

6.470 Final Writeup

"ViewerVerse"; Ruby Tamberino, Elisabeth Morant, Bridger Maxwell

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**\*\*\*OUR SITE IS MEANT TO BE VIEWED IN CHROME!!\*\*\***

**1. What is the name of your website?**

ViewerVerse.com

**2. What is the url for your website?**

[www.viewerverse.com](http://www.viewerverse.com)

**3. List the name, school (if not MIT), year, major, and number of years of web programming experience of everyone on your team.**

- Ruby Tamberino, MIT, junior, course 6-3, 1 year experience
- Elisabeth Morant, MIT, junior, course 6-3, 6 months experience
- Bridger Maxwell, MIT junior, course 6-3, 6 months experience

**4. Describe the problem your website aims to solve.**

The frontier of higher education is continually evolving in large part due to two interconnected phenomena: the incorporation of technology into the learning process, and a move towards mass accessibility of materials previously limited to those present in the classroom. A seminal part of recreating the classroom experience for a wider audience has been the recording and publication of lecture videos via the Internet. These videos not only afford those outside the university who are eager to learn an opportunity to do so, but also provide a vital study tool to those who *are* enrolled in the course.

In fact, watching lecture videos becomes a social experience entirely unlike that of watching a live talk when students watch together and can work to better understand the material through group discussion. It is through this collaboration and discussion that the more widely comprehensible and, conversely, obtuse portions of the lecture can be distinguished. If three students have the same question while watching a given portion of the talk, it is highly likely that many others in the class do as well.

How can this collaborative experience be harnessed and optimized in order to both improve the learning process for students and provide lecturers with detailed, constructive feedback on their talks? This is the challenge to which we sought to develop a solution with our website.

**5. Describe how your website solves this problem.**

Our site ties the user experience of watching lecture videos online to a way for students to ask questions and submit comments on specific segments of the lecture in real-time. As the video progresses, the viewer sees a scrolling list of student questions (accompanied by answers submitted by either instructors or fellow classmates) and comments corresponding to what is currently being taught in the lecture, and is provided with a way to add feedback of their own. In this way, students can clarify any unclear topics *while watching*, as opposed to either having to pause and restart the lecture whenever something is unclear or waiting until the end to have their questions answered. Users can ask their questions in real time as they arise, that is if said question hasn't already been answered and is being displayed in the scrolling sidebar.

**6. What backend technology did you use?**

Django, AJAX, SQL

**7. What frontend technology did you use?**

HTML, CSS, Javascript, JQuery

**8. List all of your site's features.**

- Access to MIT lecture videos for 6.00, 6.002, 8.01, 8.02, 7.012, and 7.014
- Submit your questions or comments on a specific segment of the lecture you are watching
- Delete your question/comment from the collection for this lecture
- See a dynamically scrolling collection of questions/comments posted by other users corresponding to the specific segment of the lecture you are watching
- Post a response or solution to questions/comments posted by other users
- Up-vote or down-vote others' questions, comments, and responses

**9. Describe which feature(s) are most important and describe why/how that adds to the core value of your website. + 10. Tell us what you think makes your site cool and/or unique.**

The most important feature of our site lies in the concept of tying users' comments and questions to a timestamp in the course of the video so that a) at any time the viewer is only presented with content from other users that is relevant to

what he/she is currently learning/watching, b) the student doesn't need to stop and start the video when they have a question about the material being taught, and c) the student doesn't need to provide context for where in the lecture he/she became confused when they want to ask a question or leave a comment. This is an entirely original idea that adds to the core value of our site because it combines all of the best aspects of watching a lecture video online independently with those of learning "live" in a classroom setting.

***11. List all 3rd party API's, 3rd party plugins, open-source code, etc that you used.***

- DjangoMako
- MovingBoxes by Chris Coyier
- "How to Create a Drop-down Nav Menu with HTML5, CSS3 and jQuery" by Dan Wellman
- YouTube video API

***12. Does your site fit within the MIT Utility category?***

Definitely!

***13. Does your site fit within the Philanthropy category?***

Yes, if our feature was applied to the context of making higher education more accessible to the masses.

***14. Will at least one of your team members be able to attend judging on Wednesday and awards on Thursday if you are chosen as a semifinalist?***

Yes, all three of us will be in attendance.