# ISE 215 - Spring 2011

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Grooveshark Usability Report



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### I. Executive Summary

Grooveshark.com usability testing was performed by ISE215 team 'ABA' on April 25<sup>th</sup> 2011. The purpose of the usability testing was to evaluate the ease of use, effectiveness, intuitiveness and compatibility of this music streaming website with the needs of the representative user population. Also, the study attempted to determine any design issues and user interaction issues with the website. Developing and executing usability tasks by the participants and by post-interaction surveys accomplished usability testing of Grooveshark.

In total, three new and two current Grooveshark users participated in performing the usability tasks for the most commonly used features of Grooveshark. Each participant in the study also completed a post interaction survey. At first the participants found the Grooveshark website hard to use. Once they figured out how to use the site, they enjoyed streaming music without becoming a member. While all five participants liked the music search and streaming features, four out of five participants were confused by the difficulty of adding music to favorite vs. My Music and three out five participants had difficulty with one or more aspect of working with playlists. All participants were confused about the Radio feature of the site and questioned the utility and purpose of this feature. One participant was annoyed by frequent expansion of ads over the play area and three participants indicated they disliked the advertisement feature. None of the participants could remember any of the ads in the post-interaction survey. This is an issue because ads are the main source of revenue for Grooveshark.

The following is a high-level summary of our findings:

Feature	Impact	Findings	Suggestions
Favorite My Music	Global	Most participants were confused by many small and hidden icons  ( ) with elaborate functions peppered throughout the screen. Require users to spend time and really learn ins and outs of the icons to be effective users of the site.	Use larger and easily recognizable icons for playing and moving music to different folders. Avoid using similar icons for different tasks.
Playlists	Global	2 out of 3 new users had difficulty creating playlists, adding songs to playlists, moving songs and deleting playlists	Use wizard to guide through creation of playlists and adding/moving songs for novice users.
Upload Songs	Global	All current users of Grooveshark	Design a new page or tab

Feature	Impact	Findings	Suggestions
		had difficulty locating the uploaded songs since uploaded songs get blended in with other songs on the screens.	for uploaded songs, as the user will be upset if they cannot find songs they own.
Radio Feature	Local	All participants (including current users) were confused by the radio feature. They all expected the more songs in the "radio station"	Use a different name for music suggestion feature rather than "radio". Show songs played and songs suggested in two different areas.
Covering of features by Advertisement s and Feedback	Local	One participant was annoyed by expanding ads covering the features of the site. Others could not adjust music volume because if was covered by the site feedback box.	Avoid using expanding ads or expand to non-critical area. Feedback should be designed so it does not cover volume control.

Items identified as global require complete redesign and reorganization of the affected screen. Items identified as local can be remedied by fixing the affected feature, renaming it or moving the display to another part of the screen. Our findings indicates that in order for Grooveshark to capitalize on the value offered to the users and turn the new users to current users, it's necessary to redesign all global issues noted above, make the features intuitive and reduce the learning curve of the first time users.

# **II.Product Description**

Grooveshark is a popular online music search engine; streaming, sharing and a fee-based music download service. The web based music search

feature allows for searching thousands of songs from around the world and playing them instantly without the need for becoming a member or paying for any of the songs. Payments are required only when the user downloads the music or wishes to



eliminate ads. The site also allows for the creation and sharing of playlists. The basic membership is free and provides users more capabilities and flexibility than non-member users. The user can create an account by providing an e-mail address or they can log in using Gmail or Facebook accounts. Users with an account can create and save playlists, upload and share music and use the radio feature to stream more music based on their music preferences. Grooveshark makes money by selling premium membership with monthly dues, selling songs and advertisements.

# III. Usability Objectives

The original objective of the usability testing plan was to perform a comprehensive assessment of the Grooveshark website. The study was scaled back to fit into the class assignment and objectives for paid premium membership was excluded from the study. Participants of the study consist of new and current users. The study covered all non-subscription features that are available to the users and collected data for usability testing of features available to these users. Also, the study compared the ease of use and feature set to that of competitor websites used by one participant. Usability tests were developed and executed to accomplish the following objectives:

#### **Usability Objectives:**

Determine the ease of use and intuitiveness of the website as per new and current users.

Assess the ability of existing and experienced users to complete more advanced tasks.

Determine user preferences in utilizing this site to upload and listen to music as compared to its competitors

Determine effectiveness of advertisements on the site in catching the attention of the new and experienced users.

Compile a list of user errors, effectiveness of search engine and any other issues noticed by the user groups. Rank the errors and issues based on frequency and severity to be addressed by the site

Evaluate design preferences of the users and recommendation by the users to improve user experience with the website

Conduct a post-study survey to determine user satisfaction for all user types

#### **Usability Objectives:**

Create a comprehensive summary report of all usability data and provide an overall assessment of the website, its usefulness, intuitiveness and acceptability to the user population. The report will highlight any issues found during the test, any major design flaws and the implications of the survey results.

# IV Methodology

# A. Participants Profile

Three new users and two current users fitting the participant criteria were selected and included in this usability study. One new user also had competitor experience using Pandora website. All study participants were selected from San Jose State University students and their family members. All participants were asked to sign the Grooveshark Usability Test Release Form (Appendix TBD).

	New Use	ers (N=3)	Current Us	ers (N=2)
	Gei	nder	Gend	der
	Male	2	Male	1
	Female	1	Female	1
	Total	3	Total	2
	A	ge	Ag	e
	20-30	2	20-30	2
	30-40	1	30-40	0
	Total	3	Total	2
	Hours/day o	n the internet	 Hours/day on	the internet
	1-5	2	1-5	2
	6-15	3	6-15	3
	Total	5	Total	5
_		c experience	 Other Online mu	isic Experience
	Pandora	2	Pandora	1
	None	1	Last.FM	1
	Total	3	Total	2
		1	 	

# **B. Study Settings**

The usability study of Grooveshark was performed at the San Jose State University Clark Hall reserved room. A laptop computer with 17" monitor with internet connection was used to run the usability session.



Participants were asked to rate all covered features after completing each task and fill out a post-study survey about the site. In addition, the moderator asked the participant filling out data Moderator and Data recorder used another computer to record all observations in the data log. Each study session lasted 30 minutes and participants were photographed and videotaped using smart phones by the third team member.

# B. Study Design

Grooveshark usability study was performed according to the methodology described in the Usability Plan (Appendix TBD). Due to complexity of the website the users with and without Grooveshark experience were selected and asked to perform tasks tailored to their experience level. Comprehensive task list was prepared but not all tasks were performed due to limited number of participants and resources. Each group was assigned a specific set of use cases tailored to the level of experience of that group as described below. All studies were completed within 30 minutes. Participants experience level with Grooveshark and competitor experience is shown in table below:

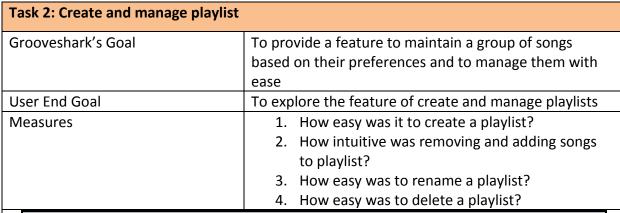
# of Participant	Grooveshark Experience	Competitor Experience	N per subgroup
2	Yes	No	2
		Yes	0
3	No	No	2
_		Yes	1

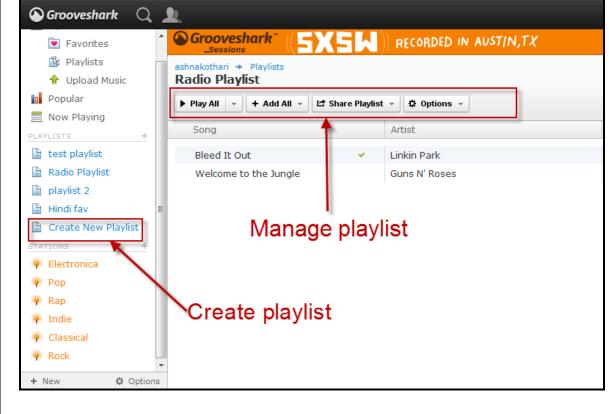
## D. Tasks

Each group of participants ran protocols appropriate for the group as discussed in Section VI. The current users asked to provide feedback based on their prior experience with the website and also to exercise the more advanced features of the website such as creating communities, following friends and setting and modifying account preferences. The new users were asked to run usability tests to search and play songs, create new playlists, and share the playlists with friends. Both groups were asked to use and report on features such as uploading songs provided for them and the use the radio and community features. Detained participant tasks protocols are provided in Appendix TBD.

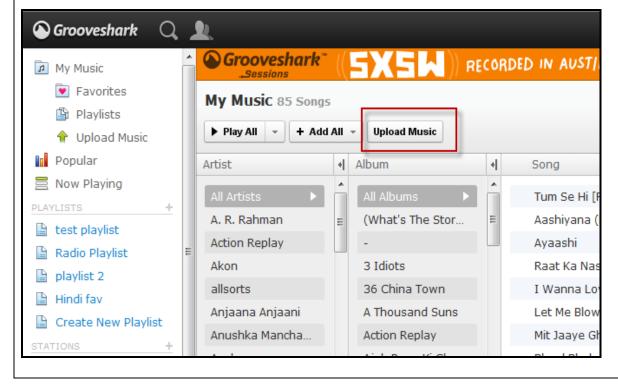
#### **NEW USER TASKS**

Task 1 - Search and play music	
Grooveshark's Goal	To provide a search feature to search for their songs quickly and play them with ease.
	, , , ,
User End Goal	To search for their favorite songs and be able to play
	them for 5-6 seconds.
Subjective Measures	<ol> <li>How easy was it to search the Music Titles or songs?</li> </ol>
	2. How accurate was the search function in finding the songs you were looking for?
	3. How easy was it for you to play the music you wanted?
	4. How would you rate the overall search and play feature of Grooveshark with other sites that you use?

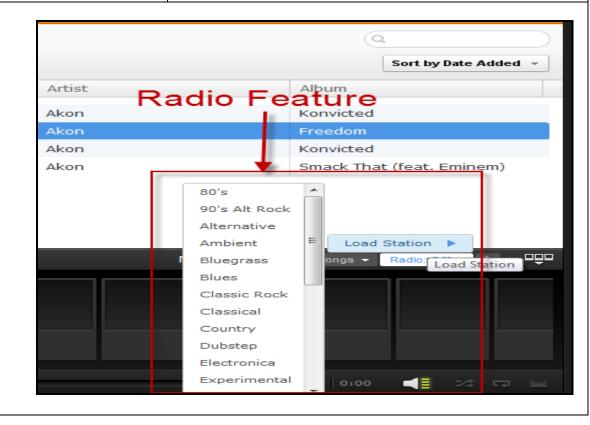




Task 3 - Uploading and sha	are songs
Grooveshark's Goal	To provide a feature to songs from a local drive or a DVD to
	their own music, create a playlist out of the uploaded songs
	with ease and facilitate user to share the uploaded songs
	through the provided options
User End Goal	To upload a few songs from the hard drive, be able to create a
	playlist of the uploaded songs and share on facebook, gmail or
	twitter
Measures	1. How easy was it to upload music?
	2. How easy was it to find from where to upload music?
	3. How easy was it to create a playlist of the uploaded
	music?
	4. How easy was to share songs?



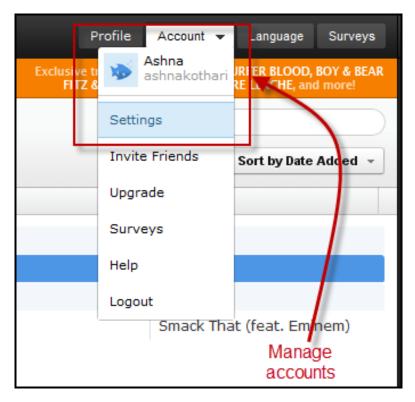
Task 4 – Radio	
Grooveshark's Goal	To provide a radio feature to find their favorite genre from a list of genres, listen to songs easily and also to create a playlist out of the songs playing from the radio
User End Goal	To listen to the favorite Genre under radio feature and create a playlist out of the Radio songs
Measures	<ol> <li>How useful was to use the radio feature?</li> <li>Will you use the radio feature?</li> <li>How easy was to create playlist out of radio songs?</li> </ol>



Task 5	
Free form	
Grooveshark's Goal	To provide common features provide by various online music
	websites and to enable users to use them easily and effectively
User End Goal	To explore different features of Grooveshark easily and use
	them effectively
Measures	Based on the likeness of a particular feature
	e.g. Do you like the "Feature name" ?

#### **CURRENT USER TASKS**

Task 1 Account Settings	
Grooveshark's Goal	To provide a feature to manage accounts according to users'
	own preferences.
	To provide a feature where users can invite their own friends
	to join their community
User End Goal	To modify their account to hide their activity from other
	members of their community.
	To invite friends to join their community and create a playlist
	of songs that their friends are listening to
Measures	<ol> <li>How easy was to modify their profile?</li> </ol>
	2. How easy was to hide their activity from other users?
	3. How easy was to invite friends?
	4. Was inviting friends useful?
	5. How easy was it to make a playlist out of songs that
	your friends are listening to?
	6. Was the task intuitive?



Task 2	
<b>Sharing Songs</b>	
Grooveshark's Goal	To provide a feature to share songs easily through popular social networking websites
User End Goal	To be able to find a most recent song by their favorite artist and share it via any of the options provided
Measures	<ol> <li>How easy was finding the most recent song by your favorite artist?</li> <li>How easy was sharing this song?</li> </ol>

#### **Relevant features** Options 🕶 Upload Music 4 Album + Song Artist Albun I Wanna Love Akon Konvi Freedom Play Song Now Don't Matter Konvicted Konvi Play Song Next Konvicted Smack That Smack Play Song Last Smack That (feat, E... Share Song 🕨 Email Buy Song Facebook Share -Twitter StumbleUpon Reddit Widget Copy URL

ooveshark's Goal	To provide a feature	to share their activity an	d songs to
	•	hem and be able to lister	•
		nem and be able to lister	i to other
	users songs		
ser End Goal		ided in the task sheet and	d listen to
	their playlists easily.		
easures	1. How easy wa	s to follow users?	
	2. How easy wa	s to subscribe to friends	nlavlist?
Sessions  My Community	RECORDED IN AUSTIN,TX	Exclusive tracks and videos from SURFE FITZ & THE TANTRUMS, SONDRE LE	.KCTL, and more:
My Community  Invite Friends  getliketorii listened to Voices by Distu	ು Activity → A Following 시	FITZ & THE TANTRUMS, SONDRE LE	P <sub>o</sub>
My Community  Invite Friends	ು Activity → A Following 시	FITZ & THE TANTRUMS, SONDRE LE	
My Community  Invite Friends  getliketorii listened to Voices by Distu Saturday 10:06 pm	⇔ Activity →Δ Following A	FITZ & THE TANTRUMS, SONDRE LE	
My Community  Invite Friends  getliketorii listened to Voices by Distusturday 10:06 pm Play Hide Songs Follow		FITZ & THE TANTRUMS, SONDRE LE	
My Community  Invite Friends  getliketorii listened to Voices by Distusturday 10:06 pm Play Hide Songs Follow  We Takin' Over (remix) Voices My Curse	## Activity *A Following A Fol	FAIR Recently Active • Q  Da Drought 3 (disc 1) The Sickness As Daylight Dies	
My Community  Invite Friends  getliketorii listened to Voices by Distu Saturday 10:06 pm Play Hide Songs Follow  We Takin' Over (remix)  Voices My Curse I'm Not Human option to listen to	Activity *A Following A Follow	FAIR STATE TANTRUMS, SONDRE LE Fans Recently Active   Da Drought 3 (disc 1) The Sickness As Daylight Dies Rebirth	v.
My Community  Invite Friends  getliketorii listened to Voices by Distu Saturday 10:06 pm Play Hide Songs We Takin' Over (remix)  Voices My Curse I'm Not Human option to listen to other users music	Activity *A Following A  Thed and 12 others.  Option to follow users  Lil Wayne  Disturbed  Kill Switch Engage  Lil Wayne  Lil Wayne	Fans Recently Active • Q  Da Drought 3 (disc 1)  The Sickness  As Daylight Dies  Rebirth  Rebirth	v.
My Community  Invite Friends  getliketorii listened to Voices by Distustry 10:06 pm Play Hide Songs Follow  We Takin' Over (remix)  Voices My Curse I'm Not Human option to listen to other users music I'm A Monster	Activity *A Following A Follow	Fans Recently Active • Q  Da Drought 3 (disc 1) The Sickness As Daylight Dies Rebirth Rebirth Rebirth	v.
My Community  Invite Friends  getliketorii listened to Voices by Distuset Saturday 10:06 pm Play Hide Songs We Takin' Over (remix) Voices My Curse I'm Not Human Prom Queen I'm A Monster Indestructible	Activity *A Following A Follow	Fans Recently Active • Q  Da Drought 3 (disc 1)  The Sickness  As Daylight Dies  Rebirth  Rebirth  Rebirth  Indestructible	v.
My Community  Invite Friends  getliketorii listened to Voices by Distustry 10:06 pm Play Hide Songs Follow  We Takin' Over (remix)  Voices My Curse I'm Not Human option to listen to other users music I'm A Monster	Activity *A Following A Follow	Fans Recently Active • Q  Da Drought 3 (disc 1) The Sickness As Daylight Dies Rebirth Rebirth Rebirth	v.

Task 4	
Free Form	
Grooveshark's Goal	To provide common features provide by various online
	music websites and to enable users to use them easily
	and effectively
User End Goal	To explore different features of Grooveshark easily and
	use them effectively
Measures	Based on the likeness of a particular feature
	e.g. Do you like the "Feature name" ?

### **Findings**

#### A. Data Analysis

Data for the usability study was collected from each participant in the following manner:

- 1. Each participant was screened for their prior knowledge of Grooveshark and a competitor website.
- 2. Each participant was asked to rate tasks in a standard rating scale provided with the tasks. In addition, space was provided for each task so the users can provide comments and qualitative assessment of the feature being used.
- 3. Moderator noted the behavioral performance of participants and collected qualitative and behavioral data in the data log.
- 4. Each participant was asked to list all issues and problems noted during test and/or from their prior experience with Grooveshark.
- 5. The participant with experience with a competitor Pandora website was asked to compare the features of Grooveshark to that of Pandora and rate the features for ease of use, intuitiveness, effectiveness.
- 6. The moderator and data recorder collected data from each task for success or failure of the participant to complete a task, rating of the each task completed, time taken to complete a task, and any other behavioral or perception issues during the study.
- 7. Each participant filled out a post-study survey at the end of the study regarding features they liked or disliked about the site, major usage or design issues encountered during the study and whether they will become a user of the site.
- 8. All user errors were recorded by the study coordinator and/or observers and the results will be tabulated.

Quantitative data from all these sources are tabulated for each user group. Common responses and findings are extracted and summarized. Qualitative comments, responses, observations and all reported issues with the use of the website are summarized under Results section of this report.

#### **B.** Results

Usability tasks and subtasks were used to determine the level of user satisfaction for various features offered by Grooveshark. Analysis of quantitative data is performed and presented for each feature set below. Behavioral and subjective human factor comments by the participants are captured and presented following the quantitative data analysis section for each feature set. These results are results are organized for new users followed by existing users. Qualitative assessment and observed behavioral and human factors data are also presented for each feature set. Screen-by-screen recommendation and design suggestions are presented in the last part of this section.

Task Rating scale used for both t	the user groups:
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Very difficult 1	2	3	4	5	Very Easy
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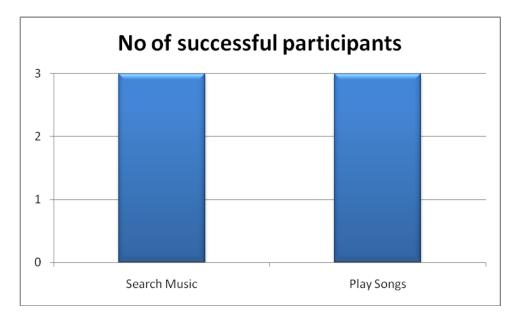
#### **New Users**

#### **Search and Play Music**

Three participants (all new users, one with competitor experience) were asked to exercise some form of music search and play as part of their tasks as music search and play is an important part of what Grooveshark offers to all users. Users were asked to rate the ease of performing these tasks, effectiveness of search and satisfaction with the quality of music and sound on a five point scale 1 being most easy and effective and 5 being most difficult and least effective.

Task Difficult - Search and Play Music/Account Settings	P1 New user	P2 New user	P3 New user (competitor Experience)
Music search was easy	Somewhat Easy	Neutral	Easy
Satisfied by music search			
effectiveness	Effective	Neutral	Effective
Satisfied playing music	Difficult	Somewhat Easy	Easy
Sound quality was good	Somewhat Good	Excellent	No Response
Searching and playing music on			
Grooveshark is better than			
other websites I use			Same as Pandora

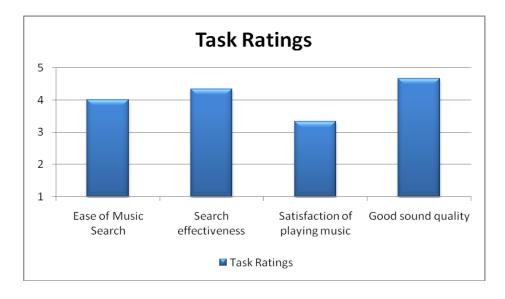
### Overall Task Performance



All the participants were able to effectively search the music (3/3, 100%) but two out of 3 (2/3, 66%) faced difficulty playing the selected songs. Both participants who had lower satisfaction rating for playing music were confused on how the songs are played and tried to click on the song title rather than the play button next to the songs. All the participants completed the task successfully. Two participants were satisfied with quality of songs and one participant with competitor experience thought Grooveshark was the same as the competitor (Pandora) for searching and playing music.

## Task ratings

Over all task ratings for Search and Play features are shown below:



Participants rated music search to be easy (Mean = 4), they were very satisfied with the search effectiveness (Mean = 4.33), were somewhat satisfied while playing the music (Mean = 3.33) and found the sound quality very good (Mean = 4.67)



Overall, all the users where able to search their favorite music but were not immediately able to play the songs they searched for.

Participant	Observations			
P1	Showed frustration. Thought that the green check mark as shown in figure indicated that the song was currently playing.			
	Grooveshark  My Music  My Music  Favorites  Propular  Scarch: "linkin park"  Musing for the end  Waiting for the end  Popular  Minute To Minipht  Minute To Minipht			
P2	Thought that the website has a drag and drop functionality and tried to drag and drop songs to the music pane.			
Р3	First accidently added songs to "My Music" and then played the songs.			



Participant	Comments
P1	"Searching is easy. How do I play this song?? I thought it is already
	playing."
P2	"Wow! I can find any song I want"

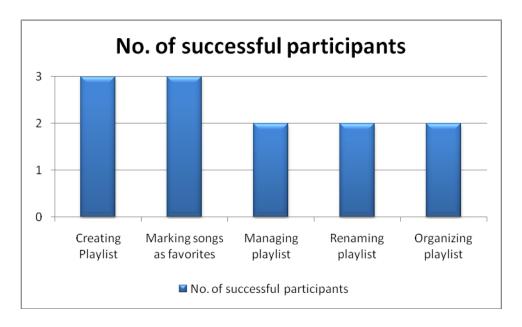
#### **Playlists**

All three new users were asked to create playlists from the songs they had searched for, modify, rename and organize playlists. Users were asked to rate the ease of performing these tasks and the participant with competitor (Pandora) experience was asked to compare the playlist function to that of Pandora. The 5-point rating scale was used for these and other tasks throughout this report.

			P3 New user
Task Somewhat Difficult	P1	P2	(competitor
- Playlists/Sharing	New user	New user	Experience)
Creating a playlist was		Somewhat	
easy	Easy	Difficult	Easy
Removing and adding			
songs to a playlist was		Somewhat	
easy	Neutral	Difficult	Easy
Renaming playlists was			Somewhat
easy	Neutral	Somewhat Easy	Difficult
It was easy to organize		Somewhat	Not performed
playlists	Neutral	Difficult	Not performed
Grooveshark playlists			
features are better than	Not performed	Not performed	Are the same
other websites I use			

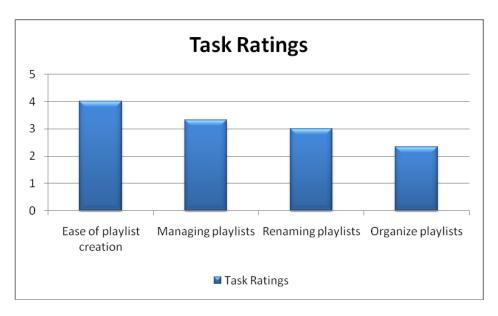
Except for creating playlist, which was easy to 2 out of 3 (66%) of participants, all participants found playlist tasks hard or somewhat hard to perform and at best they were neutral about these tasks. Participants behavior showed confusion and dismay when it came to working with playlists. This is an area that Grooveshark needs to really make it easy for users to create and modify playlists if they want the users to become return users.

### Overall Task Performance



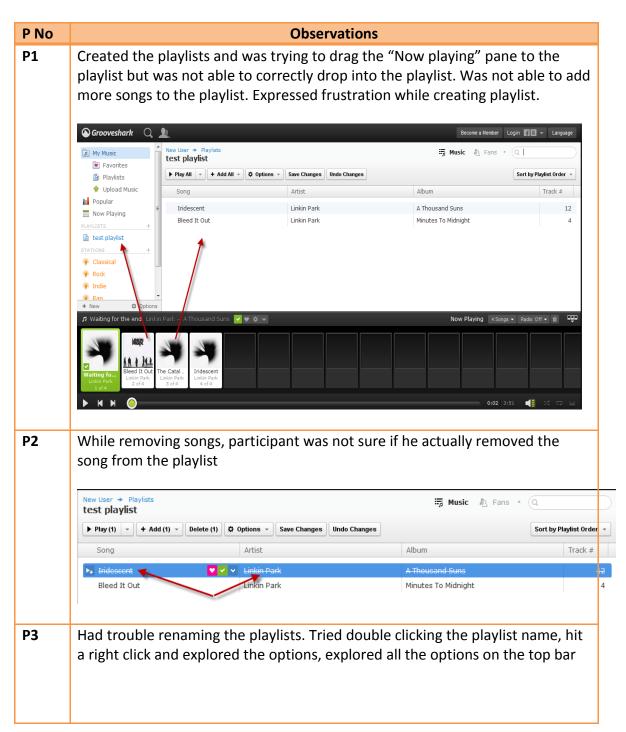
All participants were successful in creating playlists and marking songs as favorites (100%, 3/3). On an average 2 participants out of 3 were able to add and remove songs to the playlists, rename the created playlists and organize playlists. (66%, 2/3)

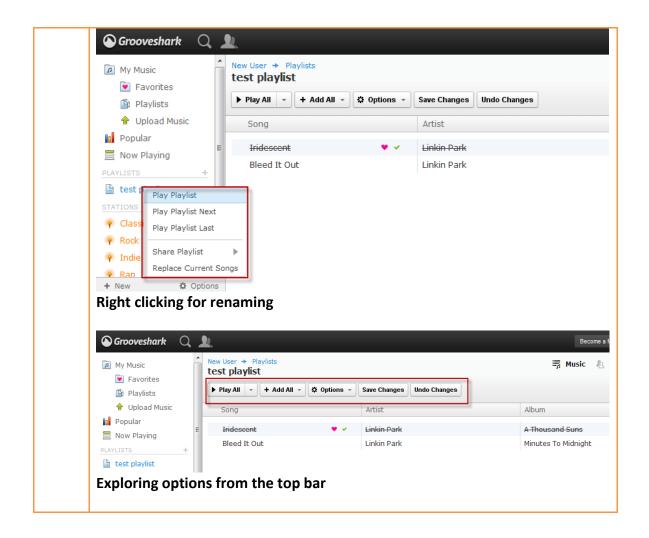
# Task Ratings



Participants found creating playlists to be quite easy (Mean=4). Removing and adding songs to playlists was not so easy for some and easy for some participants (Mean=3.33). Renaming playlists was somewhat neutral (Mean=3). Organizing created playlists was somewhat difficult for majority of the users (Mean=2.33).









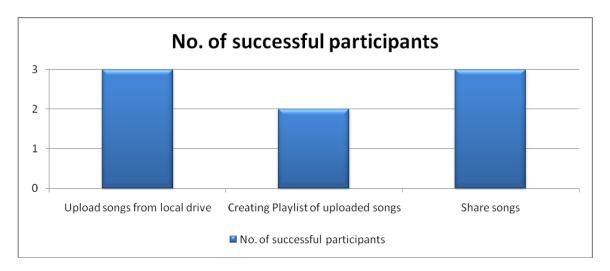
Participant	Comments
P1	"I cannot find from where to add songs to playlist, this interface is not usable at all. Where did these songs come from? I never added it!!!!!"
P2	"I don't know if I removed the song from the playlist as it is still there"
Р3	"There are no suggestions given for songs, as they do in Pandora"

#### **Upload music**

All three new users were asked to upload music and use the uploaded music to create playlist and share these songs. Users were asked to rate the ease of performing these tasks. The 5-point rating scale was used to rate these tasks.

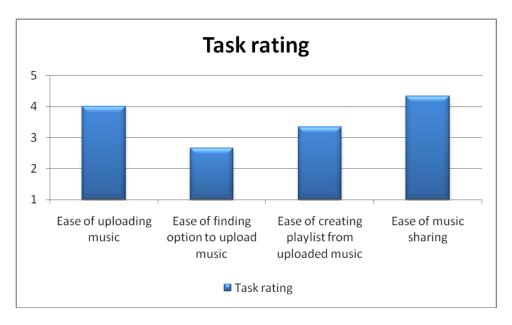
			P3
			New user
	P1	P2	(competitor
Task 3 - Upload Music	New user	New user	Experience)
			Somewhat
Uploading music was easy	Somewhat Easy	Somewhat Easy	Easy
Finding where to upload music		Somewhat	
was easy	Difficult	Difficult	Easy
Creating a playlist from			
uploaded music was easy	Neutral	Somewhat Easy	Neutral
Sharing music was easy	Somewhat Easy	Somewhat Easy	Easy





All the participants were able to upload songs by browsing from the local drive (100%, 3/3). 2 out of 3 participants were able to create playlists of the uploaded songs (66%, 2/3). All the participants were successfully able to share songs via email or post them on facebook (100%, 3/3). Two participants found it hard or somewhat hard to find their music once they had uploaded it.

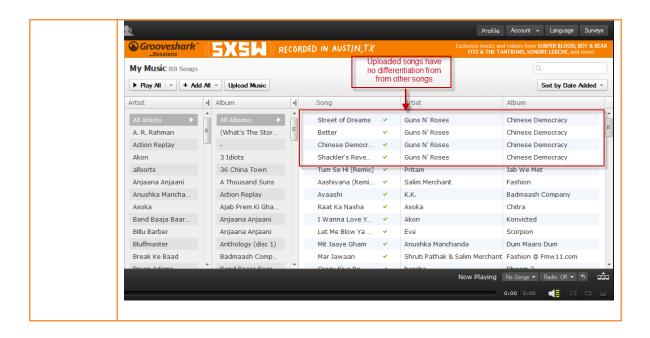




Overall, all the participants found uploading music to be somewhat easy (Mean=4). But they did not find the uploaded music easily from the interface (Mean=2.66). They found creating the playlist from the uploaded songs to be neutral (Mean=3.33). Ease of music sharing was found to be easy (Mean=4.33).



Participant	Observations
P3	Was not able to find the uploaded songs as they were mixed up with the current music. Exhibited frustration.



## Subjective data

Participant	Comments		
P1	"Where are my uploaded songs?"		
P2	"This is odd!! I can't find any option to upload songs"		

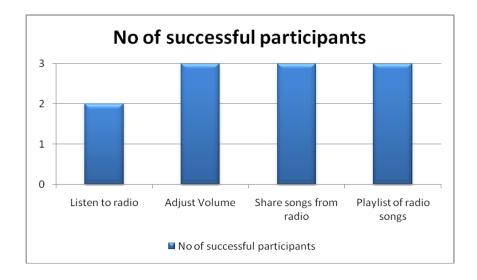
#### **Radio**

All three new users were asked to use the radio feature to play songs, share these songs and create playlists from these songs. Users were asked to rate the ease of performing the radio tasks and use the 5 point rating scale for this purpose.

			Р3
			New user
			(No
Task Somewhat Easy -	P1	P2	competitor
Radio/Organization	New user	New user	experience)
	Somewhat		Somewhat
Radio feature is useful	Useful	Not Useful	Useful
		Somewhat	
I would use the radio feature	Neutral	Difficult	Easy
Sharing songs is useful	Not Useful	Neutral	Neutral
Creating playlists from raido songs		Somewhat	
was easy	Easy	Difficult	Easy

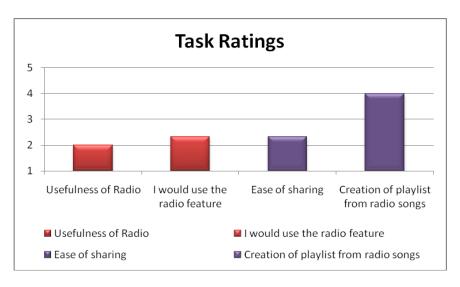
All three users rated the radio features of Grooveshark from not useful to neutral except for creating playlists from radio songs, which is a feature independent of the Radio. We think the radio feature is confusing and misunderstood by the new users and would require redesign and renaming to reveal its intended true value.

### Overall Task Performance



Overall, 2 out 3 participants were able to find the option for Radio (66%, 2/3). All the participants were able to adjust the volume while the song was playing, share the songs from the radio on facebook, twitter and via email and were able to create a playlist out of the songs from the radio. (100%, 3/3).



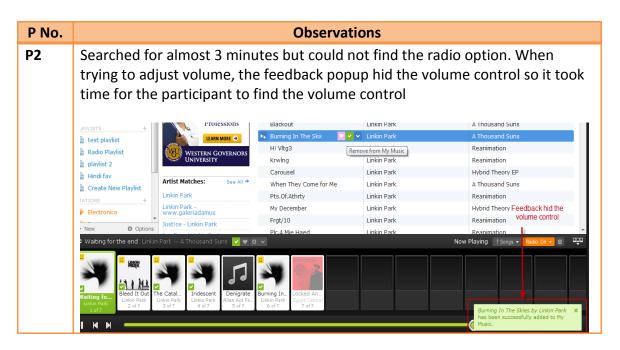


#### Rating scale:

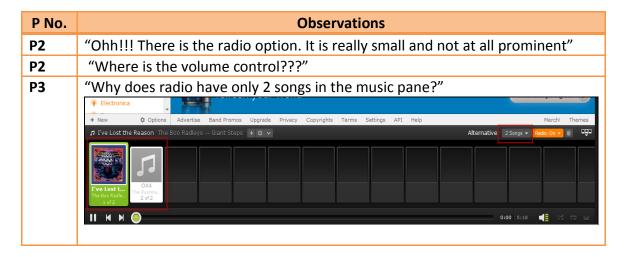
Not useful	1	2	3	4	5	Very useful
Very difficult	1	2	3	4	5	Very easy

Participants found radio not to be much useful (Mean=2). Most of the participants stated that they did not like the radio feature and would most likely not use it (Mean=2.33). Sharing radio songs on facebook, twitter, via email was rated to be not very easy (Mean = 2.33) and creating playlists of radio songs was rated to be easy (Mean = 4).









#### **Free Form**

All new participants were asked to use Grooveshark features in a free form exploratory use and rate the features used on the standard five-point scale:

Task 5 - Free form	New user – P1	New user – P2	New user – P3
I liked the popular music function	Somewhat like		
I liked the favorites function	Neutral		
I liked the community function	Somewhat dislike		
I liked music organization		Neutral	Strongly Like
I liked search		Somewhat dislike	Strongly Like
I liked absence of ads in radio station		Strongly Like	Strongly Like
I liked the share feature			Strongly Like
I liked playlists			Somewhat dislike
I liked icon state & changes			Strongly dislike

Most participants exercised different features and therefore inference from the results is difficult. Two participants liked the absence of ads in the Radio feature and this is in alignment with other findings that the users found the occasional expansion of ads over the features annoying. Participants 1 and 2 were neutral or disliked the features like marking favorite songs, community function and music organization.



P No.	Observations
P1	Found the advertisements to be very annoying. While checking out the community feature accidently added songs to my music and later was confused where did the songs come from. Did not notice the feedbacks at all.





Participant No.	Comments		
P1	"These advertisements are booby traps!!!!!"		
P2	<ul><li> "Icons are really very small and No feedback"</li><li> "Unclear functionalities"</li></ul>		
P3	<ul> <li>"It does not predict music based on my taste"</li> <li>"Really small buttons for favorites and not at all a smooth interface"</li> </ul>		

### **Current User**

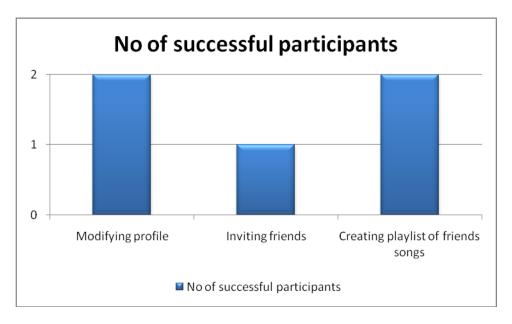
#### **Account Settings**

Two existing users participated in evaluation of Account Settings of Groovshark. Both participants performed the tasks outlined below and provide rating in the five-point scale for ease of use, usefulness and intuitiveness:

Task 1 - Account Settings	P4 Existing User	P5 Existing User
Modifying profile was easy	Easy	Easy
Hiding account activity was easy	No Response	Easy
Inviting friends was easy	Neutral	Somewhat Easy
Inviting friends is useful	Not Useful	Useful
Making a playlist of songs my friends are listening to was easy	Difficult	No Response
Performing the tasks was intuitive	Neutral	No Response

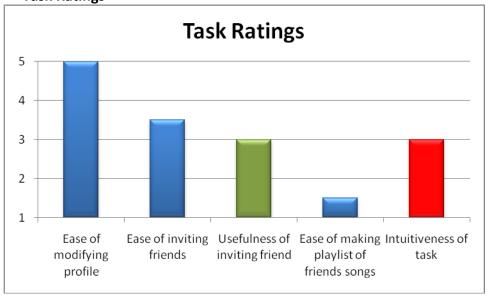
Both participants found modifying their profiles to be easy. One participant was generally neutral or negative on the features offered for hiding account activities, inviting friends and making playlists from friends songs while the other participant was somewhat positive towards these features. Larger number of participants are needed to determine whether these features are truly useful and easy to use.





Overall, all the participants were able to modify their profile to hide their activity from other users (100%, 2/2). Only one of the participant was able to invite friends was able to join their community as another participant did not know about the feature. (50%, 1/2). Both the participants were able to create a playlist of songs their friends were listening to (100%, 2/2).





#### Rating scale:

Very difficult	1	2	3	4	5	Very Easy
Not Useful	1	2	3	4	5	Very Useful
Confusing	1	2	3	4	5	Intuitive

Participants found modifying profile to hide their activity from other users to be very easy (Mean = 5) and found inviting friends to join their community to be near to somewhat easy (Mean = 3.5). They found the usefulness of inviting a friend to join their community to be moderately useful (Mean = 3.0). They also found very difficult to make playlist of songs their friends were listening to (Mean = 1.5). Participants rated the intuitiveness of task to be moderate (Mean = 3).



Participant	Observations
P4	Did not know that there is a feature for account creation. After playing around with the account settings, did not find the account creation to be much useful. Looked surprised by some features like community and inviting friends.
P5	Had some difficulty with creating playlist from friends songs



Participant	Comments
P4	"I did not know we can create an account.", "I do not need an account as I just listen to songs"
P5	"There are so many options but none of them tell me from where to add songs to my playlist"

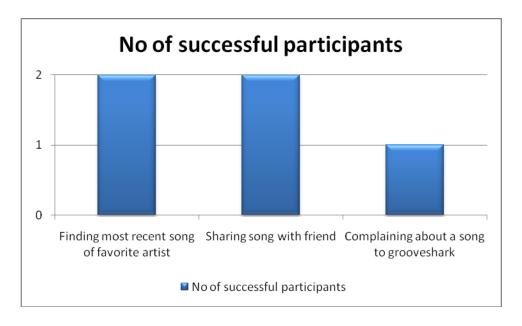
#### **Search and Share Songs**

The current users were asked to search for current songs by their favorite artists and share these songs with their friends and complaint about the songs to the website administrator.

Grooveshark Data	P4	P5
Task 2 – Search and Share	Current User	Current user
Finding the most recent song by my favorite artist is easy	Neutral	Easy
Sharing this song with friend/community was easy	Easy	Easy
Complaining about songs was easy	Neutral	Neutral

Both current users of Grooveshark were able to find most recent songs by artists and share these songs with their communities without any difficulty however they did had difficulty finding and using the complaint feature of the website.

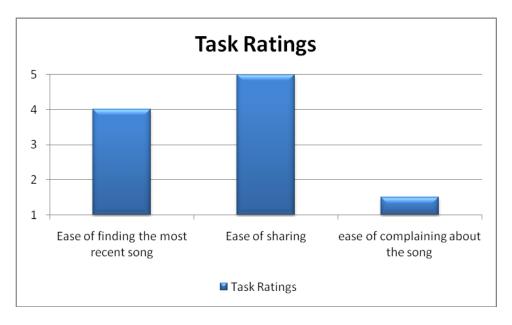
## Overall Task Performance



Overall, all the participants were able to find the most recent song by their favorite artist (100%, 2/2) and share that songs with their friends (100%, 2/2). Only 1 participant

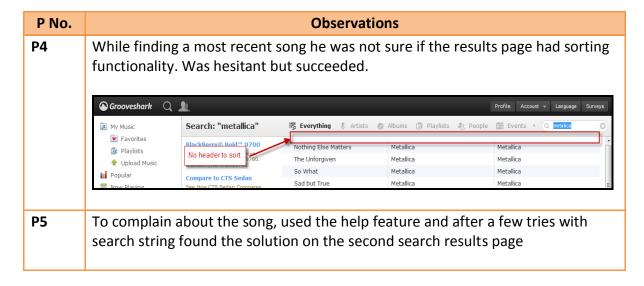
was able to find out how to complain about a song that is not playing correctly (50%, 1/2).

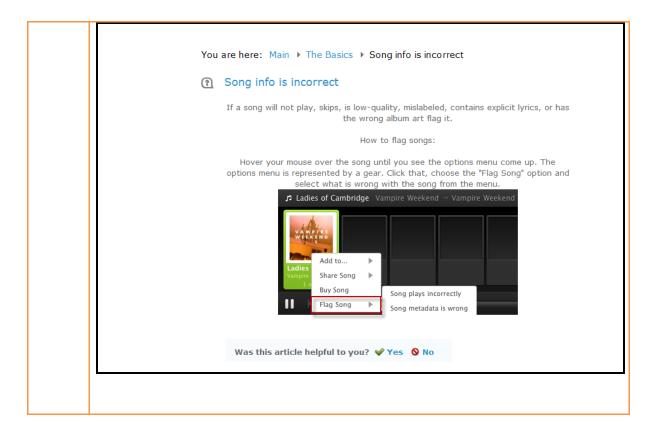




All participants rated finding a recent song by their famous artist to be somewhat easy (Mean = 4). They rated sharing songs to be very easy (Mean = 5). Participants rated complaining about a song that is playing incorrectly to be difficult (Mean = 1.5)









Participant No.	Comments		
P4	"Can you sort this?? This does not help"		
P5	"These icons are really small. Too hard to find any options"		

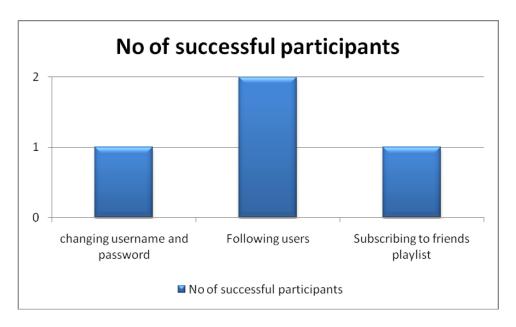
#### **Radio and Community**

Two current users of Grooveshark were asked to perform tasks listed in table below to exercise the tasks appropriate to the experienced users. They rated the usefulness and ease of use for these features on a five point rating scale.

Task 4 - Radio/Organization	Current User – P3	Current User – P5
Radio feature is useful	Not Performed	Not Useful
I would use the radio feature	Not Performed	Probably Not
Sharing songs is useful	Not Performed	Neutral
Creating playlists from radio songs was easy	Not Performed	Easy
Changing user name and password was easy	Somewhat Hard	Not Performed
Following users was easy	Somewhat Easy	Not Performed
Subscribing to your friends playlist was easy	Somewhat Hard	Not Performed

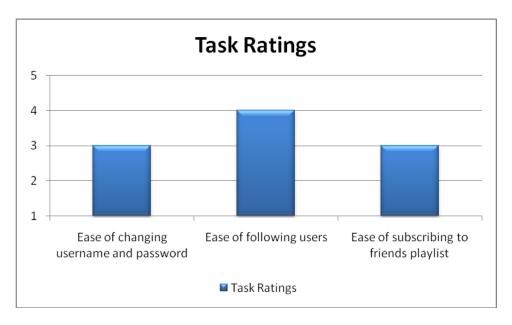
Overall the radio feature was found to be not very useful and participants had difficulty performing tasks related to user name and password or subscribing to friends' playlists.





Both the participants were able to follow users provided in the task sheet (100%, 2/2) but only one participant was able to find where to change username and password (50%, 1/2). Only 1 participant was able to subscribe to a friends playlist (50%, 1/2).



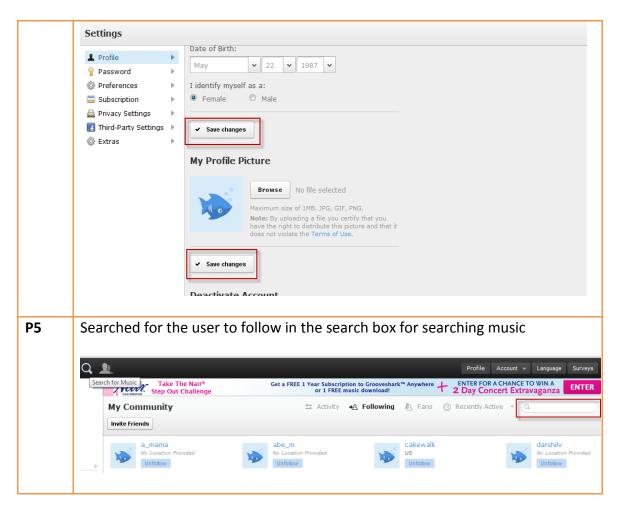


Participants rated changing username and password to be moderate (Mean = 3). They found following users provided in the task sheet to be somewhat easy (Mean = 4). They also rated subscribing to a friends' playlist to be moderate (Mean = 3).



#### **Behavioral measures**

P No.	Observations
P4	was confused while saving the changes username as there were 2 "save changes" button



## Subjective Data

Participant No.	Comments
P4	Where do I change the username!!! There is no username!!!!"

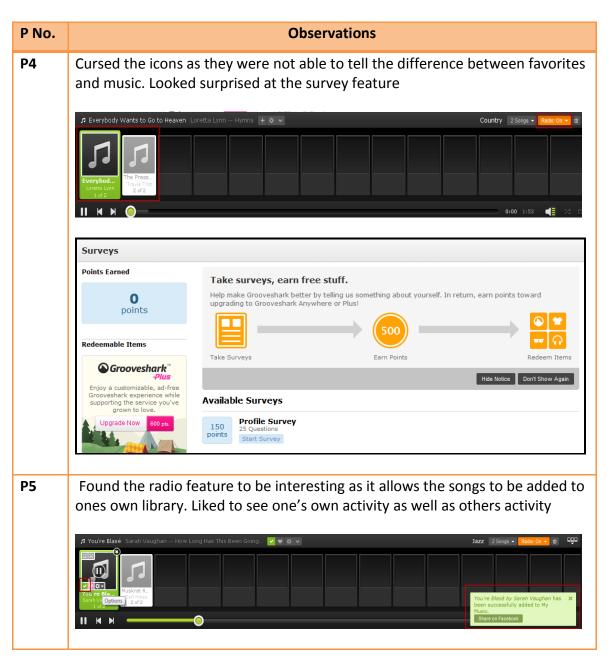
#### **Free form**

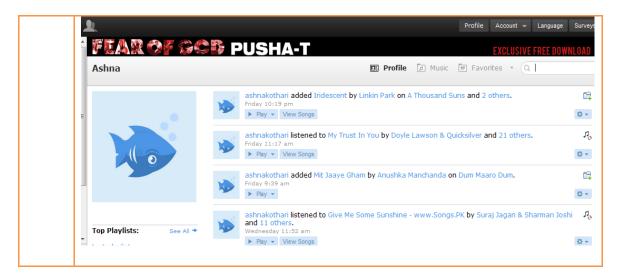
Two current users of Grooveshark were asked to use any features of Grooveshark they like in free from study. They were asked to note and rate the features they use in a five point rating scale:

Task 5 - Free form	Current user - P4	Current user – P5	
I liked the popular music function	Not Performed	Somewhat like	
I liked the radio	Not Performed	Very much like	
I liked upload	Not Performed	Somewhat like	
I liked playlists	Somewhat dislike	Somewhat dislike	
I liked icon state & changes	Very much dislike	Very much dislike	
I like music saving (favorites)	Very much dislike	Not Performed	

All the participants found the search feature to be intriguing. They used mostly the search and play feature. They did not favor other features like upload music and radio as they could find any song they want to using search. They liked the community feature. They did not like advertisements. They mostly agreed upon the icons being very small and menu items to be unclear and not much usable.







## Subjective Data

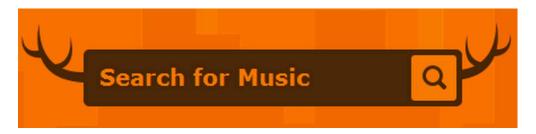
Participant No	Comments
P4	<ul> <li>"You have to play before you can add to playlist"</li> <li>"When I deleted the songs, it brings them back again"</li> <li>"Never used the radioWhy are there only two songs??"</li> <li>"Would not need upload feature as all songs I need is already up there"</li> </ul>
P5	<ul> <li>"Radio feature is better than Pandora"</li> <li>"Never uploaded music before but its cool"</li> <li>"Suggestion of popular songs is nice"</li> </ul>

#### C. Post-Interaction Survey Summary

At the end of each session, every participant completed a post-interaction survey. The responses from the five sessions are summarized in the following pages.

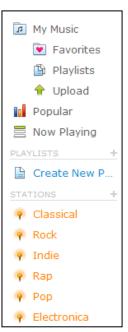
#### New Users (n=3)

Out of the three new users that participated in the study, two of them found Grooveshark to fail at fulfilling their music needs, while one found that it mostly satisfied his music needs. Possible reasons for this disdain were that one user had trouble figuring out the software and the other user said she would only use Grooveshark if it were a mobile application. The most liked feature was the ability to search for nearly any music the user desired and the ease of which it was accomplished.



Some of the least liked aspects of Grooveshark were the confusing interface buttons and ads that would take over the screen without the user intending for that to happen. Managing and editing playlists is something the participants also indicated having difficulty with. For creating Grooveshark account one participant did not see an advantage, and the other two cited community and sharing music. Disadvantages to using Grooveshark found y the participants were lack of portability, unclear functionalities, and the lack of music prediction.

Only one of the new user participants could remember a specific advertisement. Satisfaction was found with two of the three new user participants as well as a recommendation to a friend. The other new user found no satisfaction and would not recommend to a friend.



#### **Current Users (n=2)**

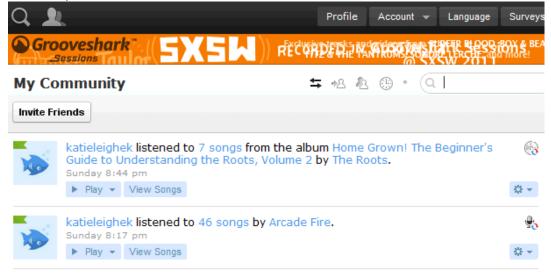
Grooveshark accomplishes most all the tasks for current users, the only drawback being the lack of mobile support for iPhones. Both current users cited the selection of songs and minimal interface requirements to listen to music as their favorite features of Grooveshark. Menu items were cited as being the least liked features of Grooveshark, as well as an inconsistent control scheme.



Only one of the current users new the advantages to creating a Grooveshark account. Neither new users had ever utilized the upload function of Grooveshark. None of the ads were remembered by either current user. Both current users would recommend Grooveshark to a friend, or

had already done so.

One participant felt that the activity feed was a little bit intrusive, but kind of cool at the same time. She said that displaying her current songs to anyone that is following her is a great way for people to find new music. But at the same time she had no idea that this was an option in Grooveshark.



#### D. Recommendations

Each recommendation was rated on impact to users.

Level of impact	Icon
Positive	
Neutral	
Negative	



<u>Overall -</u> Grooveshark provides to its users what seems to be an endless supply of songs that can be searched, organized and played. And just to sweeten the deal you can do all of these things before

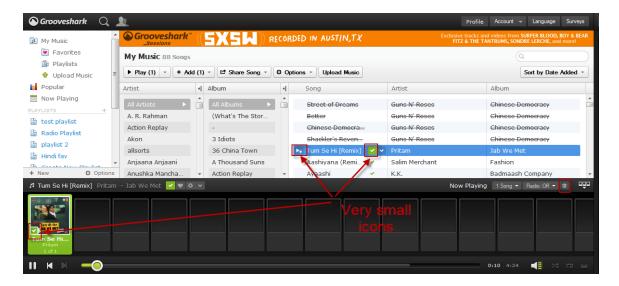
you ever become a member. To streamline and completely remove the need for registration the site allows you to login via Google account or Facebook account, as well as a very streamlined Grooveshark registration process.

Unfortunately the strengths of Grooveshark are sometimes buried under the cumbersome design of the tools, and hidden features as well as misleading or unrecognizable labels for icons. During our usability study of this website we found the following issues and features to limit the value offered by the site, confuse and annoy the users.



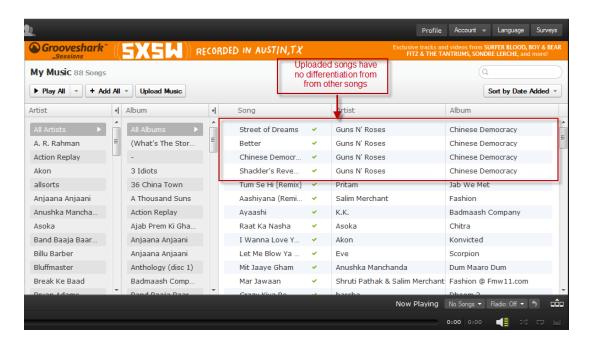
**Small Hidden Icons**: Participants spent good amount of time searching for icons to accomplish simple tasks such as play music, add music to favorites and add music to playlist mainly

because the **icons** for such basic actions are small and hidden within other objects:



**Suggestions:** The issues related to small hidden icons are global to the website and require a complete redesign. we suggest these icons be moved to top of the page, made bigger and the symbols replaced with more universally recognizable symbols.

- a. The green check mark () in the picture is displayed only after a song is played and is used for removing the song from the My Favorite. The check mark symbol () next to the song is used to add or remove songs to/from My Music and down arrow () right next to it gives more options. The two buttons are almost identical on the screen, not universally recognized and are source of confusion for most participants. We recommend Grooveshark to change the icon for these functions and move them to a more prominent position.
- **b.** Also, the (+) sign allows for adding songs to My Music without any indication that this action has taken place and display a heart symbol which allows for adding and removing songs to and from favorites. Participants were not able to figure these set of complex symbols and their relationships. We recommend these symbols to be streamlined into a popup menu and moved elsewhere in the screen.
- 2. Differentiate Uploaded Songs: All participants noted that uploaded songs get mixed with all other songs that are searched on the website: All participants had a difficulty finding the songs they had just uploaded. This can be a negative experience for the users who have paid for the songs and may deter them from using the site.

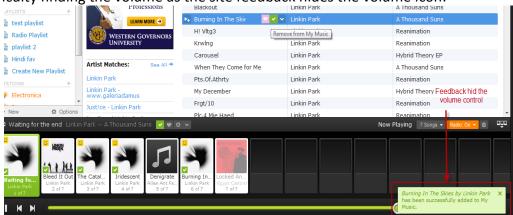


**Suggestions:** Although this issue is localized to certain screens, we believe this issue requires additional design work to come up with new screens for uploaded music. We recommend Groovshark create a separate menu or tab for uploaded

songs and keep these songs separate from other songs found through search. Allow the user more options (such as downloading) for songs uploaded by the users.

3. Radio Feature confusing to new users: Most new users found radio feature to be confusing and could not understand why there are so few songs available in the radio. Also, one participant had a

difficulty finding the volume as the site feedback hides the volume icon:

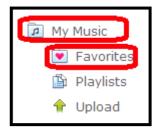


**Suggestions:** The radio issue is more of naming issue and setting the correct expectations with the user groups and can be fixed locally. It a misnomer to use the word "radio" for music suggestion feature and a different universally accepted word should be used for this feature. Popup feedback should be reviewed and designed so they do not block critical controls on the screen. The black boxes ta represent upcoming songs should instead indicate to the user that they will eventually become songs if the user keeps listening.



#### 4. Feature function consistency (feed forward):

The differences between the two menu items "My Music" and "Favorites" is hard to grasp at first. For a lot of users, the music that is in My Music will be their favorite music, negating the need for another level of organization. If another function of the Favorites feature is proposed by Grooveshark then its intention is lost to the user.



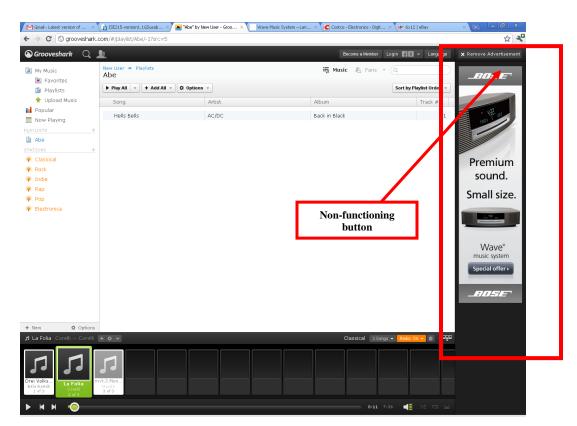
Another area of the site where feed forward can be improved is in the community section of the website. Here the user is presented with "following" and "fans" Discerning what these two items could possibly mean is a daunting task. Who does following pertain to, is it who is following the current user, or who that user is following?



When you click on "fans" it lists what

appears to be a list of every user on Grooveshark, further complicating the "Following" and "Fans" paradox.

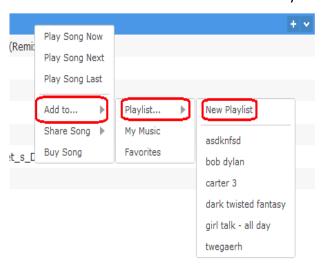
5. Annoying Advertisements: It's understandable the Grooveshark has ads on their website as a source of revenue but ads especially ads that expand over features automatically annoyed and frustrated users. Also, the button the labeled [Remove Advertisement] while active, does not remove the ads for non-subscribers:



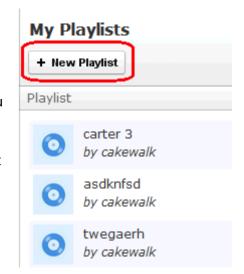
**Suggestions:** Issues with advertisements are also local issues and can be remedied with few adjustments and correct selection of the ads. We recommend use of less annoying advertisements and if the ads must expand they should not cover key features of the site. Also, the Remove Advertisement button should be removed or grayed out for non-subscribers to remove any misunderstanding on the part of the users.



6. **Confusing Playlists:** 2 out of 3 participants had difficulty creating playlists, adding and removing songs and organizing the playlists. There are elaborate ways of creating and moving songs in and out of



playlists but none of these methods are intuitive to an average user. Also, participants discovered that you have to play songs in order to add them to the playlist using the small icons that appear on the album and found this unnecessary.



**Suggestions:** The issues with playlist is a global issue and require a different approach in design to creating more user-centric playlist feature set. We recommend the site designer focus on one main method of creating and modifying playlists using a wizard that assists the user through each step.

7. Feedback- Relaying information to the user that their actions have affected the system is a very valuable aspect of every human computer interaction. Grooveshark does an exceptional job at this throughout the website. One recommendation for the Feedback is to take it one step further and add informational text in that area, as well as feedback. For example, highlighting a feature could bring up a small popup that describes the function of the feature in a short sentence. This could possibly help guide newer users through their Grooveshark interaction. Disabling this feature should be easy.



8. Navigation
Grooveshark does a
good job with removing almost all
navigation for from their website.
Everything that a user needs from
their music streaming experience is
just a few clicks away. The most
significant item, the search feature, is
the first thing users see when logging
in to their website. In addition to the
good affordances, interacting with it
requires minimal user input.



## **VI Contact Information**

This report was conducted and submitted by SJSU ISE215 ABA Consulting INC. Please contact the following with any questions or comments:

ISE215 ABA Consulting, INC 123 Easy Street San Jose, CA 95123 www.lse215aba.com/Support

(408) 123-4567



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#### **Appendix A**

### Consent Form Grooveshark.com Usability Test

Thank you for participating in Groovshark usability studies. Please read this and all other accompanying documents carefully and sign this form.

Grooveshark is a music search, sharing and purchase website. You are not required to purchase any music from this site and all subscription services tested are provided free of charge. The sole purpose of this study is to evaluate the usability of Grooveshark website.

#### In this usability test:

- You will be asked to perform certain tasks on a website and provide your feedback in written or verbal form.
- You are authorizing us to video and audio record the session and take pictures to illustrate any usability issues.
- You will be asked to fill in a survey.
- This usability test will last approximately one hour and you will be paid \$100 at the end of session.

Participation in this usability study is voluntary. All information recorded in this study are confidential and your name or any other personal information you furnish during this study are protected. The descriptions and findings may be used to help improve the web site. However, at no time will your name or any other identification be used. You can withdraw your consent to the experiment and stop participation at any time.

If you have any questions after today, please contact San Jose State Grooveshark Usability Team at 408-123-4567.

answered			
Participant's Signature		Date	-
Usability Coordinator	<u> </u>	Date	

I have read and understood the information on this form and had all of my questions

#### **Appendix B1**

# User Tasks: New Users and No Competitor Experience

Read the scenario. Once you have read and understand the scenario, indicate to the moderator that you are ready to begin. If at any time you are confused or cannot move on please notify the moderator.

#### Scenario:

You recently purchased a new computer and really want to listen to your favorite album. Unfortunately your new computer does not have the music loaded to it, and you seem to have misplaced the CD. You remember a friend telling you about the website Grooveshark.com. You know that it is a music streaming website that allows you to search, share, organize and upload music. You decide to use the website to solve your music dilemma.

#### **IMPORTANT:**

Upon the completion of each task, please notify the moderator. Once prompted by the moderator, please indicate how difficult you felt each task was using the Post Task Rating scale below

Participants Name:	<del></del>
Grooveshark Experience:	(duration)
Competitor Experience:	(website names)

#### Task 1 – Search and Play Music

- 1. Search for your favorite music.
- 2. Select several songs and play a few seconds of each.

#### STOP – Announce you have completed the task

Music search was difficult			Music search was easy
Music search did not find songs I was looking for			Music search did found songs I was looking for
Playing music I wanted was difficult			Playing music I wanted was easy
Sound quality was Horrible			Sound quality was Excellent

Additional Comments/Issues Encountered:
STOP – Wait for the test administrator to tell you to start next task,

#### Task 2 - Playlists

- 1. Create 2 playlists with songs you found in Task 1
- 2. Mark songs as favorites.
- 3. Move songs between playlists
- 4. Remove songs from the playlist
- 5. Rename and organize the playlists
- 6. Delete playlists

#### STOP – Announce you have completed the task

Creating a playlist was difficult			Creating a playlist was easy
Removing and adding songs to playlist was confusing			Removing and adding songs to playlist was intuitive
Renaming playlists was difficult			Renaming playlists was easy
It was confusing to organizing or delete playlists.			It was simple to organizing or delete playlists.

Additional Comments/Issues Encountered:	
STOP – Wait for the test administrator to tell you to start next task,	

#### Task 3 – Upload Muisc

- 1. Upload one song from DVD provided.
- 2. Upload the whole album from the DVD provided.
- 3. Upload several songs from c:\myMusic.
- 4. Create a playlist of all songs on the uploaded.
- 5. Share songs with friend using all sharing options. Note the options you used here:

\_\_\_\_\_\_

#### STOP – Announce you have completed the task

Uploading music was difficult			Uploading music was easy
I had a hard time locating the uploaded music			I found the uploaded music easily.
Creating a playlist from uploaded music difficult			Creating a playlist from uploaded music easy
Sharing music was difficult			Sharing music was easy

Additional Comments/Issues Encountered:	:
STOP – Wait for the test admini	strator to tell you to start next task,

#### Task 4 – Radio Features

- 1. Click on genre of your choice under Radio and listen to some songs
- 2. Adjust volume
- Share songs from radio using email, Twitter and Facebook.
   (Use <a href="mailto:ISE215GS@gmail.com">ISE215GS@gmail.com</a>, @ise215GS and ise215gs Facebook accounts)
- 4. Create a playlist called Radio Playlist
- 5. Add songs from the radio to this playlist

#### STOP – Announce you have completed the task

Radio feature is not usefu at all			Radio feature is very useful
I do not like the radio feature and will not use this feature			I really like the radio feature and will use it
Sharing songs is a useful feature			Sharing songs is not a useful feature
Creating playlists from radio songs was difficult			Creating playlists from radio songs was easy

Additional Cor	mments/Issues Encountered:
STC	OP – Wait for the test administrator to tell you to start next task,

#### Task 5 – Free Form

- 1. Explore the rest of the site that you have not used in this study
- 2. List fetaure below and indicate the level of like and dislike of the feature STOP Announce you have completed the task

Feature: Dislike it						Feature: Like it
Feature: Dislike						Feature: Like it
Feature: Dislike						Feature: Like it
Feature: Dislike						Feature: Like it
Additional Comments/Iss	sues End	counter	ed:			
STOP – Wait f	or the te	est admi	inistrato	or to tell	you to	start next task,

#### **Appendix B2**

## User Tasks: New Users with Competitor Site Experience

Read the scenario. Once you have read and understand the scenario, indicate to the moderator that you are ready to begin. If at any time you are confused or cannot move on please notify the moderator.

#### Scenario:

You recently purchased a new computer and really want to listen to your favorite album. Unfortunately your new computer does not have the music loaded to it, and you seem to of misplaced the CD. You remember a friend telling you about the website Grooveshark.com. You know that it is a music streaming website that allows you to search, share, organize and upload music. You decide to use the website to solve your music dilemma.

#### **IMPORTANT:**

Upon the completion of each task, please notify the moderator. Once prompted by the moderator, please indicate how difficult you felt each task was using the Post Task Rating scale below

Participants Name:	
Grooveshark Experience:	(duration)
Competitor Experience:	(website names

#### Task 1 – Search and Play Music

- 1. Search for your favorite music.
- 2. Select several songs and play a few seconds of each
- 3. Indicate other websites you use for buyinhg, listening or sharing music:
- 4. Compare your experience between Groveshar and these other websites

STOP – Announce you have completed the task

Music search was difficult			Music search was easy
Music search did not find the songs I was looking for			Music search did found the songs I was looking for
Playing music I wanted was difficult			Playing music I wanted was easy
The overall search and play features of Grooveshark are worse than the other sites I use			The overall search and play features of Grooveshark are better than the other sites I use

Additional Comments/Iss	ues Enc	ountere	ed:				
STOP – Wait for the test a	adminis	trator to	o tell yo	u to staı	rt next t	ask,	

#### Task 2 - Playlists

- 1. Create 2 playlists with songs you found in Task 1
- 2. Mark songs as favorites.
- 3. Move songs between playlists
- 4. Remove songs from the playlist
- 5. Rename and organize the playlists
- 6. Delete playlists
- 5. Compare your experience between Groveshar and the other websites you use.

#### STOP – Announce you have completed the task

Creating a playlist was difficult			Creating a playlist was easy
Removing and adding songs to playlist was confusing			Removing and adding songs to playlist was intuitive
Renaming and deleting playlists were difficult			Renaming and deleting playlists were easy
The overall playlists feature of Grooveshark is worse than the other sites I use.			The overall playlists feature of Grooveshark is better than the other sites I use.

Additiona	l Comments/Issues Encountered:	
	STOP – Wait for the test administrator to tell you to start next task,	

#### **Task 3** – Upload Muisc

- 1. Upload one song from DVD provided.
- 2. Upload the whole album from the DVD provided.
- 3. Upload several songs from c:\myMusic.
- 4. Create a playlist of all songs on the uploaded.
- 5. Share songs with friend using all sharing options. Note the options you used here:
- 6. Compare your experience between Groveshar and the other websites you use

#### STOP – Announce you have completed the task

Uploading music was difficult		Uploading music was easy
I had a hard time locating the uploaded music		I found the uploaded music easily.
Creating a playlist from uploaded music difficult		Creating a playlist from uploaded music easy
Sharing music was difficult		Sharing music was easy
Uploading and sharing music is much more difficult on Grooveshark		Uploading and sharing music is much easier on Grooveshark

Additional Comments/Issues Encountered:	
STOP – Wait for the test administrator to tell you to start next tas	sk,

#### **Task 4** – Purchase and Download Songs

- 1. Login to the site with user ID and password provided.
- 2. Find 3 songs you want to purchase.
- 3. Click Buy to buy the song (you will not be charged for these songs.)
- 4. Compare the experience to buying from the other websites you use.
- Share songs using email, Twitter and Facebook.
   (Use <a href="ISE215GS@gmail.com">ISE215GS@gmail.com</a>, @ise215GS and ise215gs Facebook accounts)
- 6. Create a playlist fro, purchased songs and call it FREESONGS.

#### STOP – Announce you have completed the task

Purchasing and downloading songs was difficult			Purchasing and downloading songs was easy
Download of purchased songs was not intuitive			Download of purchased songs was intuitive
Sharing purchased songs was difficult			Sharing purchased songs was easy
Purchasing songs from the competitor site is better			Purchasing songs from Grooveshark site is better

Additiona	Il Comments/Issues Encountered:
	STOP – Wait for the test administrator to tell you to start next task,

#### Task 5 – Free Form

- 1. Explore the features you have not used in this study
- 2. List fetaure these features below and indicate the level of like and dislike of the feature STOP Announce you have completed the task

Feature: Dislike it						Feature: Like it
Feature: Dislike it						Feature: Like it
Feature: Dislike it						Feature: Like it
Feature: Dislike it						Feature: Like it
Additional Comments/Iss	Additional Comments/Issues Encountered:					
STOP – Wait for the test administrator to tell you to start next task,						

# APPENDIX C. NEW USER POST-INTERACTION SURVEY

New User Post-Interaction	Ratings/Comments:
Survey:	
Does Grooveshark fulfill all of your music needs?	
What did you like most about your Grooveshark experience today?	
What did you like least about your Grooveshark experience today?	
What are the advantages of creating a Grooveshark account?	
What advantages do you see using Grooveshark for your music needs?	
What disadvantages do you see using Grooveshark for your music needs?	
Can you remember a specific advertisement that you saw on the website?	
Did you notice the pop up notification after completing a task? Do you see any value in this feature?	
How satisfied were you with your Grooveshark experience today?	
Would you recommend Grooveshark to a friend?	

#### **Appendix D1**

# User Tasks: Current Users and No Competitor Site Experience

Read the scenario. Once you have read and understand the scenario, indicate to the moderator that you are ready to begin. If at any time you are confused or cannot move on please notify the moderator.

#### Scenario:

Your friend has been using Grooveshark for a little over a month. He is not very good with computers or technology and has only figured out the basics of the website. He has been bugging you to show him the more advanced features of the website, he also wants to know how difficult each task is. You finally have a free moment and decide to show him everything you know.

#### **IMPORTANT:**

Upon the completion of each task, please notify the moderator. Once prompted by the moderator, please indicate how difficult you felt each task was using the Post Task rating scale below

Participants Name:	
Grooveshark Experience:	(duration)
Competitor Experience:	(website names)

#### **Task 1** – Account Settings

- 1. Login to you account using your own account
- 2. Modify your profile to hide your activity from other members.
- 3. Invite friends to join your community
- 4. Make a playlist of the songs your friends are listening to

#### STOP – Announce you have completed the task

Modifying profile was difficult		Modify profile was easy
Inviting friends was difficult		Inviting friends was easy
Inviting a friend is not useful		Inviting a friend is useful.
Making a playlist of the songs your friends are listening to was difficult		Making a playlist of the songs your friends are listening to was easy
Overall performing the tasks was not intuitive		Overall performing the tasks was intuitive

Additional Comments/Issues Encountered:								
STOP – Wait for the test administrator to tell you to start next task,								

#### Task 2 – Sharing Songs

- 1. Find the most recent song by your favorite artist.
- 2. Share this song with a friend.
- 3. Share this song with the community

### $\label{eq:STOP-Announce} \textbf{STOP-Announce} \ \ \textbf{you} \ \ \textbf{have} \ \ \textbf{completed} \ \ \textbf{the} \ \ \textbf{task}$

Finding the most recent song by artist is not useful at all.			Finding the most recent song by artist is very useful.
Sharing this song with a friend was difficult.			Sharing this song with a friend was easy.
Sharing the songs with the community was difficult.			Sharing this song with the community was easy.
I dislike the song sharing feature			I like the song sharing features

Additional	Comments/Issues Encountered:
	STOP – Wait for the test administrator to tell you to start next task,

#### Task 3 – Purchase music

- 1. Login into an account using user name and password provided (enables subscription)
- 2. Remove all ads from the interface
- 3. Buy 3 songs of your choice and download.
- 4. Download songs to your MP3 player
- 5. Share songs with your friends.

#### STOP – Announce you have completed the task

Logging into the account was difficult.		Logging into the account was easy.
I dislike removing ads feature		I like removing ads feature
Buying 3 songs and downloading them was difficult		Buying 3 songs and downloading them was easy
Downloading songs to my MP3 player was confusing		Downloading songs to my MP3 player was intuitive
Sharing songs with my friends is not a useful feature		Sharing songs with my friends is a useful feature

Additional	Comments/Issues Encountered:
	STOP – Wait for the test administrator to tell you to start next task,

#### Task 4 – Organize your music

- 1. Change user name and password to user name and password provided in the task sheet.
- 2. Follow the users provided in the task sheet
- 3. Subscribe to a friends' playlist from your community

#### STOP – Announce you have completed the task

Changing user name and password was difficult	Changing user name and password was easy
Changing account notifications to stop all notifications was difficult	Changing account notifications to stop all notifications was easy
Following users was difficult	Following users was easy
Subscribing to a friends' playlist was difficult	Subscribing to a friends' playlist was easy

Additional Co	mments/Issues Encountered:
STO	OP – Wait for the test administrator to tell you to start next task,

#### Task 5 – Free Form

- 1. Spend 5 minutes showing off your favorite features of Grooveshark.
- 2. Show what features you use the most, and which you use the least.
- 3. Fill out survey

#### STOP – Announce you have completed the task

Feature:	Feature:
Dislike it	Like it
Feature:	Feature:
Dislike it	Like it
Feature:	Feature:
Dislike it	Like it
Feature:	Feature:
Dislike it	Like it

Additional Co	mments/Issues Encountered:
ST	OP – Wait for the test administrator to tell you to start next task,

### **Appendix D2**

# User Tasks: Current Users and Competitor Site Experience

Read the scenario. Once you have read and understand the scenario, indicate to the moderator that you are ready to begin. If at any time you are confused or cannot move on please notify the moderator.

#### Scenario:

Your friend has been using Grooveshark for a little over a month. He is not very good with computers or technology and has only figured out the basics of the website. He has been bugging you to show him the more advanced features of the **website**; he also wants to know how difficult each task is. You finally have a free moment and decide to show him everything you know.

#### **IMPORTANT:**

Upon the completion of each task, please notify the moderator. Once prompted by the moderator, please indicate how difficult you felt each task was using the Post Task rating scale below

Participants Name:	
Grooveshark Experience:	(duration)
Competitor Experience:	(website names)

#### **Task 1 – Account Settings**

- 1. Modify your account to hide your activity from current users
- 2. Invite friends to join your community
- 3. Make a playlist of the songs your friends are listening to.
- 4. Indicate other websites you use for buying, listening or sharing music:
- 5. Compare ease of account access/modifications to the competitor website you have used.
- 6. Compare Community features with the competitor website you have used.

#### STOP – Announce you have completed the task

Modifying your account to hide your activity was difficult			Modifying your account to hide your activity was easy
Inviting a friend was difficult			Inviting a friend was easy.
Inviting friends was not useful			Inviting friends was useful
Making a playlist of songs your friends are listening to was difficult			Making a playlist of songs your friends are listening to was easy

Additional Comments/Issues Encountered:	
STOP – Wait for the test administrator to tell you to start next task,	

#### Task 2 – Music Sharing

- 1. Find the most recent song by your favorite artist.
  - 2. Share this song with the community
  - 3. Assuming that a song is not playing correctly, complain about this song to grooveshark
  - 4. Compare song sharing with the competitor website you have used.

### STOP – Announce you have completed the task

Finding the most recent song by my favorite artist was difficult.		Finding the most recent song by my favorite artist was easy.
Sharing this song with the community was difficult.		Sharing this song with the community was easy.
Complaining about the songs was difficult		Complaining about the song was easy

Additiona	al Comments/Issu	ies Encounter	red:			
	STOP – Wait for	r the test adm	ninistrator to	o tell you to s	tart next task	ζ,

#### Task 3 – Buy Music

- 1. Login into an account using user name and password provided (enables subscription)
- 2. Remove all ads from the interface
- 3. Buy 3 songs of your choice and download.
- 4. Download songs to your MP3 player
- 5. Share songs with your friends.
- 6. Compare song purchase experience to the competitor website you have used.

#### STOP – Announce you have completed the task

Logging into the account with the user name/password provided was difficult.		Logging into the account with the user name/password provided was easy.
Removing all ads from the interface was difficult		Removing all the ads from the interface was easy
Buying 3 songs and downloading them was difficult		Buying 3 songs and downloading them was easy
Downloading songs to your MP3 player was difficult		Downloading songs to your MP3 player was easy
Sharing songs with friends was difficult		Sharing songs with friends was easy

Additional	Comments/Issues Encountered:
	STOP – Wait for the test administrator to tell you to start next task,

#### Task 4 – Organize your music

- 1. Log into your personal account
- 2. Change user name and password to user name and password provided in the task sheet.
- 3. Follow the users provided in the task sheet
- 4. Subscribe to a friends' playlist from your community
- 5. Compare ease of use of these features to the competitor website you have used.

#### STOP – Announce you have completed the task

Changing user name and password was difficult			Changing user name and password was easy
Following users was difficult			Following users was easy
Subscribing to your friends playlist was difficult			Subscribing to your friends playlist was easy

Additional Comment	s/Issues End	counter	ed:					
STOP – W	ait for the to	est adm	inistrato	or to tell	you to	start next t	task,	

#### Task 5 – Free Form

- 1. Spend 5 minutes showing off your favorite features of Grooveshark.
- 2. Show what features you use the most, and which you use the least.
- 3. Compare these features to the competitor website that you currently use.
- 4. Fill out survey

#### STOP – Announce you have completed the task

Feature:	Feature:
Dislike it	Like it
Feature:	Feature:
Dislike	Like it
Feature:	Feature:
Dislike	Like it
Feature:	Feature:
Dislike	Like it
Additional Comments/Issues Encounter	ed:

Additional	Comments/Issues Encountered:
	STOP – Wait for the test administrator to tell you to start next task,

# POST-INTERACTION SURVEY (CURRENT USERS)

<b>Current User Post-Interaction</b>	Ratings/Comments:
Survey:	
Does Grooveshark fulfill all of your music needs?	
What do you like the most and the least about Grooveshark?	
How do you sign into Grooveshark? le. Via Facebook, Google account, or Grooveshark account.	
How many songs have you purchased through Grooveshark?	
What is the difference between "My Music" and "Favorites"	
Was the signup process short and straightforward?	
Would you use a feature of the website that would recommend music to you?	
How many playlists do you have?	
Have you changed your profile picture before?	
What are the advantages of subscribing to Grooveshark? Have you purchased a subscription?	
Would you even consider paying money for a music streaming website?	
What features do you desire most in a subscription based music streaming website?	
How would you rate your involvement in the Grooveshark community?	

How many people are you following on Grooveshark? How many people are following you?	
How many people have you invited to Grooveshark? Were you initially invited to Grooveshark?	
Have you ever used the Radio feature? Have you ever added songs from the radio to a playlist? Did you know you could do this?	
Did you notice the pop up notification after completing a task? Do you see any value in this feature?	
Can you remember a specific advertisement that you saw on the website from the session?	
How would you rate the current ease of navigation in Grooveshark?	
Did you know you can see what music your friends are listening, What do you think of this feature?	
How satisfied are you with your Grooveshark experience thus far?	
Would you recommend Grooveshark to a friend?	

# **APPENDIX F1**

#### **New User Data Log**

	1		
Participant ID	Α	В	С
Task 1			
Start of Task			
End ofTask			
Success (Y/N)			
Search for music			
Play music			
Explicit Frustration			
Comments			
Explicit Delight			
Comments			
Post Task Rating (Difficulty)			
Task 2			
Start of Task	0:00:12		
End ofTask	0:01:08		
Success (Y/N)			
Create 2 playlists with songs you found in Task 1			
Mark songs as favorites			
Move songs between playIsits			
Remove songs from the playlist			
Rename and organize the playlsits			

Delete playlists		
Explicit Frustration		
Comments		
Explicit Delight		
Comments		
Post Task Rating (Difficulty)		
Task 3		
Start of Task	0:00:12	
End ofTask	0:01:08	
Success (Y/N)		
Upload one song from the DVD provided		
,		
Upload the whole album from the DVD		
,		
upload several songs from C:\mymusic		
Create a playlist of all the songs you just uploade		
Share songs with a friend using all of the sharing options.		
MODNOTE: what options did they use?		
Explicit Frustration		
Comments		
Explicit Delight		
Comments		
Post Task Rating (Difficulty)		
Task 4		
Start of Task	0:00:12	
End ofTask	0:01:08	
Success (Y/N)		

Listen to Radio		
Adjust volume		
Share songs from radio using email, Twitter		
and Facebook		
Create a playlist called "Radio" playlist		
Add songs from the radio to this playlist		
Explicit Frustration		
Comments		
Explicit Delight		
Comments		
Post Task Rating (Difficulty)		
Task 5		
Start of Task	0:00:12	
End ofTask	0:01:08	
Success (Y/N)		
Explicit Frustration		
Comments		
Explicit Delight		
Comments		
Post Task Rating (Difficulty)		

#### **Current User Data Log**

Participant ID	Α	В	С
Task 1			
Start of Task			
End ofTask			
Success (Y/N)			
Login to your account using your own account			
Modify your profile to ide your activity from other members			
Invite friends to join your community			
Make a playlist of the songs your friends are listening to			
Explicit Frustration			
Comments			
Explicit Delight  Comments			
Comments			
Post Task Rating (Difficulty)			
rost rask nating (Difficulty)			
Task 2			
Start of Task			
End ofTask			
Success (Y/N)			
Find the most recent song by your favorite artist			

Share this song with a friend		
Share this song with the community		
Explicit Frustration		
Comments		
Explicit Delight		
Comments		
Post Task Rating (Difficulty)		
Task 3		
<u>143K 3</u>		
Start of Task		
End ofTask		
Success (Y/N)		
Login to an account using the user name		
and PW provided		
Remove all ads from the interface		
Buy 3 songs of your choice and download		
Download consets your MP2 player		
Download songs to your MP3 player		
Share songs with your friends		
Explicit Frustration		
Comments		
Explicit Delight		
Comments		
Post Task Rating (Difficulty)		
Tools 4		
Task 4		
Start of Task		
End ofTask		
Success (Y/N)		

		1
Character and DIM to the		
Change user name and PW to the user		
name and PW provided in the task sheet		
Follow the users provided in the task sheet		
Subscribe to a friends' playIsit from your		
community		
Explicit Frustration		
Comments		
Explicit Delight		
Comments		
Post Task Rating		
1 OSt Tusk Ruting		
Task 5		
Start of Task		
End ofTask		
Success (Y/N)		
Explicit Frustration		
Comments		
Explicit Delight		
Comments		
Post Task Rating		
	<u> </u>	

# **APPENDIX E**

#### **Session introduction and Product description**

Thank you for participating in our study. You will be interacting with a website called grooveshark.com. Grooveshark is an online music website where you can search music, stream songs and upload music. You can also share music with other grooveshark users or by posting links on facebook, mySpace, stumbleUpon etc.

Today, you will perform a series of tasks using grooveshark.com. Each task will be followed by a series of questionnaire where you will be asked questions about the ease and satisfaction of completing that task, general preferences etc. After the completion of all tasks, you will be given a final set of questions where you will be asked to rate your overall experience with Grooveshark.

Do you have any questions?

# **APPENDIX E**

#### **Study Checklist**

Before Each Session:	
Printed instructions for	
participants	
Printed schedules	
Microphone	
Computer and its accessories	
Printed task list	
Printed consent forms	
Envelopes with dollar bills	
Two video cameras	
(Including Positioning)	
Camtasia running on PC	

After Each Session:	
Clear browser cache, cookies, browsing	
data after each session	
Check if Internet is working properly	
Turn on the cameras and check if	
microphones are working properly after	
each session	
Test if Camtasia software is working	
properly	
Check for Virus scan settings and any other	
updates that may start during the session	

### **APPENDIX G**

# **Recruitment Ad**

<u>Listen to music on your computer??</u>



Read below to see if you qualify to participate in a \$\$paid\$\$ research study!!

We are looking for people who listen to online music or radio stations for a consumer research study. The session will last approximately 60 minutes and participants will be paid \$100 in cash. Sessions will be held April 25-29 from 9:00 am to 5:00 pm in Engineering 486 at San Jose State University.

To participate in the study you must be:

- 1. 18 years or older
- 2. Regular computer & internet user
- 3. Love listening to music!

If you are interested in participating, please call (408)-123-4567 or email us at <a href="mailto:ResearchStudy@215.com">ResearchStudy@215.com</a>

| \$100 research study  |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| (408)-123-4567        | (408)-123-4567        | (408)-123-4567        | (408)-123-4567        | (408)-123-4567        | (408)-123-4567        | (408)-123-4567        | (408)-123-4567        |
| researchstudy@215.com |

# **APPENDIX E**

#### **Participant Screener**

Participant Information			
Name:			
Age:			
Occupation:			
Email:			
Phone Number:			
Are you on the internet around 10 hours a week?	2YES 2NO		
List 5 things you use the internet for:	1. 2. 3. 4. 5.		
What was the last thing you did on the internet?			
Do you listen to music?	?YES ?NO		
What is your preferred mode of listening to music? (e.g. streaming, ipod, car radio, off of your phone etc.)			
Do you use any websites to listen to music?	PYES PNO		
What was the last website you used to listen to music?			
What are your 3 favorite interactions with music streaming websites?	1. 2. 3.		

# Appendix G.

# <u>Schedule</u>

Monday, April 25	Participant Name
9:00am	
10:00 am	
11:00am	
12:00pm	
Break	
2:00pm	
3:00pm	
4:00pm	

Tuesday, April 26	Participant Name
9:00am	
10:00am	
11:00am	
12:00pm	
Break	
2:00pm	
3:00pm	
4:00pm	