**GINA CODY School of Engineering and Computer Science**

**Department of Computer Science and Software Engineering**

**Concordia University**

**SOEN 342 - Project Phase 1**

Due: October 1, 2022

Team Name: Cypher

Team Members:

Victoria Castelli - 40117055 - VCastelli

Jiayi Chen - 40110997 - JIAYI615

Zayneb Mehdi - 40109417 - BrainOverfl0w

Carson Senthilkumar - 40173515 - CarsonSSk

Khaled Owaida - 40119268 - KhaledOwaida

Wassim Nijaoui - 40121366 - Nijaoui-Wassim

Haris Mahmood - 40135271 - haris2055

Ziyi Wang - 40167122 - Zeebruh326

Louisa-Lina Meziane - 40133119 - Louisa-Lina

# Abstract

The goal of this project is to develop an interface for a unique e-learning platform that pairs students in need of tutors with compatible tutors. The first step in developing such an e-learning platform is to determine the requirements the platform should fulfill. In order to do so, a market analysis was performed; the analysis consisted of a platform analysis of three existing e-learning platforms and a comparative analysis. The three existing platforms examined were Wizeprep.com, TutorMe.com, and Successclolaire.ca. The comparative analysis allowed us to elicit what e-learning requirements and features currently exist in the market and how we can innovate them to develop a unique and high-quality product. Lastly, we present our E-Academy platform by providing a layout of the features to be implemented and highlighting what makes our platform unique.

**Part I: Market analysis**

****

*Figure 1: Feature Comparison Across Site*

**Part II: E-Academy presentation**

* Users
  + Students/parent
  + Tutors
  + Administrators/managers
  + Guests
* Proposed features

**

*Figure 2: Our System*

**Guest Features**

**-Request to register / apply as a tutor:**  This feature allows the guest to create an account and sign into the E-academy community as a tutor. In this step of the process, the user fills in his information, agrees to the term and condition of the E-academy community and provide the required document to ensure the validity of his credentials.

**-Request to register / apply as a student:** This feature allows the guest to create an account and sign into the E-academy community as a student. In this step of the process, the user fills in his personal information and agrees to the term and condition of the E-academy community.

**-Orientation/How it works:** This feature provides the guest with two instructive videos depending on their choice of roles. The videos show all the features used by the guests according to their role. It provides them with a step-by-step process on how to register and navigate throughout the website.

**-Access to general sections:** This feature gives guest access to the general sections of the website to give them a general idea of the E-Academy concept**.**

**-Access to a course preview:** This feature gives guests access to a detailed overview of the course using an interactive video format.

**-Access to course info:** This feature provides the guest with an outline of the course, the tutor’s resume and reviews given by previous students.

**-Live Contact Us / Get Help Chat:** This feature provides guest with an online chat to voice their concerns and get answers to their questions.

**-Trial Access:** This feature allows guest to experience one free session with one of our tutors, for a course of their choice.

**Students Features**

-**Request for tutoring lessons:** Involves signing up for a course with a tutor. This feature will allow users to enrol with a tutor of their choosing. Lessons will be one on one live lessons, covering material of a course, having exam prep lessons to better prepare the student/parent.

**-Sign in as Student:** Common functionality, allowing user to sign in as a student/parent after signing up as one. It allows user to get certain functionalities to what would be useful for them, providing a more specific service to their needs.

-**Connects to shared board:** Providing access to students to their registered lesson boards, where the course content, recorded lectures, tests and any document shared will be provided on. Benefit is improved organization of course content.

-**Chat with Instructors:** Provides access to tutors and students to connect, to address any concerns, updating the instructor on any future topic needed to be address, asking questions regarding lessons or homework.

-**Calendar View:** This feature allows for students to view their tutors availabilities and request for a session during a certain day of the week.

-**Parental update for minors/Parental Mode:** This feature allows for students who are determined to be minor to have their parents updated on their progress.

-**Search for courses:** This functionality allows for specific searches for courses they would like to view and possibly register for.

-**Uploaded files:** Allows for student to upload their assignments or homework’s.

-**Download files:** Allows for students to download any course content.

-**Tutor evaluation**: Asked to be filled by the student, to rate the professor on the site.

-**Notifications:** Via email to notify the student of their upcoming meeting and time with their tutor. Additionally, it informs them of any cancelation or of any message by the tutor.

-**Membership:** Allows for different options for students. For the basic plan we will give access to student for 5 hours a week. For the premium plan we will provide 10 hours a week, for those who need more coverage and aid for their desired course. Finally, on demand plan is for those who would like to pay per hour or specific question they want to clear up with one of our tutors.

**-Report problem:** If the student finds that there is an issue with their instructor that require admin to come in to settle a dispute or for disciplinary action, they will have the option to report. Additionally, if there is a problem with the site it can be reported through this feature.

**-Student performance measurement:** Allows student to track their progress and see where they are having difficulties and possibly require more help in. This can be done in terms of grades.

**-Access to whiteboard**: Allows for students to use a whiteboard digitally to write out their question, practice or solve a given question, and finally even ask the tutor about a certain problem.

**-Access to general sections:** This feature gives users access to the general section of the page that encompasses home page, support page, info page, and course page.

**-Access to lessons purchased:** Students having access to the course they purchased.

**Administrators Features**

***-*Handle tutor requests:** This feature allows to approve or deny any request from guests who wish to register as tutors by assessing their eligibility.

**-Handle student requests:** This feature allows to approve or deny any request from guests who wish to register as students by assessing their eligibility.

**-Managing courses:** This feature allows to approve or deny tutor requests regarding the addition of a course they are interested in teaching.

**-Verification of tutor ID:** This feature allows to check and authenticate each tutor’s ID as a security and safety measure for both the tutors and the students.

**-Reviewing reported problems:** This feature allows to evaluate the complaints issued by a student or an instructor and assess the necessity of acting in response to the problem.

**-Weekly report review:** This feature allows to view the reports that are generated by the tutors regarding the student(s) they cater to at the end of each week.

**-Accessing student list:** This feature allows the admin to view a list of all the students that are currently registered as well as any information regarding a specific student.

**-Accessing tutor list:** This feature allows the admin to view a list of all the tutors that are currently registered as well as any information regarding a specific tutor.

* Project value:

We analyzed 3 websites: Wizeprep, TutorMe and SchoolSuccess and compared them with our website to better understand future user’s interest regarding our website. Our website has 3 additional features compared to TutorMe and SchoolSuccess namely: **An access to tutor** **reviews**, **an access to course preview** and the **access to a free trial**. Our website has 2 additional features compared to Wizeprep that after comparison analysis were determined to be our closest competitor in terms of guest functionalities. Our unique functionalities are namely: **apply as a tutor** and **access to a free trial**. However, **apply as a tutor** is a feature common for both TutorMe and SchoolSuccess. We can conclude that our website distinguishes itself by the addition of a **free trial for guest**, surpassing all concurrence.

Our site offers common student functionalities among the sites we compared previously, as well as unique features that make our site a competitive and more student-centred choice.

To begin the common functionalities, our site offers **one on one tutoring request** that were also found in both TutorMe and SchoolSuccess but not in Wizeprep. **Signing in as a student**, was offered by our site and among all sites as it is a common criterion. **Live exam preparation** was offered with Wizeprep out of all other sites, however for us it was included as a part of our lessons. **Live one on one tutoring** was made available with SchoolSuccess and TutorMe but not Wizeprep, but our site, live lessons is the core of getting students to learn and understand and being more engaged. **Recorded lessons** are provided by our site and by all sites. **Providing written notes** are offered by our site, Wizeprep and SchoolSuccess. **Chat access to instructor** is provided by our site as well as TutorMe, but not the other two sites. **Whiteboard** was a common feature found in our site as well as TutorMe and SchoolSuccess but not Wizeprep. **Upload files** was found to be common with our site as well as TutorMe and SchoolSuccess but not Wizeprep. **Downloading files**, **tutor evaluation**, **access to lessons purchased**, **notification** was common among our site as well as all the other sites. These features make our site on par if not offer more as certain website don’t have some of the features while they may have others. Our site aims to encompass all the necessary tools needed for success.

Our site offers unique functionalities as well, which includes **Calendars** to have the student be able to book a meeting by viewing the tutor availabilities. As well as serves as a visual reminder. This provides great benefit as it allows for easy transition of booking, as well as having the option of having a flexible schedule to your needs. **Membership** which provided the student of having the choice to pick a price plan that best fits their needs, offering variety of services encompassing all possible students. **Report problem**, that allows student to have the ability to report any issue they may be having which is essential to feel comfortable in a learning environment. **Student performance measurement** allows the student to keep track of their progress and to address their weak points. **Parental mode**, which allows to keep parents updated for minors. It provides comfort and assurance to parents to be able to be given an update on the students’ progress as well as their tasks.

Our site doesn’t include calculator or access to google workspace, as our site already incorporates a document saving board. As for calculator, it is required for the student or professor to be using theirs to follow along with the live lesson, instead of being distracted by one found on our site.

Overall making our site for student functionalities on par with other sites as well as even above by offering unique features that other sites don’t have.

Additionally, our site offers common administrator functionalities among the sites stated previously, as well as unique features that make our site stand out and give more control to the admins.

Our common features are essentially **handling tutor requests**, **handling student requests, managing courses**, and **verification of tutor ID** which are all features found in Wizeprep, TutorMe and SchoolSuccess. On the other hand, our site includes 2 unique features, namely **reviewing reported problems** from students and/or tutors which allows the admins to have control over the security of the people involved and to keep our site a safe environment for everyone. As well as **weekly report review** which allows the admins to keep track of students’ attendance and academic progress in general. As for **accessing student list** and **accessing tutor list** t, it was not possible for us to see if these features were in effect in other sites since it requires special admin permission. Nonetheless, we still offer them as tools for the admins to keep track of all registered students and tutors.