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The aim of this project is to provide an alternative means to accessing higher education and the classroom, as well as enhance the modern classroom experience. There are many who are severely inconvenienced by the fact that they have to go to a university in order to obtain a degree, and are unable to leave their current home(s) to fulfill this requirement. WebClicker would provide a virtual classroom for learning with like-minded people. One typical problem encountered in the traditional classroom setting is the limitation of resources caused by the inadequate teacher-to-student ratio. Providing an extra layer of interaction could mean communication with aides to the teacher who have a better understanding of the material than other students. Questions could be answered without interrupting the main lecture. The professor/lecturer/teacher could also measure the understanding and progression of students via quizzes, similar to the “clicker questions” seen in several classes at UW today.

The only forms of online education we have experienced have been supplemental to in-class learning. Online applications such as WebAssign and discussion boards have helped with classroom education, but haven’t obsoleted the need to physically attend class. On another note, WebClicker could be used as a replacement for the traditional clickers used in classes. Traditional clickers are often an unnecessary expense, given the device is discarded after completion of introductory courses.

The minimum viable product is very similar to the clicker system used in several classes to answer multiple choice questions on the fly. The product will have basically two different interfaces: one for the teacher, and the other for the student. The teacher will be able to add questions through their interface, and in real time will be able to see the students’ responses, complete with statistics such as the distribution of answers. As the teacher adds a question, each student will be able to answer and will be given feedback similar to the teacher. There will be a time limit on answering the questions at the proctor’s discretion.

The tool chain will consist of jQuery, jQueryMobile, RaphaelJS, Bootstrap, MySQL, and Python/Django. Excepting the latter two, the frameworks are meant to ease the simultaneous development of PC and mobile web applications.

This product will be delivered as a web application available for both computers and (hopefully) mobile platforms as well.

The risk of this project is in trying to create a product beyond the vision of the minimum product, as each additional feature may bring us out of focus and/or the scope of our capabilities. In order to manage the risk, we will finish the minimum working product, and then build more features on top of it. In addition, we have little experience in server-side operations and multi-platform services. It’s the first time writing a web application for many of us, and understanding how all the components will stack together will be a part of the development process. This has also made choosing specific frameworks difficult.