Bandmaster Usability Test Report

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Executive Summary

The goal of our study was to test the user interface and functionality of our web application Bandmaster. In total we had four people participate in our usability study and all four were able to complete the test. Participants were read a brief description of the application along with the goal of the test. Participants were then given control of a laptop with the application open and a list of tasks to attempt during the test. Tasks consisted of creating an account and logging in, adding a task to their page, uploading and playing a song, and finally attaching an associated file to the uploaded song, such as lyrics or sheet music. During the tests, members of our group observed the participants completing the tasks, noting their behavior, successes, and failures. At the conclusion of the test, users were asked follow-up questions to further ascertain their feelings and opinions on using the application. Using this data, we plan to make changes based directly on participant feedback that will improve the usability of our application. Included with this document are a copy of the instructions read to participants, the list of tasks they were given to perform, filled out behavior evaluation forms, and filled out participant questionnaires.

Methodology

Who we tested

Four participants took part in our study. Table 1 shows the age breakdown of our participants with all users being in their twenties. Table 2 shows the split between genders for our participants: three males and one female. All participants in the study had above average computer knowledge.

Table 1. Age of Participants

Age	Number of Participants
18-30	4
30-40	0
40-50	0
60+	0
TOTAL (participants)	4

Table 2. Gender of Participants

Gender	Number of Participants
Women	1
Men	3
TOTAL (participants)	4

What participants did

Participants met with our group for approximately 10 minutes each. Each participant was asked to complete a small set of tasks testing all areas of our application. Using a MacBook Pro laptop, users began our test by creating an account. They were then instructed to use their administrator page Add/Remove a task from the task list, upload a song provided to them, play the song, and finally attach additional files to that song. Furthermore, we tasked users with finding their public band page and testing the features from a non-administrator point-of-view.

What data we collected

The data we collected were two-fold. First, we observed participants and noted whether or not they could complete each task, how long it took them, and how they appeared to go about completing tasks. Second, we verbally asked users for their opinions following the tests to gauge

their thoughts on difficulties while using the application, how our application reacts compared to similar products that are available, and suggestions they had to improve the product.

Major findings and recommendations

Issues:

- Participants had trouble uploading non-music files.
- Users had trouble finding their public band page.
- There was confusion about selecting a song after uploading it.
- Users were confused about the "Enter" key not being able submit a task.

Possible Solutions:

- Get rid of the drop down menu for file upload. Too archaic and confusing.
- Make the public band page link more prominent on the administrator page.
- When a song is uploaded, make it selected automatically if no other song is currently selected.
- Enable the "Enter" key to allow for the submission of tasks and account creation/login.

Detailed findings and recommendations

Introductory Questions & Tasks

While conducting the usability tests, members of our group observed and recorded the activity of participants based on a form we prepared beforehand. Table 3 shows some of the common behaviors we noticed from participants.

Table 3. Participant Behaviors Observed During Testing.

Behaviors Being Tested	Participant Behaviors Observed
Are users able to create an account and log in?	Users were able to create accounts and log in, although some attempted to use spaces and illegal characters in their usernames.

Are users having trouble uploading a song or associated file?	Participants did not have trouble uploading a song file. Attaching other files to songs such as lyrics was more difficult with most users failing to figure out the process. Most of the confusion existed around the drop down menu when selecting which type of file.
Which mechanism did users use to upload a song? (file browser or drag-n-drop)	Only one user used the drag-n-drop feature.
Are users having trouble adding or removing tasks?	The only difficulty encountered here had to do with the "Enter" key not functioning as a method to submit the form. Besides that, users had no problem adding or removing tasks.

Exit Questions/User Impressions

Following the test, participants were asked questions about the application's features, user interface, and overall usability. Table 4 displays the questions they were asked along with the common responses to each.

Table 4. Questions Posed After Testing

Questions	Common Responses
Was the account creation and login process straight forward?	All users had no trouble creating an account and logging in, although some were surprised that the "Enter" key could not be used as a method to submit the form.
Was it clear how to upload a music file?	Users generally did not have trouble uploading a song file. Most users used the Browse

	button instead of our drag-n-drop feature.
Was it clear how to upload an associated non-music file?	Participants had significant trouble uploading files and attaching them to songs. Complaints were generally focused on how the method of selecting the file type from the drop-down menu was not obvious.
Did the site feel responsive and behave as you would expect?	Participants felt the site felt responsive, but most wondered why the song they had just uploaded had to then be selected before allowing playback.
Was the style and layout appropriate for this kind of web app?	Most participants found the style appropriate, although we got several suggestions on fonts and style. Additionally, all users felt the link to the public band page looked hidden.

Analysis

The data collected during these usability tests will be invaluable for improving our application before submission. While many deficiencies were found during the tests, most participants offered similar solutions for how they would like to see the issues fixed. Because of this, we are able to prioritize what we believe to be the key issues that need improvement. We plan to have uploaded songs automatically selected when there are no other songs currently selected. This allows users to listen to an uploaded song right away without an intermediate step. In addition,

we plan to enable the "Enter" key to be used as a method to submit when dealing with any forms on the page because this is the common behavior users expect from a web application. Furthermore, we intend to redesign the upload process for files and the process of attaching files to songs as well. Rather than having a drop down menu, we believe tabs or a generalized upload box will be easier to understand for users. We believe our current user interface is serviceable to people with strong computer and internet knowledge, but will need further polishing before it will be accessible to our intended audience.

Several suggestions were made throughout the test that we will not have time to implement before submission. One user suggested giving users the ability to customize their own page by dragging and dropping elements like the song player and calendar to custom locations. While this would be a great feature, we have decided to prioritize the current features listed above. A participant had also suggested that we implement a way to search for other band's pages. For example, a user could search for bands by genre or geographical location. Again, this would be an excellent feature to have, but would require a large amount of additional work that we simply do not have time for. Finally, it was suggested that we allow users to create and access their Bandmaster account with their Facebook or Google credentials. Facebook and Google have APIs set up to handle such a feature, but this is not a priority for us at the moment and it is not likely to be implemented before our final code submission. The usability testing process as a whole has helped our group refine our focus to the needed areas of this project.