



Overview

Alpaca provides individuals with a medium to acquire education based on a large variety of themes and subjects. The platform is powered by the community, which is one of the key distinguishing factors from rival counterparts. The platform will also be made free of cost to those who can not afford it (Read Monetary Section).

*Note: This project is currently programmed with purely hardcoded data. It is not a final release, but it attempts to showcase how a stable release of Alpaca may look like.

Theme and Sub-theme of the project

The main theme of the application is Education. We will also use Data Analytics (sub-theme) to monitor and track the user's interests, and recommend courses to users. With data analytics by our side, we can perform various activities to enhance user experiences.

Content and Material

→ Material Upload

Anyone on the internet can form and upload a course to Alpaca for users to check out. They create it using an intuitive course creator from Alpaca, which allows them to add sections, chapters, and knowledge evaluation checkpoints.

Courses that are relevant to programming also can contain coding questions. Users can solve the questions in repl.it

Post creation of the course, they add minute details like pricing, description, etc., and submit it for evaluation.

When someone submits a course, it is required to be evaluated by a moderator on the system, before being publicized.

If a creator's course fares well amongst the community then he/she will receive an increment in reputation points for that particular category.

If a creator's course does substandard amongst the community and receives poor feedback then they will lose reputation points in that particular category.

→ Knowledge Assessment Checkpoints

A Knowledge Assessment Checkpoint is an assessment that certifies one's understanding of a section/chapter in a course.

An "EOC Knowledge Assessment Checkpoint" is the final most examination in a course that certifies knowledge of the entire course.

Reputation and Roles

→ Reputation Points

Users earn reputation points by completing "EOC Knowledge Assessment Checkpoints" with an 80% or above. Reputation points unlock special privileges. Reputation points are grouped into various segments. If one was to complete a course on Data Structures and Algorithms, a new reputation point category would be created.

→ Moderators

A moderator is someone who has collected a certain amount of reputation points on Alpaca. Once a new course is released it will be evaluated by a moderator on the system.

The moderators will only be able to evaluate the courses of the category that they have acquired reputation points in.

e.g If a new course on java programming has been released, then the moderator who evaluates the course would have to have a certain amount of reputation points in the high-level programming category.

To make sure a moderator still has the skills he needs to continue to approve courses, they will be quizzed using one of the knowledge assessment checkpoints from a former course that they had approved. If they receive a percentage of less than 90 then moderators will lose their privileges in that particular reputation point's category. Strict surveillance measures similar to those of alpaca for institutions will be used to ensure full honesty during the assessment.

In a situation where moderators create a course, they need not send their course for Inspection and approval.

In the scenario that a moderator approves of content with an overall poor rating from the community, they will lose reputation points in that particular category.

Alpaca for Institutes

Our system will also hold a plan for institutions and schools. With Alpaca for Institutions, teachers are not limited to teaching from merely a textbook. They are free to alter this “textbook”, that is the digital course, to match their syllabus, at any point in time, in turn enhancing the quality of lessons. (the original course is not being altered, a copy of it that is local only to the school is being altered) No more looking around for bits and pieces of a lesson. It’s all in one place.

Every half a minute, a student drops out of high school due to the harshness of report cards and the stress of coping with school. Alpaca for Institutions aims to resolve this by using advanced data analytics to determine how likely the student is to succeed in their future, based on their understanding of the concepts. We strive to enhance education and global literacy, therefore, Alpaca for Institutions will be made completely free for government schools.

Implementation of Data Analytics and A.I

→ Promoting a specific course depending on user feedback

Data Science will assist us in tracking the types of courses a user is interested in, and suggest relevant courses.

→ Grouping Reputation Points

Alpaca Artificial Intelligence will note the courses that one has successfully completed, create a reputation point category classified with the same category as the course, and add reputation points to it depending on their level of achievement on the EOC Knowledge Assessment Checkpoint. This determines what moderators will be able to evaluate.

→ Student Progress Evaluation

Dropout rates are rising more than ever; school becomes a tiresome and stressful activity for so many students worldwide, chiefly due to their lack of understanding poor course material and content. Alpaca for Institutes aims to resolve this by using complex data analytics to determine what concepts the student is unclear of and how likely they are to succeed in future assessments, based on their current progress and understanding of concepts. This way, we can aid in increasing global literacy, decreasing global drop out rates, and tackle issues before meeting them.

Monetary Section

→ Memberships and Pricing

One can obtain a membership for ease of payment.

Each time a course is purchased, the cost of the course will be deducted from the balance of the membership.

→ Profit Breakdown

When an individual purchases a course, 55% of the income goes to the course creator, Leaving 15% for the moderator that approved the course, 25% to sustain Alpaca as well as pay for the government schools, and 5% profit.

→ Economical Exceptions for governmental schools

To increase world literacy rates, "Alpaca for institutes" is free for government schools in India.