Oregon State University
College of Engineering

CS Capstone Progress Report

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Many Voices Platform

Prepared for

Oregon State University

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Prepared by

Group 61

Remix

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Abstract

This document summaries the progress that the Remix team has made on the Many Voices Publishing Platform for the client Dr. Carlos Jensen. Additionally this document provides a week by week summary of work performed, as overviews of progress that has been made throughout Spring Term.

Contents

1 Revision Log

Name	Change Number	Date	Description of Change
Steven Powers	1	2/17/2017	Finalized Progress Report for half way point through winter term. Fixed spelling mistakes, added code listings, adjusted content, added images.

2 Project Purpose

A modern textbook is updated frequently, perhaps even yearly, and can cost in the range of hundreds of dollars. Students are often left to attempt to understand poorly worded, even incorrect information from a textbook often chosen from those sent to a professor for review by the publisher. This can lead to better works with less aggressive sales tactics not being made available, or even known. Another choice would be for a professor to write their own textbook. However, this is a process that takes months of endless research and time spent, and on top of that will require peer review and publishing before it can be released.

The Many Voices platform offers to put an end to this massive, slow, expensive cycle. Instead of a textbook being a single document written by one professor, we seek to re-imagine the textbook as instead a collection of content written by professors from around the world that are useful for a particular class. A knowledgeable professor can contribute a few chapters on their specialty, without needing to write an entire textbook around it.

Professors wishing to use this content can then modify it for their uses in the classroom. The material will be hosted in such a way as to provide the ability to ”fork” content, or create content based off of it. The platform will provide a way to search for and find content, prioritized by relevance and credibility as determined by other users; the most popular material will be shown with the most prominence.

3 Project Status

The beginning of spring term unfortunatey didn't aid us in starting out strong, as one of the team members had their laptop stolen over the break. This proved as a difficult obstacle to overcome, as we anticipated spring break to be a productive time for the application. Thankfully, after two weeks, we were able to recover the stolen laptop and start working fluently from then on. While this did manage to put us behind in a lot of areas, we were able to make a clear plan that we could follow through until we had everything checked off.

As for where our project stands now, we managed to meet every one of our requirements. The last week before the code freeze proved to be a challenging and time consuming period, thankfully the majority of the team was able to dedicate many hours to focusing on finishing the application. While we weren't able to completely utilize everybody on the team due to other classes and obligations, the project satisfactory to our clients expectations. As of the code freeze, our project is in a polished beta state. We have a fully running version of our application, but there is still much more needed testing to do. Users have access to most features desired of the full application.

Some of the main functionality for our application is being able to manipulate books, chapters, and scraps. This meant a variety of things had to be in place, such as being able to remove books, chapters, and scraps. The purpose of our application is to make it easy to write and edit books, this means being able to edit individual scraps at the base level. Users are able to upload scraps associated with a chapter, and chapters associated with a book. Users are also able to write scraps that aren't associated with any chapter but can be used later. What all this meant for us, is that user would be able to write text, and have it stored in our database as LaTeX. Thanks to one of our team members, the backend is fully able to handle images, text, and special commands (such as bolding).

One of the big requirements for our application was that it would manage user accounts. Users need to have the ability to come back to their unfinished work, and this isn't possible without user accounts. Our application uses a 3rd party, single sign on tool by Google to manage. Users are able to sign in with their Google accounts, and manage certain settings about their profile, like their username. When a user creates a book, chapter, or scrap, their name will be associated with it, and they'll be able to search for it under their content. Another factor of authentication that needed to be implemented was that whenever a user makes an API call, they have a have a varified token ID.

Keeping track of a book, chapter, or scrap in terms of history was a requirement specifically asked for by our client. While we weren't able to make the history of an item look similar to the Github timeline, we were able to incorporate dates and timestamps of events or changes. A user is able to go

4 Remaining Work

5 Problems and Proposed Solutions

One of the areas that our team wanted to improve on winter term was communication with our client. This meant that we needed to come to our meetings with an agenda and clear goals of what we wanted to accomplish. After much discussion as to what was expected, both us and our client were able to arrive at reasonable goals.