



CODING CONTEST NOMURA INDIA INFORMATION TECHNOLOGY DIVISION

NOMURA
Connecting Markets East & West



INNOVATE

KakushIN



Problem Statement

Karan lives in Mumbai with his wife and 2 kids, aged 9 and 6. He works with a large bank and in his spare time does volunteer work for an NGO that works on the field of education for underprivileged children. The Covid-19 situation caused a complete overhaul in Karan's life. In line with his organization's and the government's guidelines, he and his wife are now working from home. Both of his children are also attending classes virtually.

After some initial hiccups, he noticed that his children were adapting well to the virtual classrooms and while in his mind this could never replace a traditional classroom, a virtual classroom did lend itself certain benefits. However he noticed that the coordination with the school and teachers for him as a parent had become a bit difficult. Assignment submission, test and class schedules, parent teacher meetings etc. were all getting coordinated over WhatsApp or email or verbally. He felt this could be improved.

He also noticed that many of the teachers and other parents were not very tech savvy and this method of teaching and exchange of information over multiple platforms was leading to quite a lot of confusion.

Being from a technology background, Karan felt he could create something that would be of help to everyone in this situation. He started envisioning an application that would be used by all – students, teachers, parents and school administration to help uniform flow of information and ensure that the relevant details are available to all.



Current Challenges

1. How to seamlessly manage online schedule and send notifications (For students, parents, and teachers)
2. Teachers give online assignments but no central repository to upload files
3. Ability to upload videos, photos, text, PPT, images and online live classes
4. Assessments of the solutions uploaded by students
5. Database of students and parents
6. Ability for parents to see the Teachers' profiles
7. Weightage based scoreboard, dashboard for each student based on assignment submission, score of assessment, attendance etc. outcome-based approach (Baseline vs End line metrics)
8. Chat-bot for various queries and information needed for students and teachers
9. Parents and Teachers can see performance of students mapped to them
10. Generate various performance reports, for students and teachers

Users for the solution (this is not an exhaustive list)

1. Students - Students of different class and different sections will be interested to use the portal for below:
 - a. Checking schedule of their classes, assignments, holidays, exams etc.
 - b. Submit solutions to their assignments
 - c. Interact with other students and teachers
 - d. Participate in extra-curricular activities
2. Teachers
 - a. Conduct classes and upload videos, photos, ppt based on classes
 - b. Assessment of assignments and upload scores
 - c. Monitor performance of the students
 - d. Attendance of teachers, students with reports & Graphs
3. Parents
 - a. Get schedules and notifications
 - b. Attend Parent-Teachers meetings
 - c. Interact with teachers, coordinators and management
 - d. Payment of school fees, exam fees
 - e. Track performance of their kids
4. School coordinators & Management
 - a. Upload schedules
 - b. Discussion with staff
 - c. Discussion with parents