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Abstract

E-Academy platform is a private tutoring service that would offer a kind of seamless interaction between users of the system. Using such systems to provide tutoring has been a successful method of teaching students who have difficulties in their studies. The purpose of creating this system is that since the available systems in the current market have limited capabilities and functionalities offered to users, a new system has to be developed that could extend the features available for use. The project will be based on the existing as-is systems. The preliminary results of the requirements elicitation and analysis show that special emphasis should be directed toward security since security breaches are unfortunately on the rise. As a matter of fact, this document composes a proposal of the new to-be system after requirements elicitation and analysis have been performed.

Part I: Market analysis

Private tutoring has been a service widely used as an aid to help students pass their courses. The most common way of tutoring was in person. The tutor, or the person offering such services, puts posters in university halls with their number and what courses they offer. Students who are interested call that person.

For that system, there are 3 major constraints; namely the meeting time, the meeting place, and the pricing. With the increasing use of the internet, tutoring services are advertised online and are even offered online. Online tutoring removes one of the constraints which is the meeting place.

After thorough market research, we figured out three potential competitors in the private tutoring industry. The first platform is Tutorme which is a US-based company. Tutorme has 15000 tutors who provide educational services to over 1.5 million students. The other potential competitor is a 30 years old private tutoring platform called Teachersoncall. It delivers online tutoring services to students of all ages and grades across Ontario. The third competitor is Mobile-tutors, which is an Alberta-based company. Mobile-tutors was launched in 2008, and since then has given private tutoring services across Canada.

In this market analysis, we will talk about and compare 3 tutoring websites and compare their features. The three websites are called <u>Tutorme</u>, <u>Teachersoncall</u>, and <u>Mobiletutors</u>. They will be compared in bullet point form. Studying these websites will inform us about the existing products in the market and also will show us the potential problems or missing features that they don't have.

- While Tutorme and Teachersoncall offer a 1-on-1 only style, Mobiletutors offers both 1-on-1 and group tutoring.
- Tutorme is the only platform where 24/7 tutoring is available. The 2 others only offer tutoring during the Canadian time zone.
- While Teachersoncall and Mobiletutors only offer high school subjects; Tutorme offers a vast array of subjects including engineering, computer science, maths, languages etc. for all levels
- Tutorme and Teachersoncall do not show the pricing, the pricing is only available via a quote. Mobiletutors shows the pricing on the website.
- The scheduling process with Tutorme is messaging the tutor and settling on a date. Teachersoncall schedule via email. Mobiletutors schedule over a phone call.
- All the existing products don't have a reviews and comments section.
- None of the potential competitors have practice quizzes for the students.
- Mobiletutor is the only platform which provides career counselling sessions to students.

	Tutorme.com	Teachersoncall.ca	Mobiletutors.ca
Method	1-on-1 only	1-on-1 only	1-on-1 or group tutoring
Time availability	24/7	Canadian time	Canadian time
Subjects	Vast Array	High school subjects	High school subjects
Pricing	Needs a quote	Needs a quote	Pricing available
Scheduling	Messaging the tutor	Emailing and requesting a tutor	Phone call
Reviews	N/A	N/A	N/A
Disability tailored	N/A	N/A	N/A
Career counselling + time management	available	N/A	N/A

Table 1: A summary of the features of the existing systems as-is

Part II: E-Academy presentation

Based on the results of a meeting conducted with the stakeholders the type of users intended to use the software are guests, students, tutors and administrators. The main components of the proposed E-Academy system to be focused on are its transparency, flexibility, support, cost-effectiveness, quality, and sustainability.

The intended software must present a clear process of registration for students and resolve all the ambiguities preventing students from registering in the courses they need with respect to their budget and schedule to accommodate all types of students. Therefore, the system is intended to have a certain level of transparency, flexibility and cost-effectiveness by taking into account the following features:

- Guests can submit a request to become a tutor or a student. Students' requests must be accepted quickly while tutors' requests take time to review their skills and personal information.
- Offer both one-on-one tutoring and group sessions. The group tutoring sessions will be cheaper since the tutors won't be able to offer their full attention to one student.
- Tutors will be hired from various parts of the world, therefore 24/7 tutoring will be offered.
- Offer a variety of different subjects and high-level courses at the college and university levels.
- Provide the rates of each tutor on their profile, so students will contact tutors according to their budget by searching and filtering the results upon their budget and interest.
- Both tutors and students will have schedules public on their user profiles, which will make it easier to schedule sessions since they won't have to inquire about their availability by calling or emailing.
- Allow students to write reviews under the tutors' profile and comment about their tutoring service and whether or not they had a good experience, making them available publicly to future students.
- Provide students with learning specialists if they have learning disabilities. Career counselling will also be a service for students who need guidance.

The system should maintain a high quality of the services provided to ensure that the students are getting the appropriate training. The aspects the system should have to obtain the desired quality and sustainability are:

- Obligation for tutors to make quizzes on the subjects that they are offering and upload them for their students. This will help students to have a better understanding of the topics and track their performance by generating progress reports.
- Ban tutors from the platforms after having a rating of 3 stars and less for more than one month

The new E-Academy system should provide a set of tools for handling students and tutor requests, evaluate the status of current tutors, and track the profitability of the project. In addition, ensure a balanced amount of tutors to satisfy the requests and interests of students. The system should be usable by administrative staff and include the following features:

- Generate monthly reports presenting the profitability of the system, the number of new students and tutors, the number of courses added and the reviews of the tutors.
- View the tutors' requests and submitted files and allow admins to send an email to inform the tutor of the status of their request.
- Review the progress reports of the students and the courses they registered for.
- Post job opportunities on the platform for internal staff and tutors.

Also, the security of the system must be taken into account to ensure a certain level of privacy for users on all levels, therefore these aspects should be considered:

- Encryption of personal sensitive information
- Ensure each type of user gets the appropriate access right
- Provide secure meeting tools and make them available only to the concerned users.

Project Values:

- The system will be technically effective making it easier for the users to interact with the system thus improving client satisfaction.
- The system will provide new features that would provide a competitive advantage thus building reputation and increasing net profit.
- The system will be sustainable thus reducing the cost of maintenance.
- The system will provide a social benefit to people by increasing the rate of literacy in the community through the use of the system.
- The system will be of high quality thus grabbing people's attention when searching for a private tutoring service through a search engine.
- The system will have a high degree of security thus reducing risks related to the current waves of security breaches and potentially saving costs associated with the consequences of such security breaches.