



ENSE 405 Project report-out & lessons learned

Project name & members

- Youversity
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Project sponsor

Dr. Tim Maciag (ENSE 405 Professor)

Business need/opportunity

YouTube has its own AI algorithms to suggest the best videos for the user. However, it takes time to calibrate and sometimes the suggested videos are inconsistent or irrelevant. Our project focuses on keeping the suggestions of the quality educational resources clean and consistent. To fill in the gap between the YouTube suggestion and our goal, we planned to implement a software application.

Reflections on project planning

- UN SDG 4.7 Quality Education: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

The internet is a great resource to use to accomplish this SDG because it is a very equitable source of all sorts of information. Although YouTube is a good place to start, it has its imperfections and drawbacks. The time required to find the query that will produce the desired results, just to name one. YouTube has its AI algorithm to suggest the best videos for the users, however there still exists some gap between the quantity of contents and quality contents. We focused on and narrowed down our goal to fill in the gap with our software application. This is the main motivation or "why" for our project.

- Key findings from community research and understanding
 - We found that members of our community are hungry for a fresh tool with a new organization strategy for content
 - Our community is divided into three distinct levels of membership based on their involvement. This is creators, curators and consumers.
 - The members of our community tend to be people that are familiar with interacting with web based applications. We strive to make the interactions with our application as familiar to this as possible.
 - We want to make the minimum amount of participation very low such that our app is accessible for many. We will strive to have various levels of participation in a self



structured asynchronous fashion.

- Technology configuration inventory:
 - Members of our community would likely be familiar with other video hosting services such as YouTube and Vimeo
 - We want to implement interactions that are similar to what other video hosting sites already have such as the ability to upload videos, form playlists and like comment and share
- North star and Carryover customers

Our North Star customer is all those who are interested in learning. The greatest asset to our application is the discussion within the commons. This asset can make a steep learning curve much less steep when explained within a new light. Members of the community who share their experience with others are the most important customers we could have.
- Assumptions and Constraints uncovered
 - Our assumption was that there would be a sufficient amount of participation (posting, shares) eventually.
 - We assumed that all users are familiar with using computers and communicating over the internet
 - Finally we designed this with the assumption that all members of the community would act with good faith and not maliciously
- MVP, initial technology stacks, and prototypes
 - Our planned MVP includes: Sign-in, log-in, Dashboard (Listing), Posting (writing), evaluation, and comments
 - For the fast implementation, we chose React js and Firebase as our technology stack
 - We prototyped our application using drawings of Lofi prototype
 - Microblogging was the intended design goal(similar to instagram or twitter)

Reflections on project results

- Summarize how you felt about this project (likes/dislikes), from your experiences with the technology stack selected, translating prototypes into real solutions, and the evolution of your Minimum Viable Products (MVPs)
 - The work done throughout this project has been mostly favorable. Familiarity with React.JS was a huge asset for this project. This made it easy to quickly and efficiently turn Lo-Fis into Hi-Fis. Combining this technology with the user friendly interface of Google's Firebase made development relatively pleasurable. The familiarity with React.JS made for quick work of common bugs that have been encountered before and thus made steps towards MVPs less of a hassle.



- Summarize what went well during the project
 - Using a familiar front-end framework was a very good idea and made things much easier. Google Firebase was very easy to setup and learn because there is lots of documentation surrounding this and its integration with React.JS
- Summarize what not went well during the project
 - During development some errors were encountered relating to developing on different operating systems (collaborating between Windows and macOS systems) , even when using the same Frameworks and plugins. Furthermore there was a more niche bug that came up during the creation of the video listing page. This made for a slight setback in the development time.
- Summarize software design activities and findings. Ensure you discuss how you/your team either linked or envision links to design ideas back to topics discussed in class
 - A great deal of the focus of our project surrounds creating a richer read write culture through discussion within the commons and supplementary knowledge sharing
 - We attempted to lay the foundation for a healthy COP through envisioning multiple levels of participation (creator, curator, consumer)
- What would you do the same on future projects?
 - If the future software projects require a fast paced development, we would like to use React js and Firebase stack as well. Even though it has some pitfalls, it is the best fit to the requirement.
 - The community research and understanding document really helped to define the scope of our project and how we would distinguish ourselves from other services. If we were to do this again it would be very valuable to conduct a similar activity.
- What would you do differently on future projects?
 - At the same time, we would consider that If the time allows, we would use the other development stacks, such as Flutter, native Android, and native iOS stacks.
- Summarize opportunities and design ideas for future work
 - We discussed this as we would like to go further that content creators (curators) evaluation or rating system to compensate for those who contribute mostly to the community, listing up the person who gets the most likes and postings on the dashboard.