

University of Ottawa

“E-XL MATH ED” WEBSITE DESIGN

SEG3125 - ReactJS Website Project Proposal

July 4th 2021

Name of Company/Organization: E-XL Math Ed

Description of Company/Organization

Excel Math Ed is a tutoring service that provides math tutoring for students from grade 5 to 12 (middle school to high school) who are seeking tutoring for math courses that are in the or follow the Ontario Math Curriculum. The target audience are the students from grades 5 to 12 and their parents (as the parents are the ones who register their children into the courses).

The tutoring service offers math the following math courses:

- Grade 5 - 8 Math
- Grade 9 Math: Academic and Applied
- Grade 10 Math: Academic and Applied
- Grade 11 Math:
 - Functions (MCR3U)
 - Functions and Applications (MCF3M)
 - Foundations for College Mathematics (MBF3C)
- Grade 12 Math:
 - Advanced Functions (MHF4U)
 - Calculus and Vectors (MCV4U)
 - Mathematics of Data Management (MDM4U)
 - Foundations for College Mathematics (MAP4C)

The service can be used by students who are currently taking the courses in school and would like some extra help after school or by students who wish to reach ahead (i.e. get a head start on the course before they start it at school).

There are two types of classes offered: synchronous and asynchronous. In the synchronous option, students are taught each class by a tutor in a live session through the online platform. Students are able to purchase a set of sessions for whichever class they desire, and each session is 1.5 hours long.

In the asynchronous option, the course is broken down into modulus which the student can follow at their own pace. Each modulus comes with a video about the topic and a set of exercises for the student to complete before they can move on to the next module.

Students are able to purchase either synchronous, asynchronous or both. Pricing varies depending on the choice.

Synchronous	Asynchronous	Synchronous and Asynchronous
10 sessions - \$100	\$35/week - self paced	\$35/week for self paced modules and 10 sessions for \$80
20 sessions - \$180		\$35/week for self paced modules and 20 sessions for \$150
30 sessions - \$250		\$35/week for self paced modules and 30 sessions for \$200
Pay as you go - please inquire		

Iterative Processes

The 4 iterative processes used are as follows:

- **Follow Instructions:** When a student would like to purchase a session and register for the class, they have to follow the payment instructions (as seen in sketch #4). In addition, if a parent would like to set up an appointment with one of the teachers, they would have to fill out the appointment booking instructions (as seen in sketch #3).
- **Absorb Information:** The student will be absorbing information as they read about how the classes function (as seen in sketch #2). In addition, there will be a demo of how an asynchronous class would run, and the student would have to watch a video about a topic (as seen in sketch #5).
- **Perform a Monitored Activity:** During the asynchronous demo, the student would have to complete an exercise to get a feel of how the asynchronous class would run. The questions would give feedback if the student gets the wrong answer as well (as seen in sketch #5).
- **Explore in the Divergent/Convergent Model:** Before purchasing courses/sessions and registering, the student is free to explore the different classes, teacher, how the classes function and so on (as seen in sketch #1,2,5).
- **Communicate:** Students and parents who visit the site are able to send feedback and a message if they want to contact the organization (as seen in sketch #2).

Heuristic Evaluation

The ways the 10 heuristic are benign covered are as follows:

- **Consistency:** Consistency is achieved by having the same theme and logo on/across the site. The logo and the company name will always be on the navbar (as seen in sketch #1,2,5). Colors and fonts will be similar in order to build aesthetic consistency.
- **Familiar Language and Metaphors:** Throughout the site, submit and cancel buttons will have the same meaning (submit or cancel either the registration form, exercise answers or the feedback/message) (as seen in sketch #3,4,5). Icons will also be used to represent certain functions/components/sections.
- **Simple Aesthetic and Functional Design:** Similar to consistency, the site will have a simple theme (with simple fonts and colors). The courses, prices and teachers will be organized into tables or cards, so organization will ensure functionality design (as seen in sketch #1,2).
- **Freedom and Control:** While completing the demo module, users can pause, play the video and can return to the main page when they want (as seen in sketch #5). In addition, the forms also have a cancel button if the users didn't want to submit the form (as seen in sketch #3,4,5).
- **Flexibility:** Since some users might be returning clients, they might not want to look at the entire site before registration. Therefore, there will be a registration button at the navbar so that they don't have to waste time going through the entire site looking for the registration button (as seen in sketch #1,2).
- **Recognition over Recall:** All information about teachers and courses will be shown as a card, which will indicate to the user that a card represents information about something important (as well as images (reduced sizes)). The prices for the classes will be shown as a pricing table (as seen in sketch #1,2).
- **Clear Status:** When users submit a form (registration or appointment), a confirmation is given.
- **Error Prevention:** Constraints will be placed in certain fields in the appointment/registration forms (i.e. credit cards, phone numbers, etc). When booking an appointment with a teacher, only the dates the teacher is available will show up in the calendar.

- **Error Recovery:** In the case the user makes an error, an error message pops up if they try to submit registration/quiz/appointment form without following the correct formats.
- **Help:** Users are always able to leave feedback /contact the company for further information/help that is not urgent (questions about the classes,teacher, etc). For more urgent help, tooltips will be used.