Team Details

Team Name: Shwoshikkha Prokolpo University: North South University

Selected Scope

Education in Post-COVID era

Problem Description

Post-Covid, the number of school drop-outs has surged, especially in rural areas. Possible reasons include:

- Financial instability
- The opportunity cost of attending classes in working/fixed hours
- Lack of infrastructure and funds from the school authority side
- Lack of engagement in classroom, thus poor performance in exams, which falls into a negative feedback loop
- Lack of proper motivation/incentives for students to continue
- Inconsistent quality of education throughout the country

Each of us can relate this, all classes are not made equally engaging. Instead of providing excitement of actual learning, many of the classes we know are boring, passive and thus can feel like a complete waste of time, which can be a perfect reason for a student to drop-out.

Quite some youngsters are responsible for the food and shelter for themselves and even their families due to their fate. Many of them simply cannot afford to just leave their earning potential and attend school in working hours. In a country of mass poverty like ours, there is no way to ignore/deny this condition.

To solve this issue, we must arrange a solution that'll take these realities into consideration.

Lack of quality teachers can strongly affect a student's outlook of education as a whole. By ensuring consistent quality of education, we can create and maintain a level playing field no matter where the students are when they are getting their lessons.

Brief description of your solution

Considering the issues stated above, we are proposing a learning management system that will provide **interactive lessons**, which will help remote learning achieve two critical goals of learning in general: to become engaging and effective to the learners, unlike the present mainstream alternatives that fail to achieve those goals for their passivity. Our approach is to use <u>Gamification</u> to make learning more engaging to students, thus effectively uplifting the drop-outs. This 'gamification' of conventional learning materials <u>is proven</u> to motivate and engage students more and thus help them learn better.

The whole syllabus will stand on a **self-paced curriculum**. The kids who have to work for their bread need their classes and lessons to be in flexible time. It is impractical for us to expect them to allocate a considerable chunk of the day for classes when they must work their day jobs to get going. By making it self-paced, we provide them with the flexibility they need and deserve to study to their hearts' content.

The interactive lessons themselves will act like small quizzes. These **bite-sized interactive tasks** will be provided with each lesson (videos, images and texts) and must be completed to advance any topic. Thus they will be receiving instant feedback on their thinking and actions consistently throughout the whole curriculum. This is bound to make this method of learning way more effective than currently practiced mainstream alternatives and hopefully teach its students to better grasp their lessons.

While the interactive lessons can act as short quizzes, exams on longer syllabuses can be held on the LMS itself. Whatsoever, these frequent evaluation activities prepare a student to be confident and do better on other exams. Students may find these exams more interesting than conventional exams as they are to follow a sequential progress path and find immediate connection to the materials.

The system may reward the students monetarily/with different gifts for their individual progress. This will act as an incentive which may translate into a greater amount of participation in the system.

Students who do not have financial difficulties also can register, but possibly for a reasonable subscription fee.

Once this system is proven to surpass its claims and be able to produce better students in practice and also keep them, we have a strong interest to work with the government/responsible authorities to the point that this system can run **parallel** to the traditional curriculum, so that completion of this interactive curriculum can be regarded as equivalent to the conventional curriculum, possibly with a placement test, so hopefully, this can become the ultimate curriculum for the underprivileged and, gives them a better way to catch-up with others by letting them use their time better.

Impact

It is not a secret that despite its intention, our current education-system makes it rather difficult for the students not to distance themselves from the actual essence of what they intend to learn. As our system takes an interactive and hands-on approach to the learning materials, hopefully the gap will be shorter and shorter. They will develop an active thinking style regarding what they intend to study. This may also make it easier for them to succeed in their respective careers.

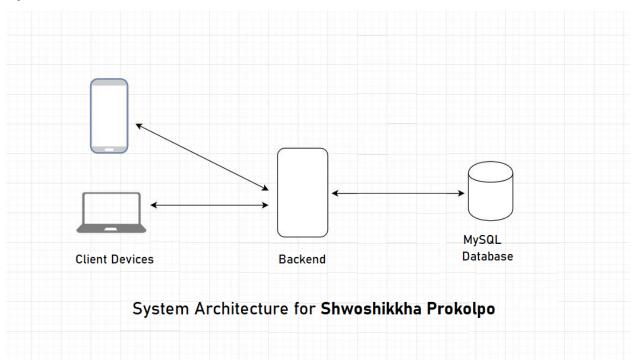
Hopefully 'Shwoshikkha Prokolpo' will be an accelerator of growth for those who are behind in the race, leveling the field for millions unprivileged. This can be a seed for change as its possible chain-of-impact will transform millions others.

Full description of your solution

Features of your solution:

- Interactive Lessons Console
- Collaboration Between Peers
- Virtual 1-on-1 Support WIndow
- An Incentive System

System Architecture:



Above is the system architecture diagram of 'Shwoshikkha Prokolpo'. It will consist of a simple database-backend-client configuration. For Database we will be using MySQL.

Tools and Technologies you are going to use:

- HTML
- CSS
- Vanilla JavaScript
- Django
- MySQL
- Figma

Description of your prototype:

It will be an web-app which will primarily consist of the Interactive Lesson Console, where the users (students) will consume their lesson contents and based on situations the user will give inputs and receive respective outputs.

As it is just a prototype in a short-duration hackathon, the scope of the topic/syllabus will be limited but enough to demonstrate the concept.

Conclusion:

"Shwoshikkha Prokolpo" is an LMS that uses an interactive approach to learning and intended to become the ultimate curriculum for the underprivileged, giving them a better way to catch-up with others by applying Gamification and giving them the flexibility they deserve.