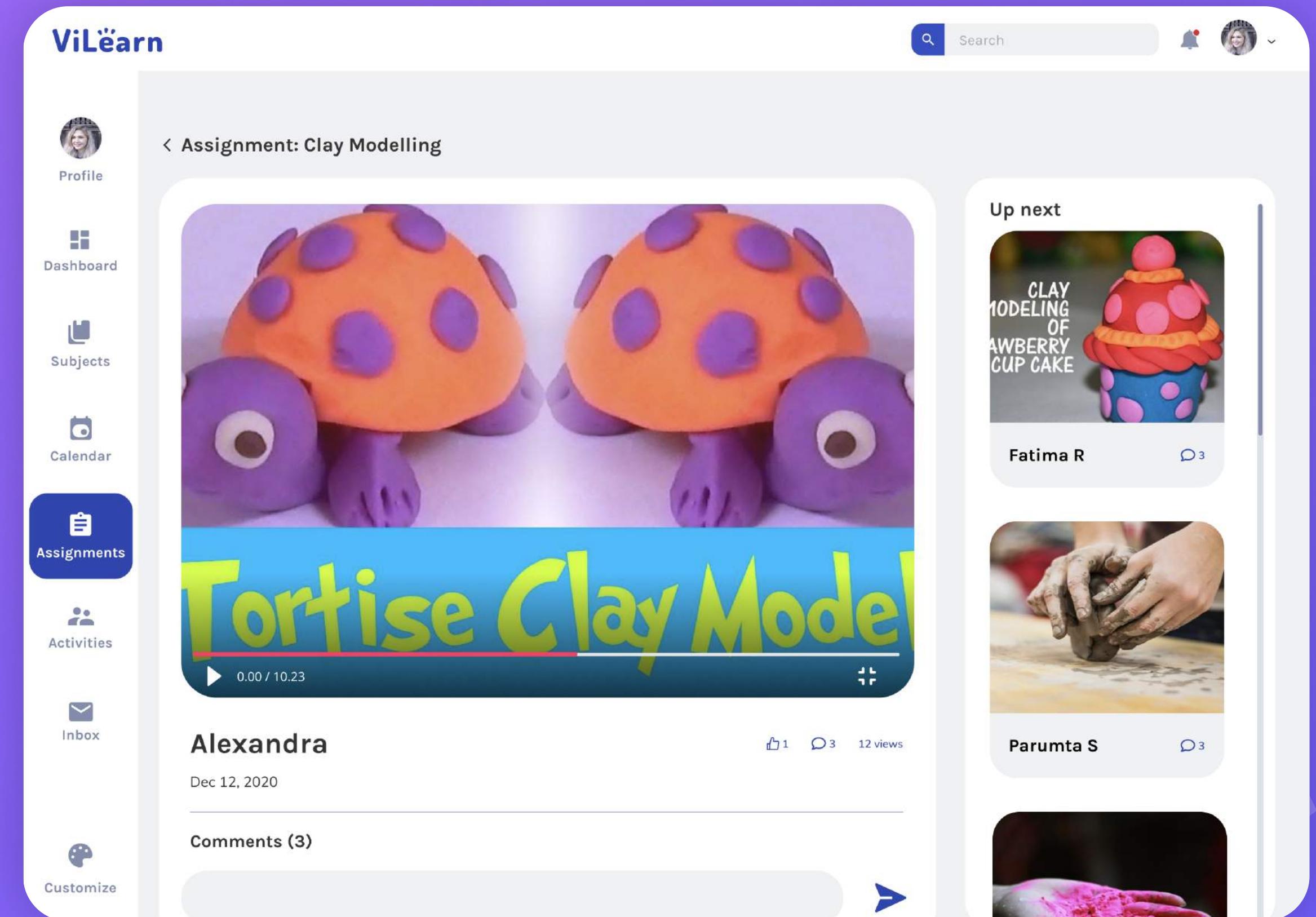
View everyone's homework & get inspired

By viewing and commenting on each other's assignments, students can work in a collaborative environment and learn to appreciate everyone's work



The screenshot shows the ViLearn platform interface for an assignment titled "Clay Modelling". On the left, a sidebar menu includes options like Profile, Dashboard, Subjects, Calendar, Assignments (which is selected), Activities, Inbox, and Customize. The main content area displays a grid of 12 student submissions. Each submission card features a thumbnail image, the student's name, and a comment count. The cards are arranged in three rows of four.

| Student Name | Comments |
|---------------|----------|
| Alexandra H | 3 |
| Henry J | 3 |
| Fatima R | 3 |
| Parumita S | 3 |
| Animesh G | 3 |
| Aniruddha P | 3 |
| Prabanshu A | 3 |
| Aakash A | 3 |
| (Thumbnail 1) | |
| (Thumbnail 2) | |
| (Thumbnail 3) | |
| (Thumbnail 4) | |



The screenshot shows a detailed view of an assignment submission for "Clay Modelling" by Alexandra. The top part of the screen shows the assignment title and a large thumbnail image of two clay tortoise models. Below the thumbnail, there is a video player showing the video duration as 0.00 / 10.23. The video title "Tortise Clay Model" is displayed in large yellow text. Below the video, the student's name "Alexandra" and the date "Dec 12, 2020" are shown, along with interaction metrics: 1 like, 3 comments, and 12 views. A "Comments (3)" section is visible at the bottom.

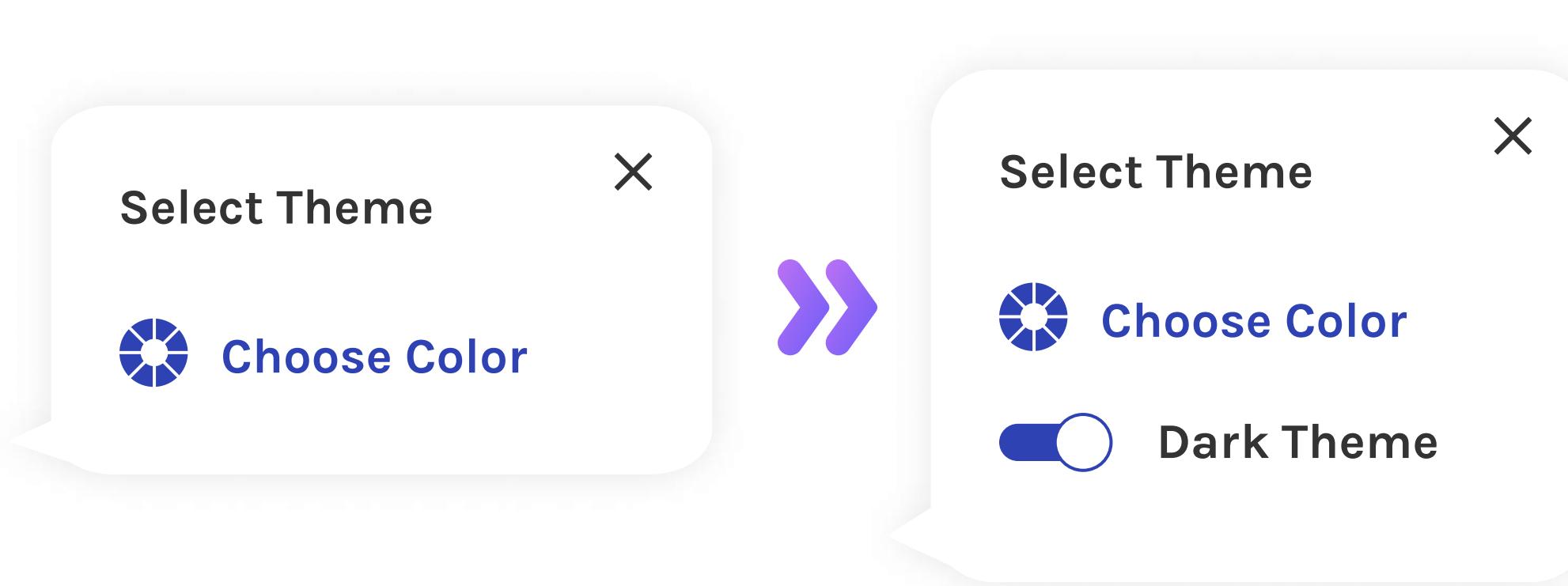
Design Decisions

ITERATION III: AFTER USER TESTING

Tweaking based on feedback

Enabling Dark Mode: We added the dark mode, which will help in both power saving and allow more customization.

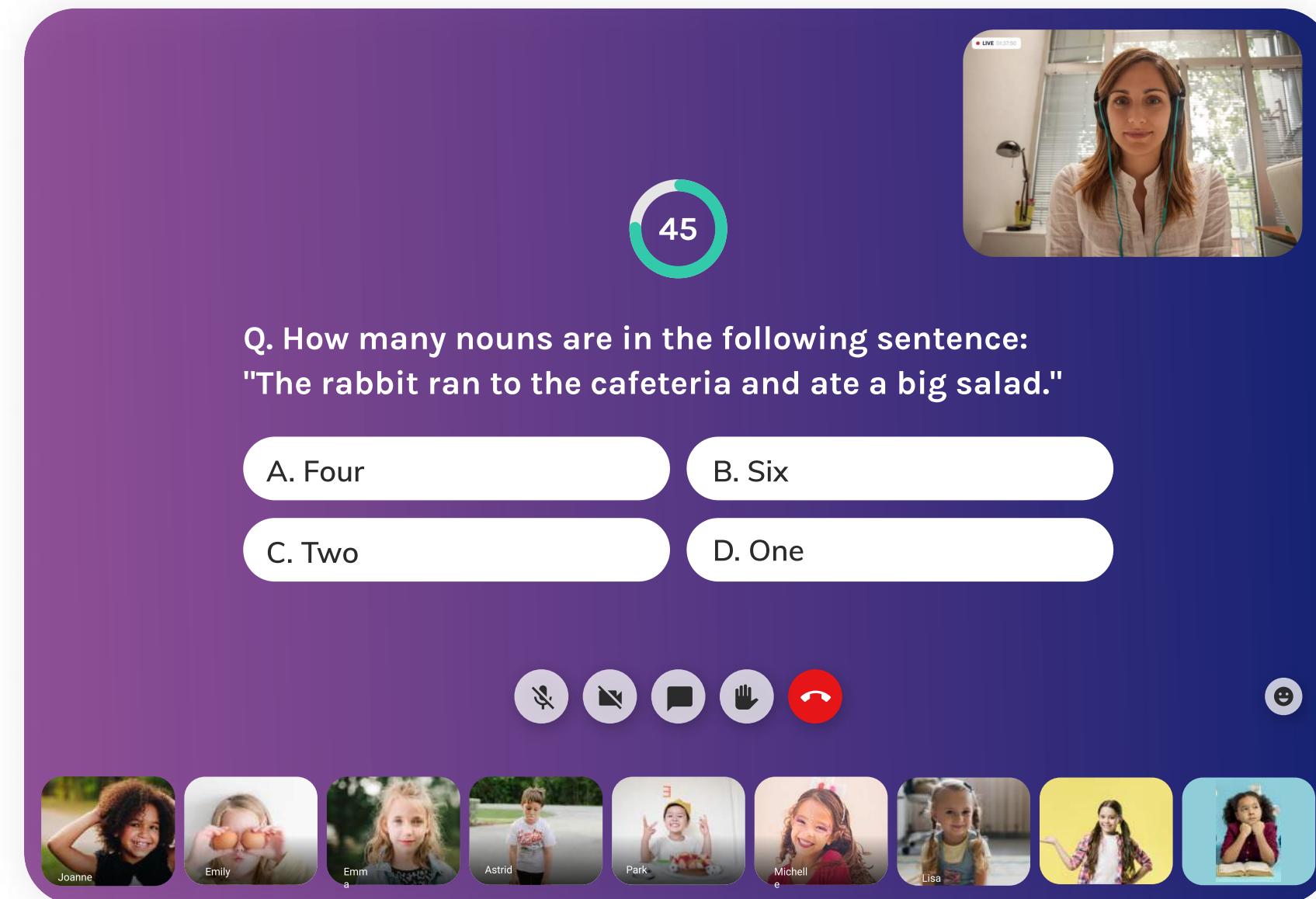
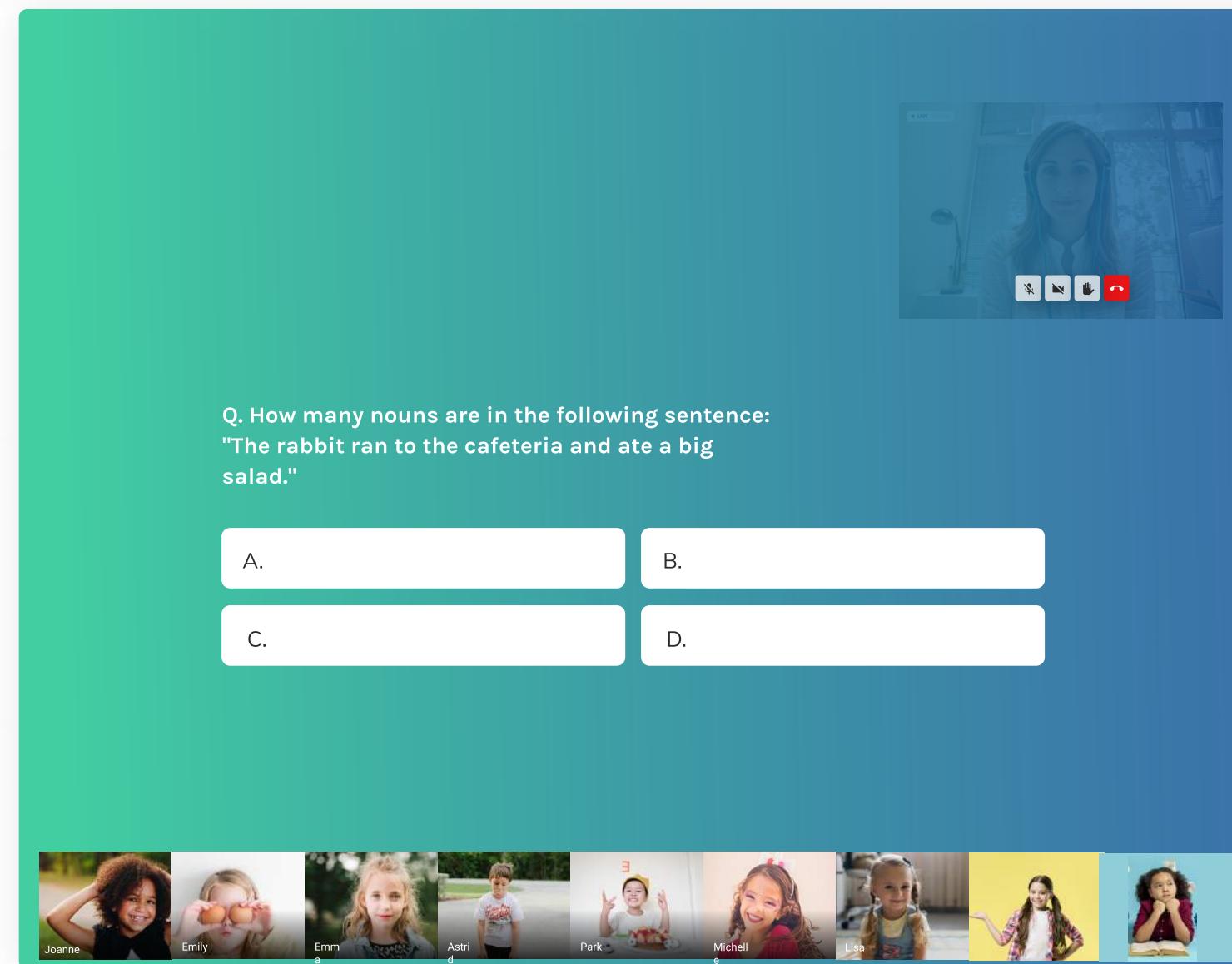
Distinguishing Badges: Testing revealed that our badges were hard to distinguish from each other and lacked context, so we iterated on it.



ITERATION III: AFTER USER TESTING

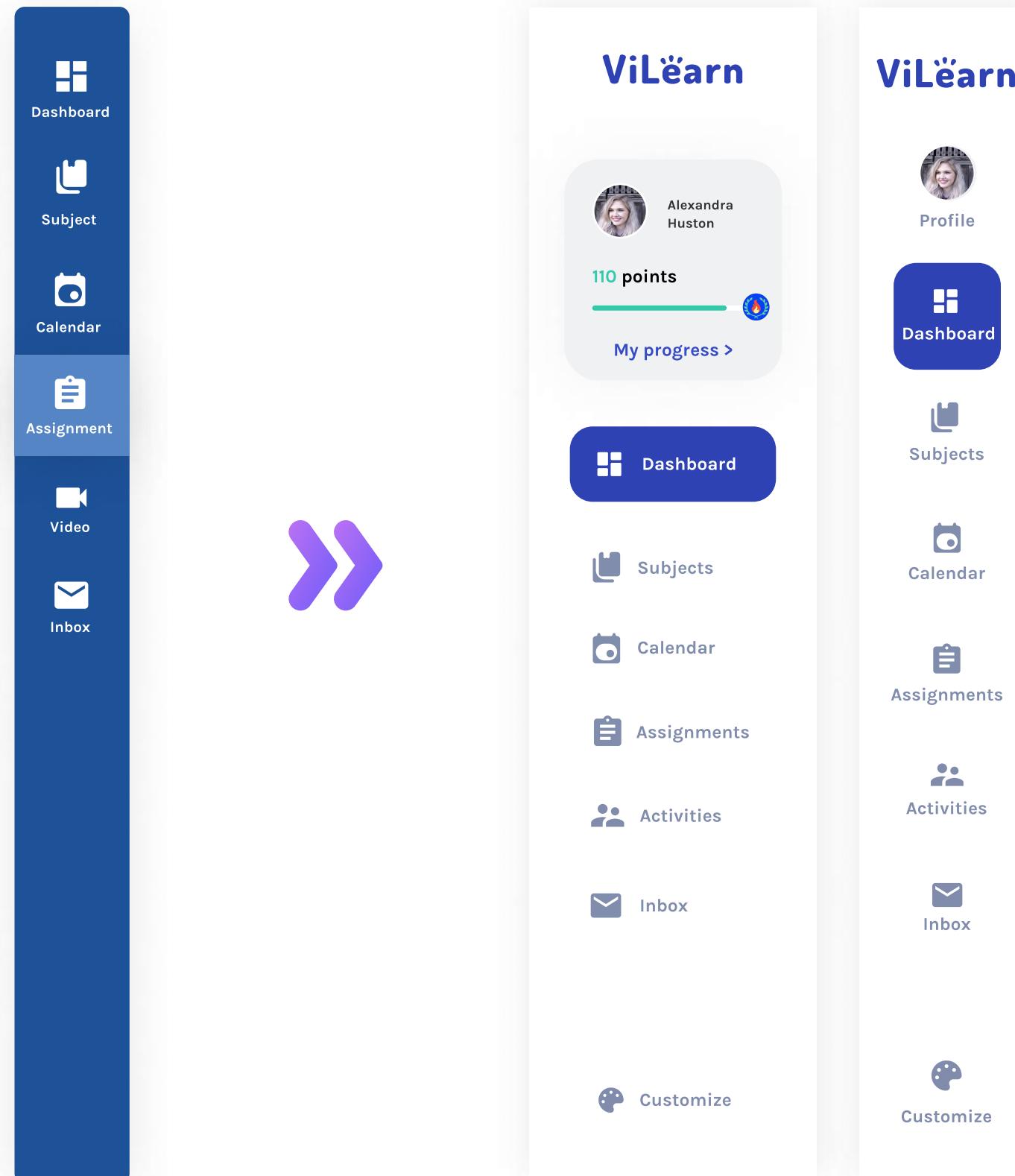
And some more...

Resonating Core Values: Our video call screen and the overall dashboard were not resonating our visual style and rounded buttons and corners. We iterated on the interface to make it more fun and inviting.

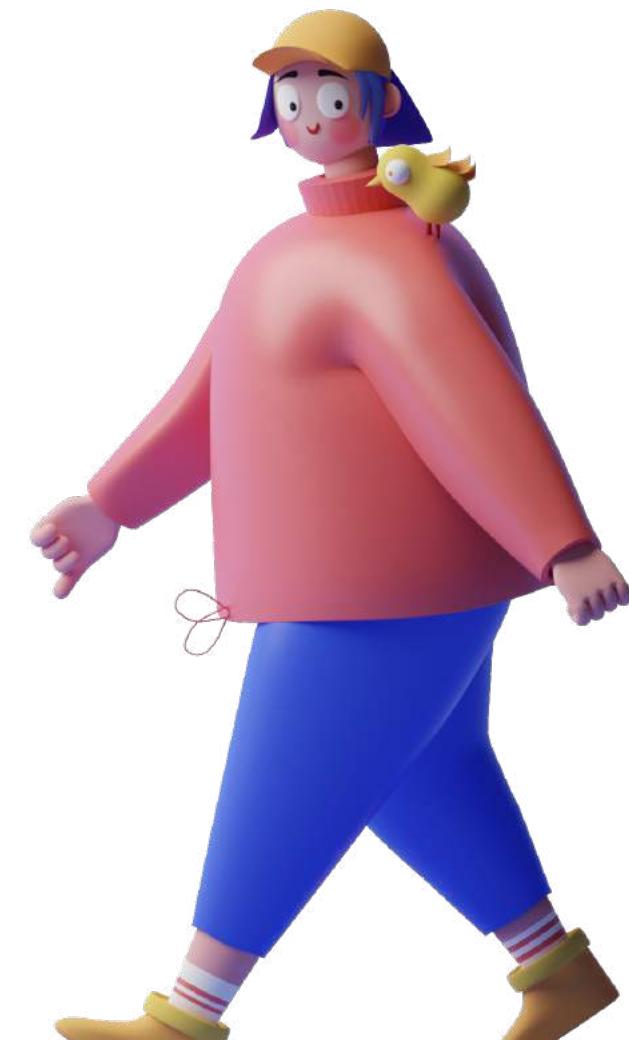


ITERATION III: AFTER USER TESTING

And a few more...



Priority in navigation: The navigation menu was completely changed. The previous one had no branding, lacked focus and clarity. The order of navigation items was not thought out. We completely revamped it and made two versions of it – expanded and collapsed, based on user preference.



Design Strategy

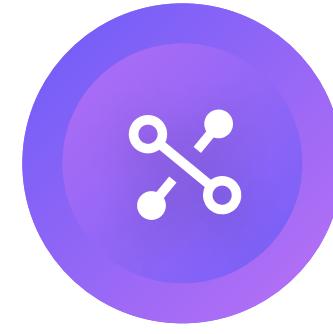
FUTURE SCOPE

ViLearn beyond remote learning



More Accessibility

Students who cannot make it to school or prefer home schooling can still use ViLearn to stay connected & engaged.



Hybrid learning

ViLearn could still be used when classes aren't remote through CMS features like assignments & homework as well as gamification features like castles & badges



Safer interactions

Since ViLearn offers socialization features like chat and calling, it is a safer and moderated way for students to interact & stay connected even when they're not in school.

HEART FRAMEWORK

Measuring Success

Measuring success using the HEART Framework was most appropriate because it is both user-centric and data-driven. It perfectly translated the qualitative goals into quantitative metric evaluation.

| | Goals | Signals | Metrics |
|-----------|---|---|---|
| Happiness | Kids and teachers both enjoy learning experience and are excited to attend virtual school. | <ul style="list-style-type: none">Higher attendanceLower drop-offs | <ul style="list-style-type: none">Attendance / per dayNet Promoter Score |
| | Kids are getting more engaged with the platform, proactively contributing to class and their profile. | <ul style="list-style-type: none">Engagement pointsCastle buildingProfile Changes | <ul style="list-style-type: none">Points collected / per weekCastle progress / per weekProfile updated / per week |
| | More schools sign up with the product and use the app with K-12 students. | <ul style="list-style-type: none">Number of schools signed upNumber of students using the app | <ul style="list-style-type: none">Number of schools onboard per quarter, year on year increase in the number of students on the app |
| | Schools renewing their purchase plan for the application for all the existing users. | <ul style="list-style-type: none">Number of schools renewing their yearly plans and number of users of the purchase plan. | <ul style="list-style-type: none">Number of schools renewed renewed their plan in a quarter for all existing users. |
| | Students are able to use collaboration features like Pomodoro, profiles, and clubs. | <ul style="list-style-type: none">Number of times students are using these features and the time taken. | <ul style="list-style-type: none">Number of times the features are used per day per user |



BUSINESS MODEL

How can we generate revenue?

Tie up with K-12 schools: The business model revolves around providing the platform as software as a service licensed to K-12 schools based on the number of users in demand. The payment plan would be based on recurring annual or monthly membership amount.

Freemium subscription model: The initial trial period for the application will be completely free for six months. Then the user accounts need to be upgraded to have a subscription plan.



Reflection

Frankly speaking..



Questioning the idea at every stage

When so many products already exist in the market, it became essential to question our idea at every stage and determining what are the unique things we are bringing to the table.

Learning to define scope the hard way

The scope of the product kept on increasing and we found ourselves overwhelmed. Only after narrowing our focus to the primary persona and key distinguishing ideas we were able to move forward.

Designing for kids is a tricky affair

Interviewing and recruiting kids was challenging. Planning activities to understand their behaviour in a subtle way was our major challenge in the research phase.

REFLECTION

If there was more time we would..

Explore secondary persona

It would be interesting to explore the teacher's perspective in further detail and bring on some interesting features from their perspective to the product.

Add polling lifelines

To further reinforce the collaboration among kids, we want to explore an extention of the polling feature, i.e the lifelines where kids and work together to answer quiz questions as a team



Thank You!

ViLearn

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