

Stinky Kid Math #2

Client

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Application

Education is rapidly changing in regard to the delivery and options students have to access their learning. Gaming and online learning are quickly becoming one of the primary pipelines of educational media, but many are falling short in providing key elements that lend to true learning. In any effective learning setting it is essential for students to get a continuous cycle of 4 things: content, practice, immediate feedback on how they are doing, and re-teaching for things that they missed. These are all elements that are extremely difficult to deliver in an effective manner online without a facilitator. Stinky Kid Math has developed 350 solid, dynamic video lessons around Pre-Algebra, Algebra, and Geometry. We currently have an online delivery platform that is consistently being revamped, but we would like to step up to the next level by offering an immediate feedback assessment and practice program. We currently have worksheets that allow students to practice and solidify their understanding of math concepts, as well as answer keys with work, to help give them feedback about where they might be missing something. We would like to change that into a system that provides that practice in an online/app format. Current programs, like Aleks do a decent job; however, their platform is proprietary and difficult to install for many users. We would like to do a much better job by creating an easy to use platform that is engaging, provides quality feedback, and also could be used in an app format.

This project would involve the development of:

- This project:
 - Creating a foundation that can be built upon for a mac/pc or tablet practice app that allows students to gain immediate feedback regarding their understanding of math concepts. The app must have an easy to use user interface, and must have the capability to be tied into a membership database. This project would provide a solid conceptual foundation for moving forward in the development of an innovative students practice and assessment program
- Dream:
 - A stand alone practice app that could potentially be integrated into an existing website or even an eBook to allow students to practice concepts ranging from basic math operations to function shifting, graphing, and complex Algebra or Trig and get immediate feedback about what they know and what they don't.
 - Constraints:
 - Can easily be used on mac or pc without difficult installs
 - Has the capacity to host a large variety of each type of problem.
 - Would randomly choose problems from a database, that would allow for 2 students working side by side to have differing problems.
 - Would give some conceptual hints if they missed the problem

once or twice.

- Would direct the student to a lesson or video showing the answer if they were not able to solve the problem.
- It would be easy to enter the information on a mac, pc, or tablet.
- Provides information to a database that allows for the tracking and intelligent problem assigning based on previous performance.
- It would also allow students to be scored based on their work and give scoring feedback to teachers on a standards-based profile

Key technologies

We believe the use of the following technologies will be key to the successful development of the application, but we also invite you to help us explore the best possible options:

- Utilizing an emerging technology to code the app that allows for use on mac's, pc's, and all tablets
- Integration with database technologies that would allow for data tracking and management for individual profiles.

Location

Stinky Kid Math is located in Colorado Springs, CO. It would be required for students to have regular meetings with the creative director (Skype or in person).

Benefit to students

This project will give students experience with:

- Web and tablet based app creation
- Outputting data hooks to allow for data tracking and management
- Working with an international developer based in Singapore to align app outputs with a membership program database
- Working with a front-running educational program that hopes to be the best in the world in math support and education in an online environment
- Potential for an internship and continued development opportunities, and possibly company ownership possibilities