

Bandmaster Alpha Status Report

by

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Goal Review and Assessment of Progress

Our proposal's development schedule describes the project's alpha version as having the following features:

- Account creation and login system.
- The ability to upload or remove files from an admin page. These changes will be applied to a public page.
- Both the admin and public pages allow for music playback and file downloads.

With the exception of the ability to download files, all of these features have been successfully implemented. Additionally, we have successfully implemented a to-do list system that allows users to add or remove tasks from a list via the admin page. This task list, as well as the list of uploaded files, is then displayed on the public page.

Unexpected Issues

One of the strategies described in our proposal to handle the fetching and display of updated data structures was to repeatedly request for an update from the server. We faced a serious problem as the servers were unable to handle these repeated requests in a timely manner and incorrect data would often be displayed. For example, when sending a request to the server to add a task, the server would respond that the task had been successfully appended to JSON. However, the page would then attempt to reload the JSON data, which was sometimes incorrect. We believe this to

be a timing issue and that the script is writing strings to a buffer rather than directly to JSON, so when the page fetches the JSON it may or may not be updated yet. Our solution to this problem is to send a request to the server that handles the request and appends the necessary strings to JSON. When the server responds back that the request was handled, we update the page's AngularJS model accordingly so that the UI is instantly updated showing the new task or new file.

Another unexpected issue was having a user account with white space in the name. Currently, when a new user is created, files from a template directory are copied over to a new directory for the user's account. Having white space in the name complicated this process and files were often put in the wrong directory. To remedy this, we now ensure that spaces are not allowed in user names.

Evaluation of Current Features

Our currently working features function just as they should in the final version. The account creation and login system work 100%. Upon the creation of a new account, a new directory is created for that user which includes a public band page. Additionally, when a user logs in, a private admin page is generated based on their preferences and uploads. The upload system works smoothly, displaying a progress bar during file upload. When an upload has completed, the user's list of content is immediately updated in the UI to reflect the changes. On the admin page or the public band page, users can listen to their uploaded songs (mp3s and wavs) by using the built in audio player. Furthermore, file deletion, adding tasks, and removing tasks are all fully functional. A user's public page will display all of the information that is set on the admin page, but with the ability to add or remove content disabled.

Feasibility of Future Features

Our next major goal will be to allow the uploading of non-music files, such as pdf sheet music, and implement a way to associate these files with particular songs. When a song is selected, we would like to also display links to any associated files for that song. Since each song is stored as a JSON object, we can append the object with name-value pairs that reference other objects/files associated with that song. Another approach would be to add a single property to each object whose value will an array of associated files. We have yet to decide on the exact UI for this feature, but we are confident it is achievable. Additionally we want to give the user the ability to sort audio files into different tabs. This can be achieved by appending the song's JSON object with a 'tab-name' property and adding an AngularJS filter to each tab.

We are also currently working on implementing a calendar that users can add events to on their admin page. Building this feature involves creating a form with text input fields for event information, writing the input data to a JSON file, and then displaying the data in a calendar format. We believe the calendar is a feasible feature, but we continue to research how we can expand on it by possibly linking events to Facebook events or locations to Google Maps.

Contingency Plans

If we cannot reach our goal of allowing new uploaded files to be directly associated with songs, we can allow files to be uploaded and sorted into their respective tabs (songs, sheet music, guitar tabs, etc). Instead of selecting a song and seeing associated files, users will then have to search each list for the files they seek.

Assessment of Delivery Schedule

Our project has met our deliverables for alpha at this point. Key features yet to be implemented are adding non-music files, associating those files with already uploaded songs, and adding a band calendar. We intend to have those features implemented shortly after spring-break at the latest allowing us to spend the last several weeks focusing on polishing the project's look and style.

Reallocation of Resources

At this time we see no need to reallocate any resources. Each team member has contributed to the project and it is moving forward in a timely manner.

Aspects of Plan to Be Removed

We have no plans to remove any key features mentioned in our proposal. We are currently on track to meet all of our minimum release criteria. The most important feature yet to be implemented will be the ability to link files to each other, but we have several ideas in mind to accomplish this.

Style of Final Product

The final style of our project is still undetermined. Our three-panel layout has worked well so far is able to display all necessary information to the user. As our project uses Bootstrap we can easily incorporate Bootstrap themes in the future for a more polished look. We are also considering styles for the main login page and looking into creating a logo.

Summary of Project's Current State

The majority of our project's core features have been fully implemented. We believe the remaining features outlined in this document are all feasible. With a tested application foundation we can now begin to expand our project by adding more sophisticated options for the user. In addition, we intend to fully revamp the UI and style for all pages. Our goal of creating a site that musicians can use to collaborate with each other is close to being achieved and we will soon be focused on making the experience as user friendly as possible.