Phase 1: Intelligencia E-Academy

SOEN 342

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Abstract

Intelligencia is an E-platform that mainly focuses on tutoring with multiple interactive learning features and experiences. It is a web-based system that is solely online, with the use of a program similar to Zoom, where tutors can speak to their students and vice versa. Additionally the use of a board to explain the course or the problems, similar to a real classroom. This platform would have several different courses available, with the possibility of being able to request one that is not currently offered in the program. Parents would also be able to interact with the tutors and ask to focus on specific areas the child might have trouble with, to get the most knowledge from each lesson from each course.

Part I: Market analysis

Existing products and features:

1. Tutor Me

- Fully animated lessons for the ACT test. A focus on visual learning which is proven to stick on long-term memory and improve comprehension. A set of practice problems with video explanations for the solutions and prep courses available on all devices.
- Pay per week for tutors.
- A double rating system where tutors rate students and students rate tutors
- Profiles have an "About", "Teaching Experience", "Education", "Subjects" and "Work Experience" sections.
- Tutors can see recent students and students can see recent tutors on the side like Facebook's side bar to access instant messaging with people
- Tutors can use six sections to help the students: the whiteboard, the calculator, the text editor, the code editor, Google Docs and File Sharing.
- Applications include the choices of a subject as well as three questions the tutor will have to answer. Those questions and answers are later posted under his profile. The quality of the answer gives the student an idea of the quality of the help he will receive from the tutor.
- Students have the possibility to see only online tutors and choose a gender preference for the tutor if they have one.
- Each subject is divided into several specialized subjects. As an example, the Computer Science section has Android programming, Arduino programming, Assembly Language, etc.

2. Tutor.com

- Customizable for institutions.
- Alerts and notifications before the tutoring sessions.
- Possibility to schedule tutoring sessions.
- Possibility to attend workshops.
- Possibility to connect with others in virtual study groups.
- Peer tutors' sessions.
- Possibility to meet school's academic advisors.
- All services presented to the student on one hub.
- Written feedback on their homework draft.
- Career support with tutoring on interviews, CVs, and cover letters drafts.
- Dashboard reports and data on the duration of the usage of the program, the percent of requests on each subject, etc.

3. Grade Savers

- Different locations**:** Allows a bigger reach for potential customers.
- Forums: This allows students to discuss subjects with their tutors without necessarily attending the class. It also allows students to discuss with each other that increases cooperation between them.
- Courses for different universities: Benefits more students because it gives tutoring based on the needs of the student's school.
- Private and Group tutoring: Allows the student to choose a type of tutoring based on their needs. Group tutoring provides more discussions and cooperation between students.
- Multi-language
- Multi-format (Crash course + In class): Database with already asked questions and pre-recorded videos that can quickly help students. Also, gives in-person tutoring which gives the students the choice based on their needs.
- Payment system: Quick and easy payment system (Visa, mastercard, etc)
- Mini-groups: This allows students to join together for tutoring and lowers the cost.

4. Skooli

- Instant messaging (Chat) **:** allows students to chat with their tutors, get instant help with any doubts/questions they have.
- File sharing/downloading: Tutors are allowed to share documents(assignments, notes, etc.) with the students which they can download.
- Replay lessons**:** All the lectures/classes are recorded and the students have an option to re-watch them.
- Live video lessons (1-on-1)
- Digital Whiteboard (write, type and draw)**:** Both students and tutors have access to a digital board during the class which can be used to write/draw on.
- Sign up as: student, parent or Tutor (each of them have access to a personal portal)
  - No guest log -in
- Various payment plans: based on hours of tutoring required.
- Search for a tutor: for a given course/grade level students can sort by:
  - Tutor rating and expertise
  - by availabilities
- Parent Portal: Parents can schedule tutoring for their child, talk to tutor and receive feedback, using a parents portal

Comparaison Table

Feature/ System	Skooli	GradeSaver	TutorMe	Tutor.com
Live Lessons/Lesson Replays	✔	✔	✔	✔
Q/A forum	✔	✔	✔	✔
File Sharing	✔	✔	✔	✔
Digital Board	✔	✔	✔	X
Guest Login	X	X	X	X
Textbook Rental	X	X	X	X
Interactive Animated learning	X	X	✔	X
Rating System	✔	✔	✔	✔
Parent Portal	✔	X	X	X
Multi-lingual	X	✔	X	X

Comparative study

In our analysis of systems already existing in the market: Skooli.com, gradesavers.com, tutorme.com and tutor.com the following features stood out: A Q&A forum and instant messaging(chat) that allows students and tutors to interact with each other at any time for questions and doubts. It also allows one on one interactions with the tutor, recorded lectures and a rating system for tutors. Furthermore, they have a file sharing system that allows students and tutors to upload/download assignments and notes. One common feature that was found across the websites we've researched is group tutoring. The group tutoring improves collaboration between students and the tutor, thus could enhance their learning.

We experimented with the different systems mentioned above, this gave us all the necessary information about the organization, the domain and the system-as-is. In order to come up with and propose the following original features for our system-to-be, we used brainstorming (within the team) and Stakeholder interview as elicitation techniques where we can ask the following questions:

WHO:
1) Who will use the E- academy platform?
2) Who can have access to upload the lessons?

WHAT:
1) What is the purpose of this service?
2) What is the great outcome of this service?

WHY:
1) Why do we need this service?
2) Why will tutors sign up to this particular platform?

Our first feature will be live lessons offered by all the tutors on our platform during different hours with our platform having a built-in video conferencing system. We also have chosen a Q&A forum as it is the best method for students and tutors to interact with each other. It allows messaging and file sharing at the same time. Next, our system-to-be will implement a digital whiteboard that allows the user to write and draw. In addition, we'll implement guest-login which allows clients to try-out tutors. This feature will give the opportunity for clients to discover what our system-to-be can offer compared to other platforms.

The following one will be implemented in our system-to-be as a textbook rental subsystem that provides students and tutors with digital copies of textbooks. Since all the textbooks can be accessed at any time, it will provide students with better accessibility. The next feature is interactive animated learning, it will entice students to learn more and the animations can break down complex notions into simpler information while making it more entertaining, which will easily engage the learners. The following is a rating system that will improve the quality of tutoring by adding competition between tutors using reviews and most importantly, it will help students go through all the tutors and choose the best one for their needs. Most students will be kids/adolescents and therefore, our system-to-be will have a Parent Portal which will allow them to track their children's progress for a given course and choose their tutors for them, as well as sign them up. Lastly, our platform will be multilingual and have tutors with over 5 years of experience from all over the world allowing students across the globe to enroll in the courses offered.

Part II: E-Academy presentation

Users

- ○ Students

- ○ Parent

- ○ Tutors

Proposed features

- ○ Accounts creation
- ○ Requests management
- ○ Courses attribution to tutors
- ○ Guest log-in
- ○ upload/download of documents
- ○ sharedboard between students and tutors
- ○ Q&A forum for students' questions
- ○ Rating system that enables students to rate tutors
- ○ Mul 'Private Tutoring' by Gary F. Gut and Joel Monellti-language platform
- ○ Animation for interactive learning
- ○ Textbook rentals

Project value

According to the National Center for Education Statistics, in the United States alone there are 34 million Kindergarten - grade 8 students, 15.4 million grade 9 - 12 students and 19.4 million postsecondary students. This gives us a potential market of 68.8 million students just in the United States [5]. As we expand and provide more language support, our potential market will expand further. Competing services often have to be obtained via a school partnership as is the case with tutorme.com and tutor.com. Other competitors offer $300 per course for post secondary options or anywhere from $36 to $100 an hour for a tutor. According to the 2008 article 'Private Tutoring' by Gary F. Gut and Joel Monell approximately 10% of students make use of a private tutor [6]. With all this in mind our project has the potential to have a gross revenue of $344 million per year .

On top of this, our project aims to grant access to the best educational content through private tutoring, premade video lectures and many more tools without requiring students to be part of a school entity. Everyone should have access to resources to help them in their studies, not only those going to specific schools. Allowing all parents and students access to the resources they need to lead themselves or their child through a successful education.

Our multi-language platform aims to expand our platform to as many countries as possible, granting even more students access to the resources they need. Other services do not guarantee which tutor you are going to get when you make a last minute request. With our rating and feedback system the students and parents can be sure that they are getting the right tutor for their needs. Interactive animations facilitate the learning process for those that are more visual and hands on, especially the younger students. This variety of features aim to set our platform above the rest by providing a truly complete learning platform.

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