Tutify

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Project Description

General Description:

The focus of the project should be the creation of a web-based portal to help students who need further help with their school studies. We live in a world where classes are filled with 25-30 students and not everyone gets the help they individually require. We need to understand that many students require this need to learn and everyone should be able to excel. Unfortunately, many parents cannot afford tutors or after school private programs. This app will help students understand and thus do their work while not being too expensive for them for them to do so as tutoring will be offered at a more affordable price.

The way in which the users of this application will be grouped up will help alot with their learning processes. Users having the same learning interests and education levels will be grouped up together via their specific course names and they will share the same course material. Students would be allowed to have access, via their tutor or otherwise, to other students completed works so as to accommodate different perspectives approaches and solutions to problems. In this way students would see other approaches to the same problem as well as give tutors/teachers more options when supporting students. Having multiple students for more than one course a semester can cause some issues of their own. This in turn could render wrong dates for appointments or files used for the tutoring sessions being lost . A platform that gives the freedom to organize and separate students by the tutor can make a big difference. A platform that is only used for the students and not part of other calendars or organising apps, to privately and directly make appointments, send reminders to both tutor and student, and the ability to share files and documents for easy access and organization. Some useful

interactions amongst tutors and students include a thumbs up/down button, share button to facilitate self guided learning amongst their peers.

Core Features:
1. Sharing files. (documents, pictures, etc)
2. Manageable progress records.
3. Easy access for tutors and parents.
4. A safe payment exchange feature between users and admins within the app.
5. External calendar integration with Google Calendar and/or iCloud Calendar with appointment system.
6. Group-based pages by interest and category.
7. Hierarchy-type of members' status within pages. (admins & users)
8. A flexible polling system that includes educational games. (quizzes, polls, and questionnaires)
9. Useful and quick to grasp user-interface.
10. Easy navigation between different subjects and grade levels.
11. Communication system that is public and private for easy intercommunication within groups.
12. A cue cards implementation for ease of quick recap of lessons.
13. Math workSheets (equations + - x / ; algebra ; probability ; word problem)
14. French and English language : grammar, comprehension text
15. A database of solutions to problem sets with the steps elaborated upon
16. A toggling feature for given problem sets for tutors to increment the difficulty of their lessons
17. A toggling feature to display the solutions for a given problem set
18. A social component of peer learning groups

Risk

In point form, describe the most important risk(s) and how you will mitigate it.

1. The Data provided by the students (their names, contact information, payment information) should be kept private and there might be a risk that this data might be leaked. It will be mitigated by using an appropriate database encryption system that will ensure that the data is kept safe and only accessible to authorized users.
2. Copyright fraud. Taking the appropriate steps to verify if certain features have been already done by other companies.

3. Students can become addicted to their mobile device, thus hinder the learning experience. Try to limit the content contained in the app to only be for educational purposes only, ie only build games that are related to education.
4. If parents can't afford a mobile device or laptop, students cannot use the program. Try to contact organizations that could provide electronics to schools and students to borrow. Go to the library to use their equipment.
5. Some problems only have one solution and thus one method, these would need to be reinforced with external materials.
6. Any break in continuity as it relates to the incrementing of problem sets can create a poor user experience. There would need to be a self assessment that would enable self guided learners to access more content.
7. Students / tutors may rely too heavily on revealing solutions. The system could be gamified in such a way to discourage these actions OR the student could refresh a different iteration of the module.
8. The social component may fall into disuse or create privacy issues for youth under 13/18. To resolve this parents would need to activate the account on behalf of their children and would have some monitoring functionality.

Competition

Search terms: list the terms you used in your search
tutoring, free tutor, tutor app , teacher online, learning platform, online courses, tutoring platform, tutor hub.

Competitor 1

Nimbus : https://nimbusapp.ca/
Nimbus is a mobile app that connects students with high grades in courses they want to tutor with students that need help in these courses. It is organized by schools to make searching for courses by their school codes better. It requires the tutors to upload their transcripts to prove their knowledge in the subject they will teach.

Our web app will be more novel as it would be open to other communities that need a portal-type to communicate and organize their activities better. Also, it will be open to people experienced in a subject and passionate about teaching it, like many independent tutors, to develop their lessons in a more coordinated manner.

Tutor Pro App: https://apps.apple.com/us/app/tutor-pro/id379525860
This application is a helpful tool for students, allowing them to easily engage in educational quiz learning activities in order to better prepare for upcoming evaluations they must face in various subjects. It involves quizzes in various subjects for a student's beneficial learning of the material present in various subjects.

Where this application lacks would be that the application only involves quizzes for various subjects and neglects core features that tutoring apps should have in order to fully succeed. If a student is struggling to understand an answer for a quiz, they cannot ask a tutor to explain to them the materials they are struggling in this application lacks a chat system.

Competitor 3

Quizlet: https://quizlet.com/
This is an application that uses virtual flashcards to help students before their exams. It is designed in a way that students can search for flashcards and notes for different classes that already exist on the website or students have the option to make their own flashcards for their specific courses.

This application only includes a subset of features that we will be creating in our application. Our application will include a quizzing game feature but will also include features such as graded assignments as well as the ability to contact tutors and teachers if they require assistance when doing their assignments. Since our tutors are paid these collections would be of higher quality.

Description of Customer and Company

Stakeholder #1:
Name and email address of contact: **Mohammed Alawami -**
mo.alawami28@gmail.com

CV:
(See PDF Attachment with the name of the Stakeholder)

Name of company or organization:
Independent Tutor For Math, Chemistry, Physics, and English. Teaches pre-requisite courses for university students wishing to enter programs such as Engineering,

Computer Science as well as other Science programs requiring pre-requisite classes. Classes taught include Calculus 1, Cegep Chemistry 1 and 2 as well as Physics classes like Electricity and Magnetism and Mechanics**.** This customer is interested as he is finds using traditional methods like email and Facebook messenger are not efficient when sharing files with students as sending files are not organized well. He also wants to expand his current tutoring services to engineering math classes such as ENGR 391 (Numerical Methods) and is currently learning the material in this class in order to eventually teach it to other Engineering Students.

Stakeholder #2:
Name and email address of contact:
Pooja Patel
poojap6572@gmail.com

CV:
(See PDF Attachment with the name of the Stakeholder)

Name of company or organization:
Volunteer teacher at AYTF ; teaching English and Math to students aged 7-13 Works at Kumon (Math and English learning center) as an assistant / tutor. This customer is interested in the outcome of this project since she wants to have a centralized platform for young children being tutored. She caters to teaching elementary school students basic Math and English and her goal is to become a teacher in an elementary school one day. She also wants to interact with parents of children who are going to be tutored and be using this application and wants to ensure appropriate consent is established between the parents and students for the specific tutoring program.

Stakeholder #3:
Name and email address of contact:
Ross Hodess
this.is.ross@gmail.com

LinkedIn:
https://www.linkedin.com/in/rosshodess/
(See PDF Attachment with the name of the Stakeholder)

Name of company or organization:

Lead Community Developer at Kids Code Jeunesse. Ross works for the same non-profit that Claudia Feochari (the team leader) works for Kids Code Jeunesse. Kids Code Jeunesse is a non-profit organization focused on providing the next generation of Canadian children, especially girls and children in underrepresented communities. It's main focus is on education and educating the future generation into the technology field, a field that will be growing in the next coming years. This app would be useful for children enrolled at schools , libraries and community centers that Kids Code Jeunesse caters to as it will foster their development and make learning easier for them with the extra help this application could provide for them in certain subjects.