



Bridging the gap in education during adversity.

Theme: Life In Lockdown

What if we are in a lockdown situation for more than a year?

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Lockdown Scenario

CAPTURE A SCENARIO

Jayashree, a 50 year old school teacher, who has been teaching students for more than 25 years in a closed classroom setup has to efficiently shift to a digital paradigm ensuring effective translation of knowledge amongst her students in a very short span of time.

On the other side, Rehnuma, a grade 7 student, who is continuously pushing her boundaries to recreate the fun times since past 3 months with her fellow classmates. She wishes to meet her favourite teacher from her home and is trying to regain all that from a digital environment. Her parents are also finding it difficult to understand how she is faring in her scholastic activities.



Problem Identified

PROBLEM DESCRIPTION

How can teachers like Jayashree continue to enlighten students during this pandemic and provide personalized engagement from her home without losing the essence of the physical classroom experience; while moulding the young minds of the future generation of our country?

From the confinement of her home, how a student like Rehnuma can continue to engage in her daily classroom activities, managing her studies and other extra-curriculars?

Meanwhile her parents want to gauge how their ward is faring in her studies with proper insights from her teachers.



Problem Identified

WHEN SOLVED, HOW IT WILL POSITIVELY IMPACT THE TARGET USER?

With lockdown in place to maintain social distancing, it is paramount to incorporate new methods of teaching and educating students. With proper intervention, students, teachers and parents can be brought together in a collaborative environment on a common platform where they can engage, interact and create a positive learning impact while keeping the students safe and healthy in the comfort of their homes.

Schools are a very important part of the formative years of a child and apart from education and knowledge, other life values like discipline, punctuality, morality and empathy towards their counterparts are also imparted by the faculties. An appropriate solution would incorporate all of these things at one place.



Target User Persona-Student

PROFILE

Name: Rehnuma

Job Title: School Student

Gender: Female

Family Setting: Nuclear family (4 members)

DEMOGRAPHICS

Income: NA

Education: 7th Standard (ongoing)

FEELINGS

Values & Goals: Meeting with her friends, engaging in studies, completing assignments and interacting with her faculty.

Worries: Clearing doubts, fun with friends, trying remote learning.

Influences: Parents & Relatives, Friends, Teachers, Social Media.

OBJECTIONS

Cost: Infrastructure.

Value: Low digital fluency, lack of motivation.

Fear: Lagging behind peers, effective learning, performance anxiety, losing contacts with friends.

Target User Persona-Teacher

PROFILE

Name: Jayashree

Job Title: School Teacher

Gender: Female

Family Setting: Nuclear family (3 members)

DEMOGRAPHICS

Income: 4.5 LPA

Education: Postgraduate

FEELINGS

Values & Goals: Managing students, imparting knowledge, conducting assessments.

Worries: Clearing doubts, catering individual student, creating educational resources & soft assets, maintaining class decorum and work-life balance.

Influences: School Admin, Peers, Parents, Social Media & News.

OBJECTIONS

Cost: Long-term efficiency, student output.

Value: Infrastructure, Awareness among peers and students, allocation of resources from management, resistance to change, poor digital training, low income.

Fear: Keeping students engaged & motivated, hesitant with new tech, job security, self doubt, hierarchy pressure.

Target User Persona-Parent

PROFILE

Name: Atif

Job Title: Software Engineer

Gender: Male

Family Setting: (4 members)

DEMOGRAPHICS

Income: 10 LPA

Education: Graduate

FEELINGS

Values & Goals: Taking care of family, providing resources, ensuring good education, health and safety.

Worries: Children's education and holistic development, providing financial security, future of children.

Influences: Colleagues, school teachers & admin, family members, social media & news.

OBJECTIONS

Cost: Justification of school fees, invalid use of products & resources,

Value: Comparison between peers, resistance to change.

Fear: Children lagging behind their peers, health of family, cyberbullying and online distractions, job security.

Ideation

“Creativity is all about connecting the dots”.

We gathered all the floating ideas in our minds to widen our perspective towards feature based solutions to all the critical challenges captured via our research.

We tried to bridge the boundaries of design and technology all together to find an innovative and impactful solution for digital schooling



Explorations

“Bringing Ideas to holistic viable solutions”.

Service design solution

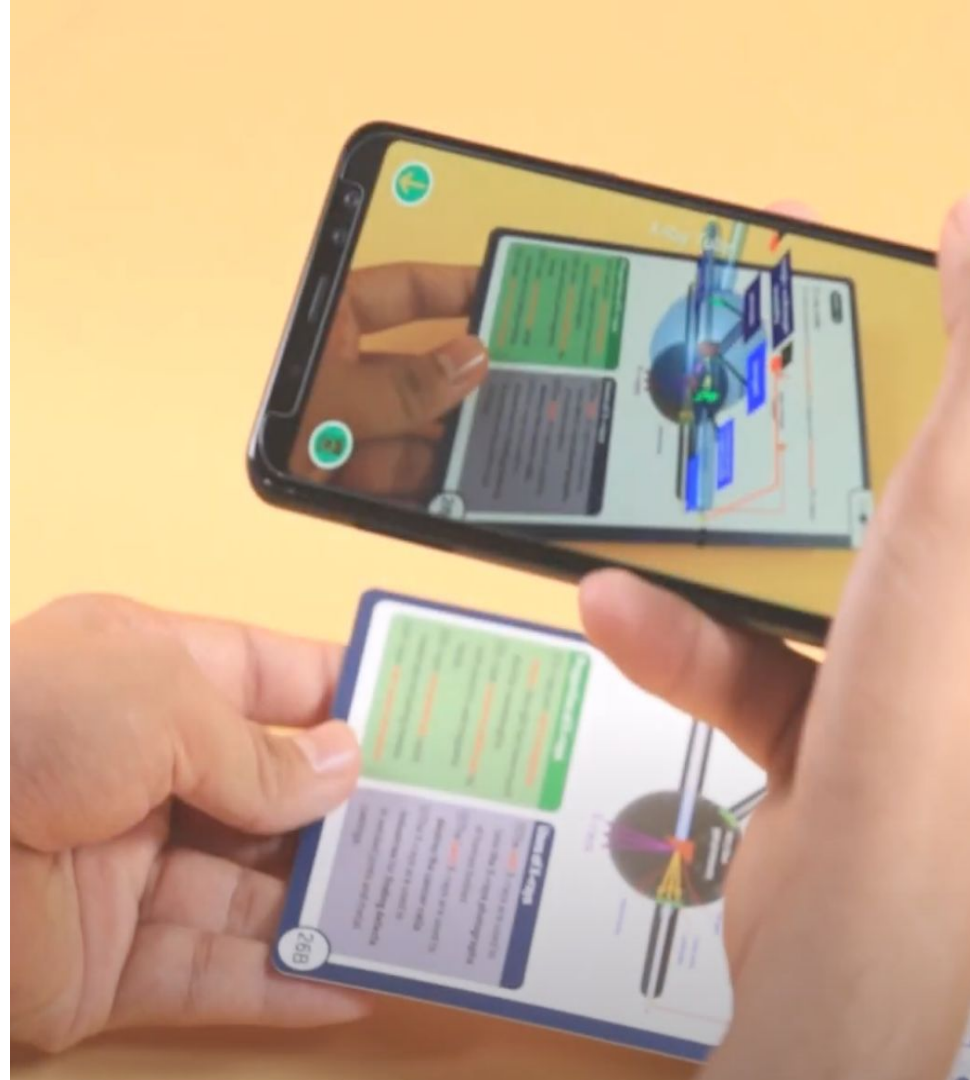
A service providing low cost physical assets like laptops, tablets, required to students/ teachers/ management to bring back schooling to life.

Tangible design

Redesigned school infrastructure according to social distancing and health care norms.

Digital Application

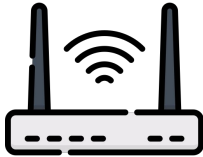
An AR based mobile phone application for digital schooling with fun and data driven graphical learning/ teaching experience for students and teachers.



Realization

“Reality is far from imagination.”

Our continuous ongoing research showed us the stakeholders real life challenges which became the key factor on understanding our product market fit.



No consistent network

67% of users said Existing video conferencing solution does not work as it consumes high amount of data and requires a higher bandwidth.



Lack of digital fluency

43% of teachers in our research are not much fluent in using web applications.



Unlikeness for AI Judgements

23% of parents told us they won't like an AI judging and evaluating their child.

Transformation

RULE # 1: THE CUSTOMER IS ALWAYS RIGHT!

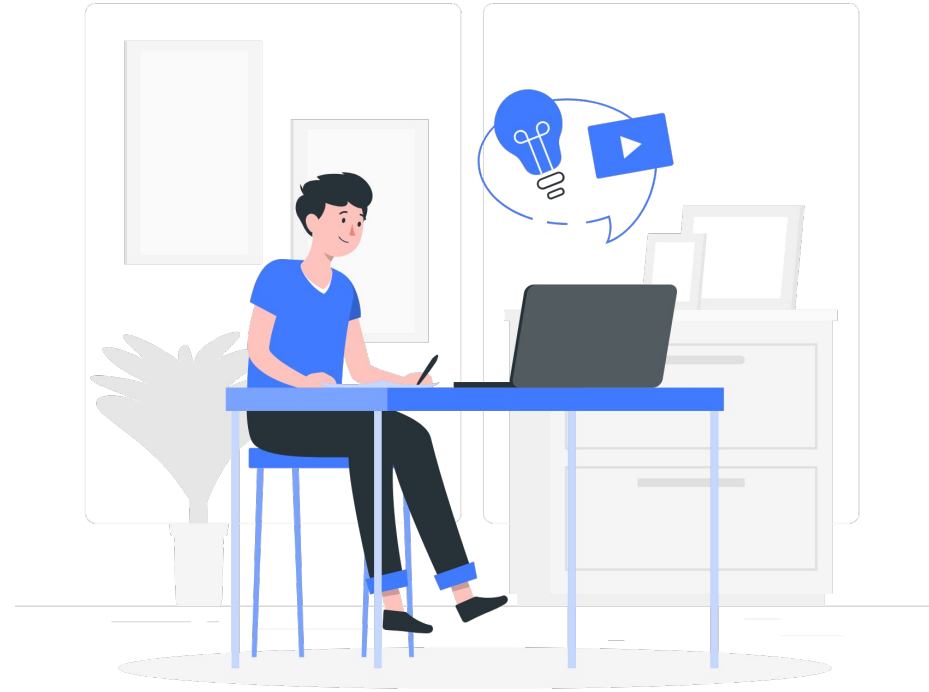
RULE #2: IF THE CUSTOMER IS WRONG, SEE RULE #1." -

By Stew Leonard

Redefined solution

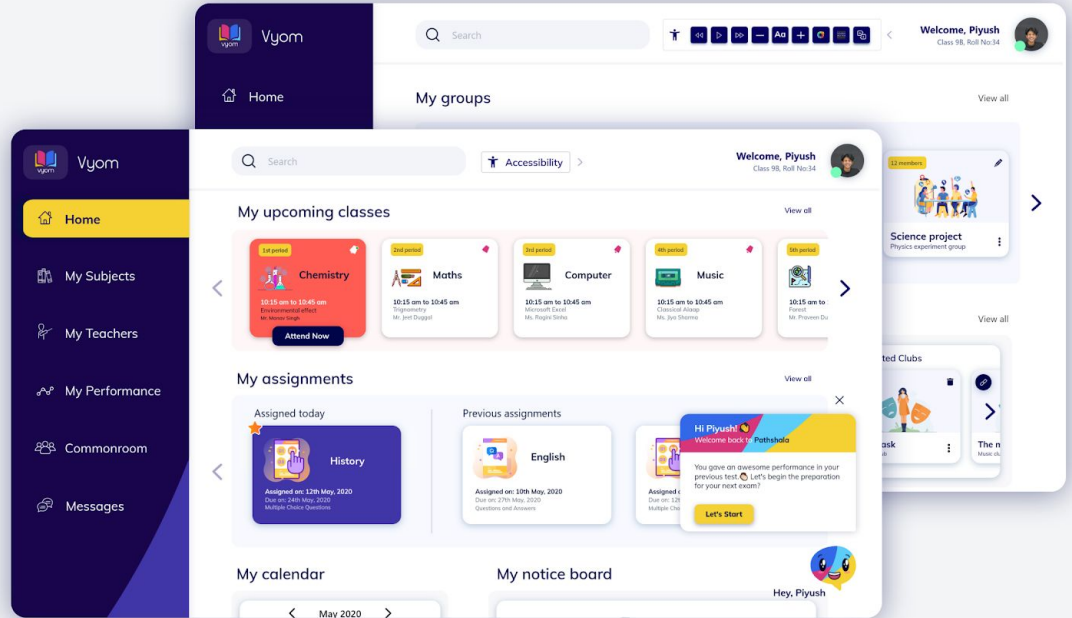
Looking at the immediate requirements, we will introduce a simple and intuitive digital schooling solution which could bring back the physical and emotional realm of the classroom within the provided resources and conditions.

In later times, we can leverage the benefit of data acquired from digital education to provide personalized and tech+human driven educational experience transforming studies and



Vyom

Introducing the new age digital schooling



User Experience

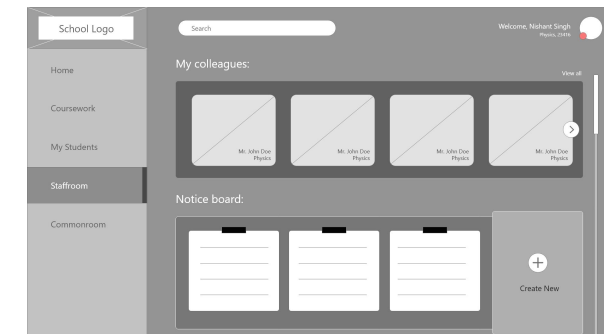
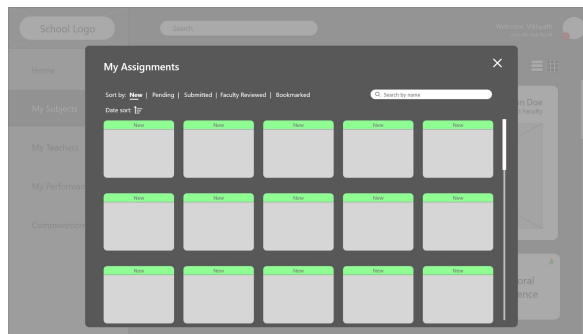
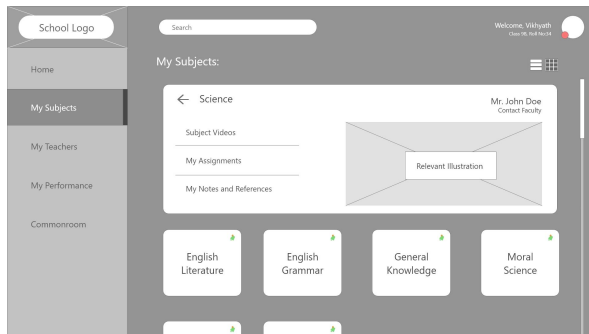
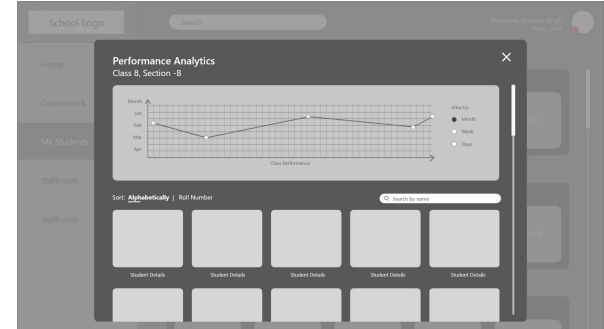
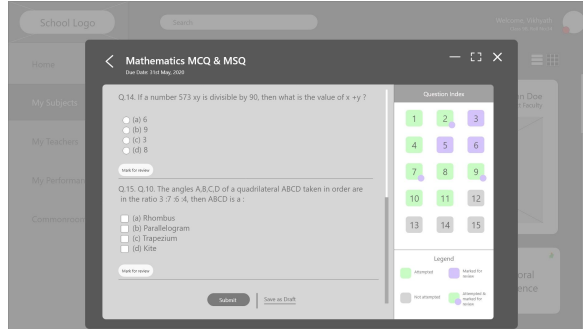
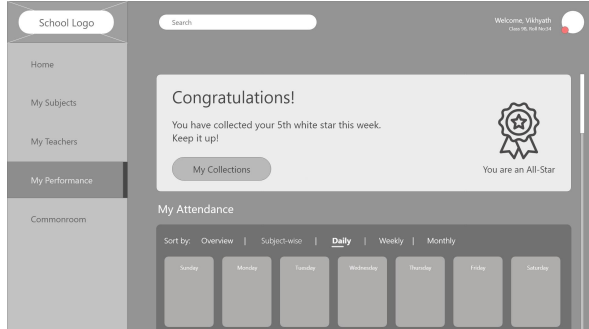
Student Interface

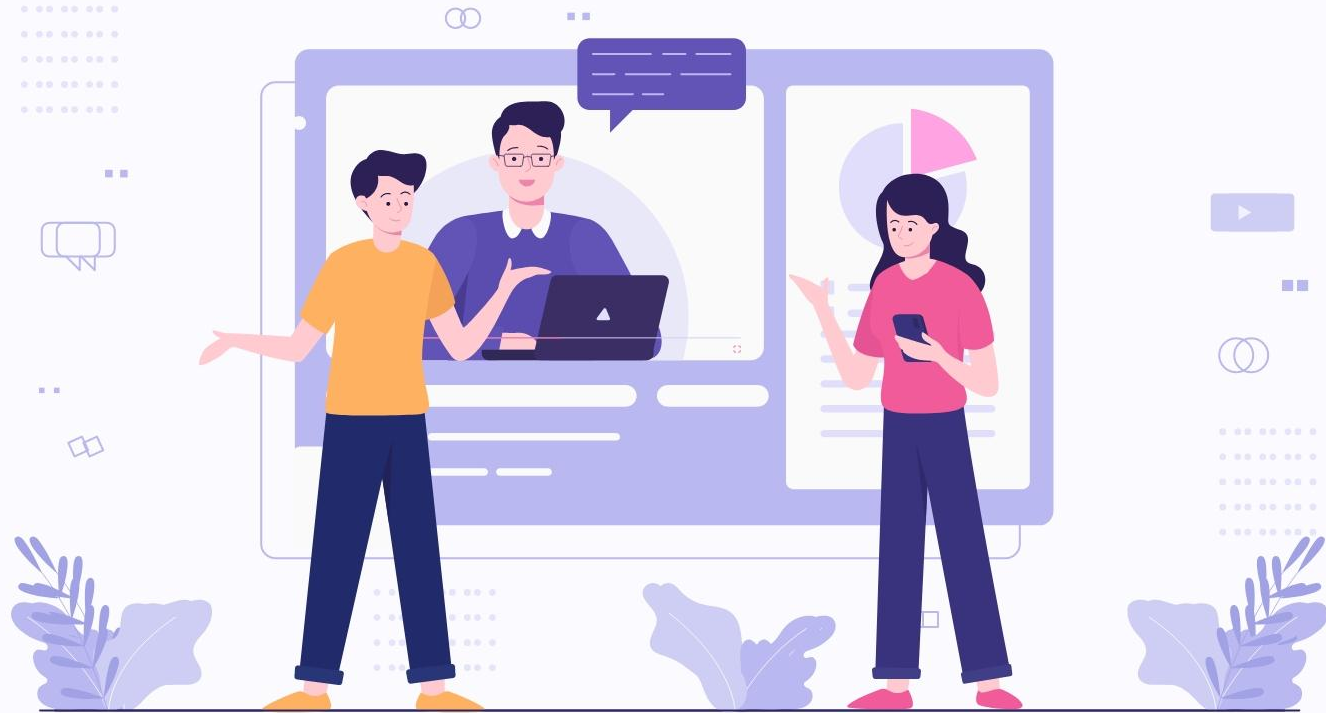
The Student Interface features a dark blue sidebar on the left with navigation options: Home, My Subjects, My Teachers, My Performance (highlighted), Commonroom, and Messages. The main content area includes a search bar, a user profile for Piyush (Class 9B, Roll No:34), and a celebratory banner for collecting 5th white stars. Below the banner is a 'My Collections' button. The 'My Attendance' section shows a weekly overview with 'Daily' selected, displaying 'yeah!' for Monday-Thursday, 'Nop!' for Friday, and 'Talk to me!' for Saturday.

Teacher Interface

The Teacher Interface features a dark blue sidebar with navigation options: Home (highlighted), Coursework, My Students, Staffroom, Commonroom, and Messages. The main content area includes a search bar, an 'Accessibility' button, and a user profile for Nishant Singh (Physics, 23416). The 'My upcoming classes' section shows three class cards for Science and Physics. A 'Memo' section contains two tasks: '1) Have to finish the notes for Class 8C' and '2) Assignment on Motion, Force and Work to discuss with Class 9B'. A calendar for May 2022 is also visible.

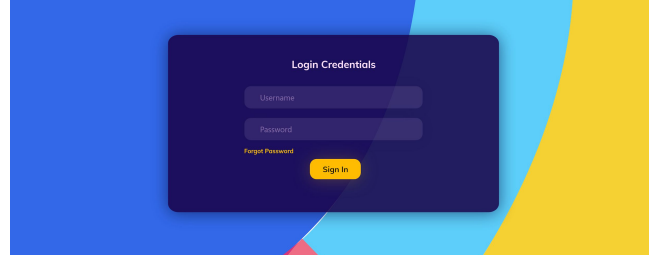
User Experience



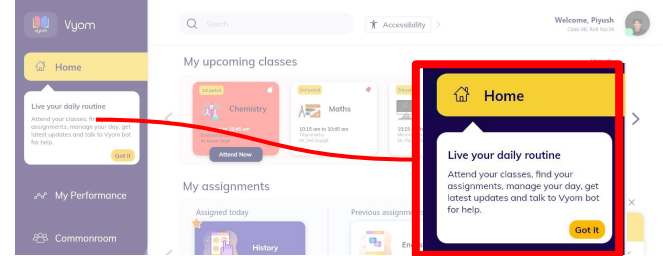


Interventions introduced for **children & teachers**

Solution | features

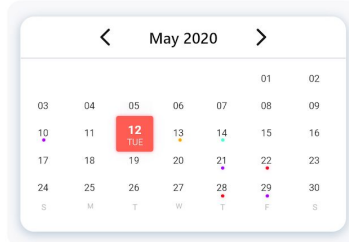


Login through school **registered credentials** to avoid false usage of profile and personal data.

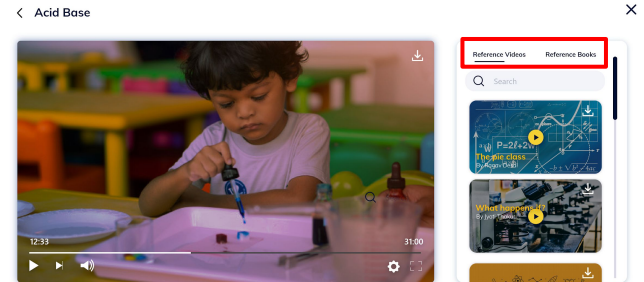


Easy and guided onboarding process helps both student and teacher to better understand the medium .

My calendar

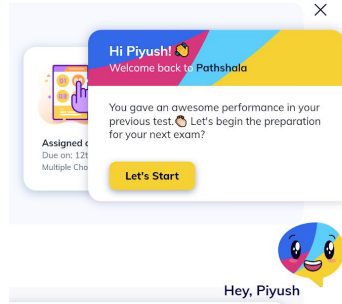


Customisable academic calendar and **reminders** for classes, submissions, and other important message/ notification for both students and teachers

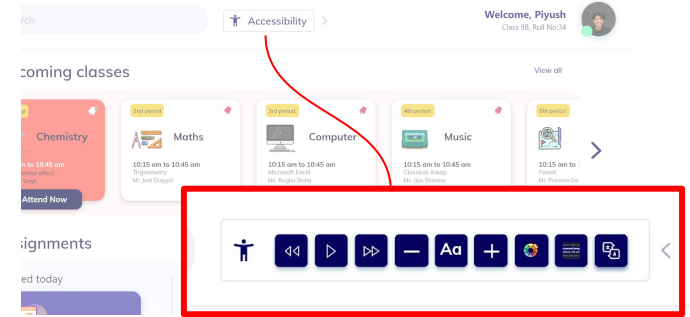


Reference videos and related **notes** all available and organised at a single place for the students. Removes the hassle of searching for them individually

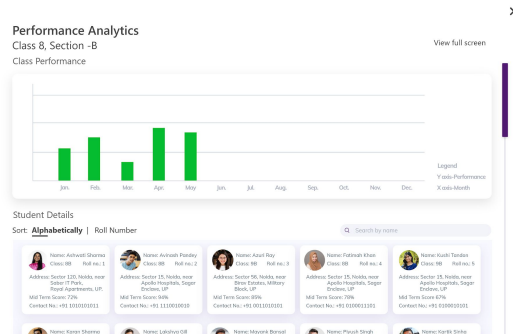
Solution | features



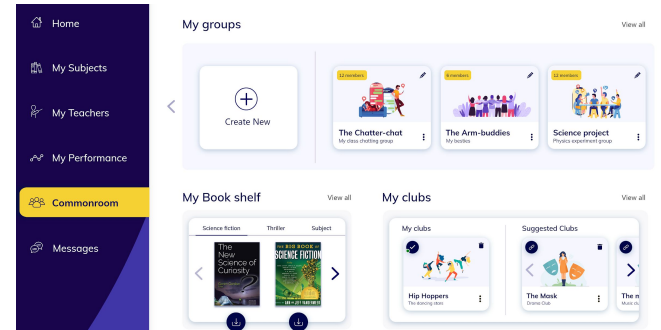
AI integrated chat bot for any help like navigation, reminders and updates



Addition of accessibility panel to be **inclusive** and **convenient** for all range of users

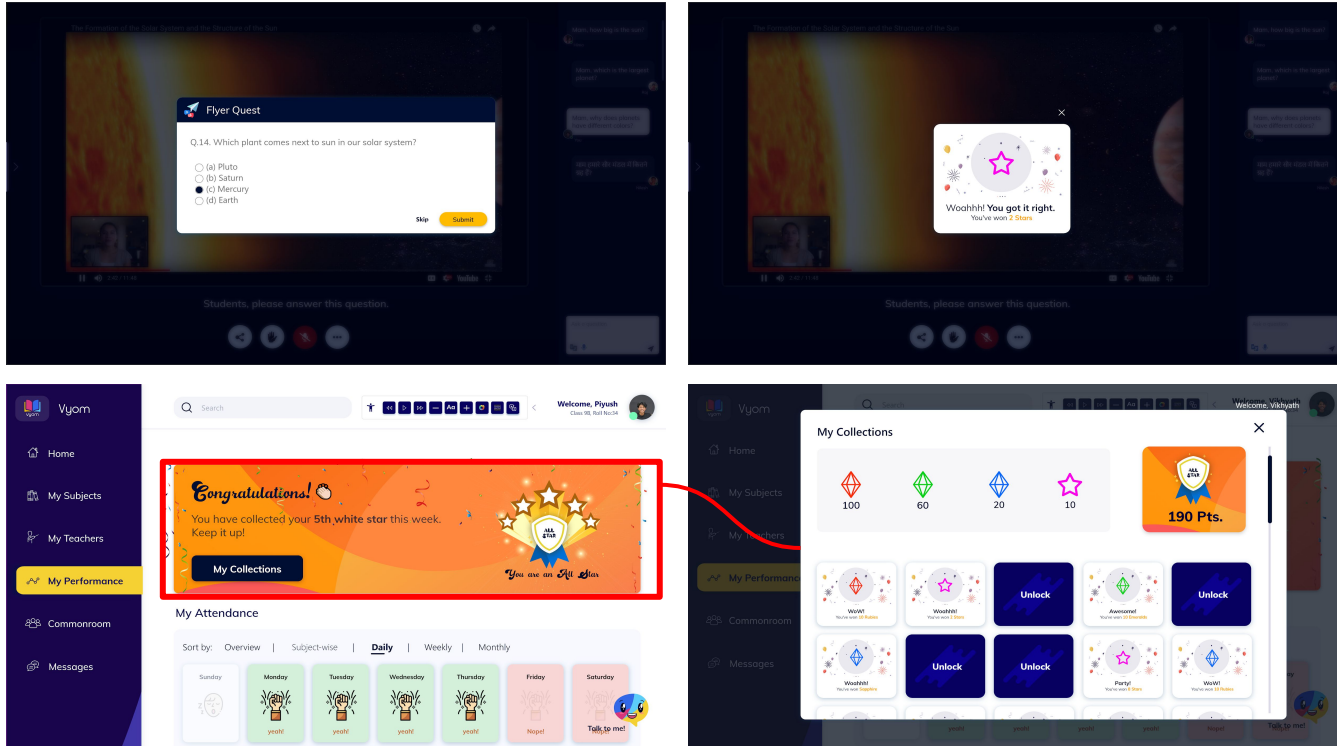


Automated student performance analytics and attendance system, Assessment done by the teachers, but compiled by the system.



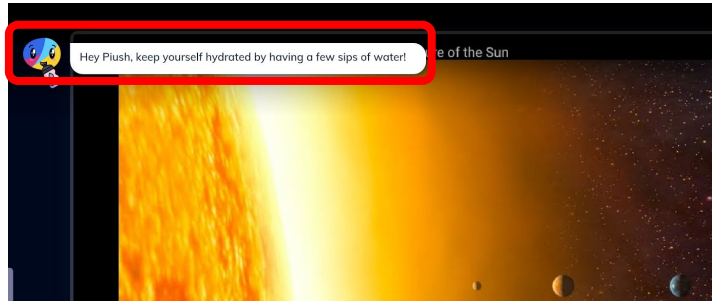
Common room feature to enable extra curricular and group activities for **motivating** students to do more along with studies.

Solution | features

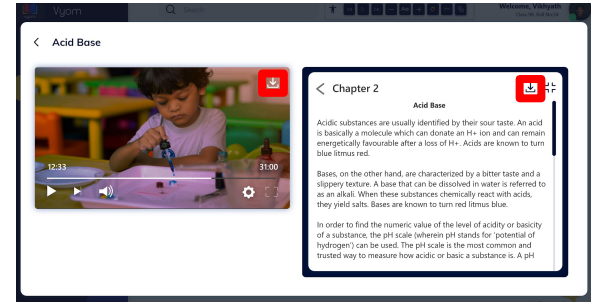


Gamification to engage children during classes with **pop up quiz/question/task sessions/submissions** and awarded with **credit points (ruby, emerald, sapphire, star)** and collecting **badges** accordingly.

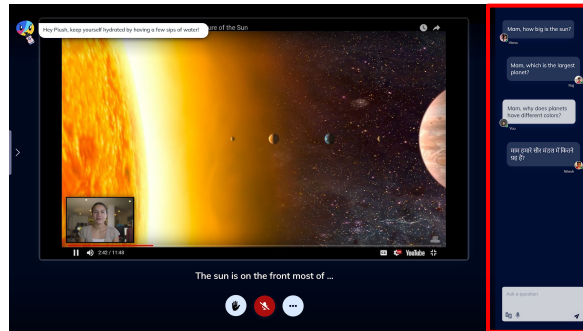
Solution | features



Interactive health reminders make sure that both students and teachers take care of their well being and posture during the class. **"Blink your eyes", "Keep your back straight",** and much more!

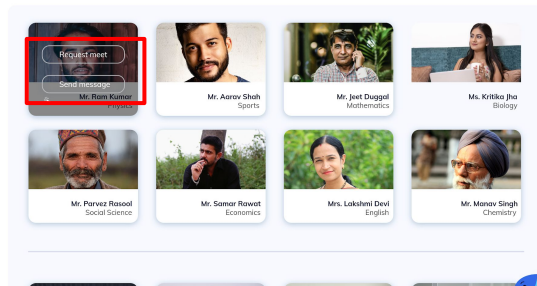


Addition of both **live** and its **recorded sessions** for later use. **Offline downloadable** content helpful in case of non consistent internet connectivity.

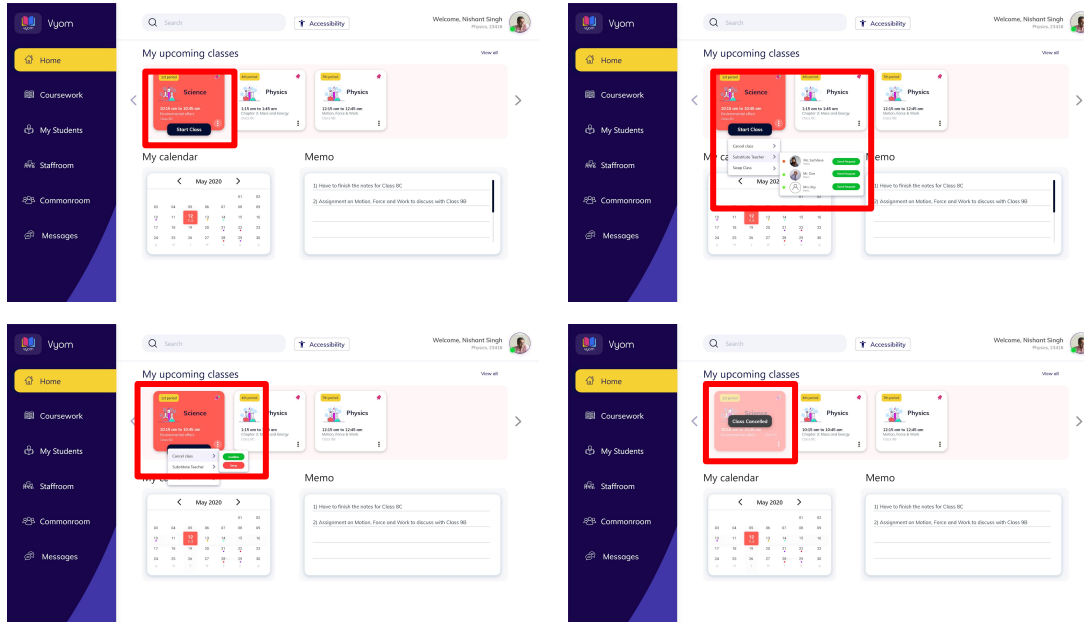


Doubt clearance done **three-way**. Either by booking an appointment or through personalised messages or open

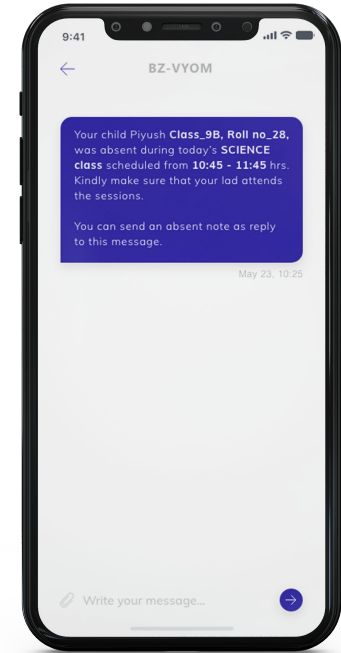
My Faculties:



Solution | features



Teachers can **alter/substitute/swap/cancel** their classes and an immediate notification will be sent to the students regarding the alternate arrangements made.



Personalised notifications and **updates** regarding child's attendance and performance are directly sent to their **parents contact number**

Process



Research

primary study- students, parents, teachers, management, secondary study- benchmarking of similar products.



Data analysis and insights:

Problem statements/pain points, needs, wants, USP, identifying target users (User economic groups and systems), taken for granted (like proper internet connection, availability of required hardware, electricity, advanced/novice tech user,).



Ideas and concepts generation:

Brainstorming, explorations, scenario and journey mapping,



Prototyping

Features and positioning, low fidelity wireframes, interaction and touch points, UI

Impact

IMPACT OF YOUR SOLUTION

One common platform catering to the needs of different stakeholders (students, teachers, parents, management). With current lockdown, this can be **easily implemented** by schools to initiate **learn-from-home** in a **safe** and **secure environment**.

Students:

- Mimics a classroom like environment. Student engagement and interaction are of the core focus as they are involved in regular **class-like activities** like **pop up quiz, tasks, co-curriculars**, and more as they become attentive and stay conscious during the online session.
- **Easy onboarding** procedure helps the student to better understand the learning medium .
- An **organised, easy to learn** and interactive platform. This helps the kid to cope up with schooling and learning process without having to go to school.



Impact

IMPACT OF YOUR SOLUTION

Teachers:

- Mimics a classroom like environment. An **organised easy to teach** and **interactive** platform.
- **Easy onboarding** procedure helps the teacher to better understand the learning medium .
- Can meet and discuss with other faculties on a virtual medium
- **Automated attendance** and performance analytics system allows teachers to get rid of the usual paperwork and protocols. Evaluation and assessment is done by the teacher but analysis and compilation is done by the system.
- Creating lesson plans, timetables, and monitoring other activities becomes easier.
- They can **monitor** and **guide** individual students efficiently



Impact

IMPACT OF YOUR SOLUTION

Parents:

- **Keeps them well informed** about the child's education, life skills, strengths and scopes for improvement,
- **Receives alerts**, updates, attendance and performance of their child through directed messages.
- **Removes the fear** of having their child sitting in front of the screen all day and spoil their health due to implementation of engaging activities and health reminders/advices.
- Since this platform includes both scholastic and non scholastic activities, it ensures **holistic development** of their child.

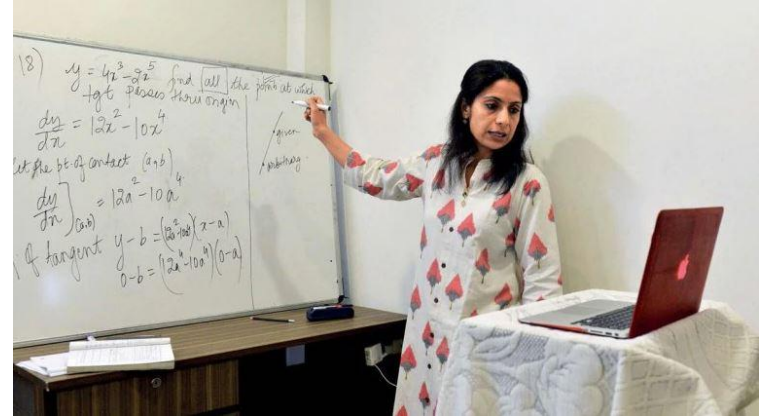


Execution & Viability

HOW CAN YOUR SOLUTION BE IMPLEMENTED AND SUCCESSFUL?

Since the specified target user group generally has a **smart device** (phones, tabs, laptops, desktops) it will be an **online platform** dedicated to the school activities of the child which could be monitored by both the parent and the teacher and resources provided by the management.

This could be designed and personalised for individual schools/educational boards with respect to its needs, necessities, resources and other infrastructure.



Execution & Viability

Future scope

- Increasing the **accessibility** to all user groups irrespective of language and other accessibility/disability issues.
- Making the platform user friendly and connected across **all devices**.
- A **combined solution** consisting of both a **dedicated hardware** and **software** designed for this specific purpose to widen the user topography as many don't have access to proper electricity, internet connectivity and hardware.
- Facilities to take the left out **extra curricular activities** online.
- Features to conduct **examinations** online
- Content creation for teachers.
- **Additional plugins** and **features** (like engagement and eye motion tracking) as per extra subscription fee or charges



Execution & Viability

Free

Everything in free

- Conduct daily lectures
- Provide student assignments
- Update important notices
- Chat

Essential

Everything in free plus

- Digital library integration
- Accessibility plugin
- Classroom gamification
- Performance analytics
- Digital examination with facial rec
- Multilingual capabilities
- Virtual Parents teacher meeting
- Social groups/ clubs formation
- Appointment booking

Premium

Everything in premium

- Chatbot driven student support
- AI suggestive personalized engagement
- Emotional and health analytics
- External SMS integration
- Financial management
- External API Integrations
- Voice recognition
- On premise deployment for data security

Enterprise

Everything in custom

- Digital human driven student support
- Immersive media integration
- Omni channel student engagement
- Role based access
- Optimized service
- 24/7 support
- External API Integrations

Thank you!



*A project by **Design Pandavas***