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User Research

In order to integrate a social aspect to Grooveshark by adding a chat feature to the website, we first determined the needs of our users. Two separate focus groups were conducted: one with three expert users of Grooveshark (people that use Grooveshark as their primary streaming service four or more days a week) and one with three potential Grooveshark users (people that use a music streaming service four or more days a week). Both groups of participants regularly use a chat feature on another form of social media.

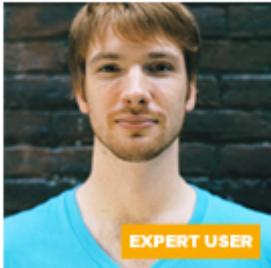
After the discussion with the expert focus group, it was apparent that Grooveshark's Broadcast feature was a huge draw to use the music streaming service and a reason these participants chose to use Grooveshark over other services. These participants also stated that they liked the amount of control they have over what they listen to on Grooveshark. When asked about a chat application in Grooveshark, participants agreed that they would like to use chat to share music quickly and easily with friends and groups of friends. It was stated that a huge draw of this chat would be eliminating the extra step of copying a link to a song from Grooveshark and then pasting it on Facebook messenger to share with a friend. Participants said they like other social media chat applications that are unobtrusive to the interface and allow them to explore while chatting.

Participants in the potential user group said they like the recommendations, unobtrusive nature and collaborative playlist features of other music streaming services. When asked about a chat feature being integrated into these services, participants said they would likely use the feature to share songs with friends or chat in a group. Participants also stated they would like to be able to see what their friends are listening to and share a quick clip of a song in chat.

Based on the user research summarized above, we were able to identify the core user needs for our chat application: being able to easily share music with friends and groups, chat with friends and groups, ease of use when chatting in a Broadcast, and making sure chatting was not intrusive to the interface. These themes were repeated and emphasized by participants in both focus groups.

Expert Questions	Novice Questions
What features do you use most often on Grooveshark?	What music streaming applications do you use?
How many people do you follow on Grooveshark?	Does the application you use have a social aspect to it? If so, what do you like about it?
How often do you use the "Broadcast" feature?	Assume there is a music streaming site and all your friends are active on it. How would you want to interact with them?
Why do you use Grooveshark over other streaming services?	What would you use a chat feature to talk about?
In what situations would you use a chat feature on Grooveshark?	How often do you use a chat feature on a social media sites?
How often do you use a chat feature on other social media sites?	What features of those chat applications do you like? Dislike?
What features of these chat applications do you like? Dislike?	Out of all the features listed, what is most important to you and why?
If a chat feature were implemented in Grooveshark, what features would you like to see?	If a chat feature were implemented in the music streaming service you use, what features would you like to see?

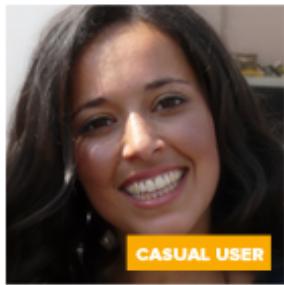
User Personas



Ed Miller. Age 20.

"I want to be able to instantly communicate with artists, broadcasters, and people who are listening to the same music that I am."

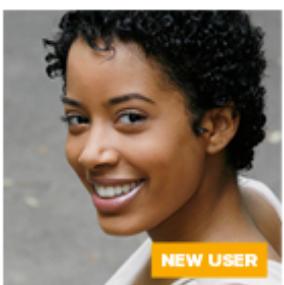
Ed is a big fan of combining social networking and music. He loves to constantly share his music interests with others. With Grooveshark, he follows a lot of people and listens to many broadcasts daily. He also does his own broadcasts every now and then. Right now, Ed feels that there are not enough social capabilities on Grooveshark. He would really like to directly communicate with everyone on a broadcast station, especially the broadcaster. Being able to directly communicate with people who share his same musical interests while listening to the music he loves is really important to him. It's a new way for him to find more people to follow and share his love of music with.. Ed also wishes that he could talk to new artists whenever they upload new music to Grooveshark. Being able to directly communicate with them would help Ed create a better connection between the artist and their music.



Rosa Sanchez. Age 19.

"I want to be able to talk to and share music with many friends at once."

Rosa mainly uses Grooveshark for when she is studying, working on homework, or needs to create a playlist for when people come over and hang out. She doesn't follow many people on Grooveshark, only a few close friends, and rarely uses the broadcast feature. A few times she has been listening to Grooveshark and found a song she had never heard before but really liked. She tried to share it with her friends, but going through Facebook or sending the link through some other social networking site was always a hassle. She would also have to send each of her friends the song individually unless she created a group on Facebook. What Rosa would really like is to create a group for all of her close friends that she follows on Grooveshark and be able to share the song she found with all of them at once and then talk about it in a chat, all inside of the Grooveshark website.



Aimee Stevens. Age 18.

"I don't want chatting to get in the way of me just trying to listen to music"

Aimee just heard about Grooveshark upon coming to UF, so she decided to check it out. She primarily uses Spotify, but even with that she isn't crazy about how it tries to be a social network as well. She doesn't really want to bother with following people, or being connected through Facebook and having other people see what she is listening to. She also doesn't like when people on Facebook try to chat with her while she is listening to music and trying to study, so she usually just closes it out. Ideally, with a chat feature, Aimee doesn't want to see or know about it unless she actually wants it there. She would prefer it to be toggled away or all off to the side.

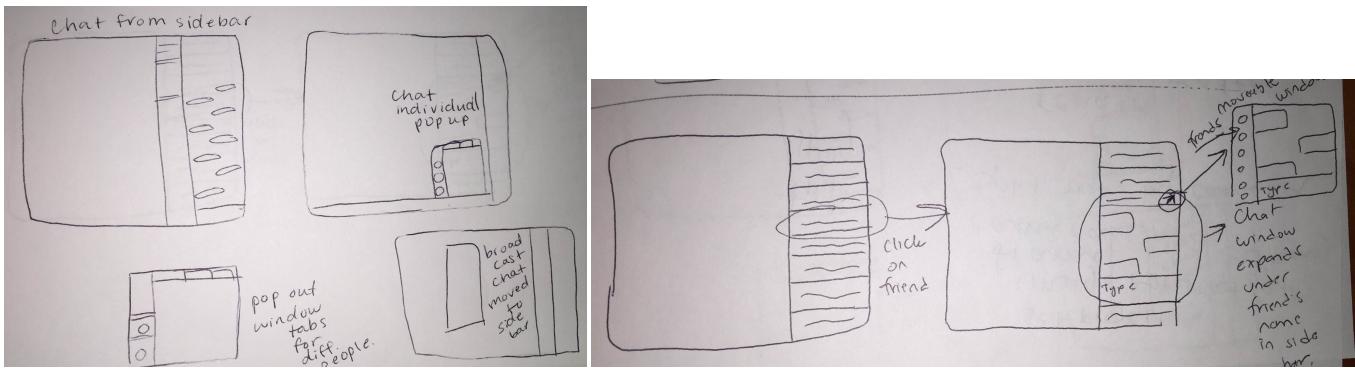
Based on our user needs, we were able to create three personas that embodied characteristics of our target users. All three personas are people who use music-streaming services regularly (Grooveshark or others) and are familiar with chat applications on other social media sites. We can appeal to all three personas user needs through a chat application that addresses the ability to chat with friends and groups within Grooveshark, being able to easily share music with friends and groups, ease of use when chatting in a Broadcast, and making sure chatting is not intrusive to the interface.

Brainstorming Process

User Needs:

- Easily share music with friends and groups.
- Chat with friends and groups.
- Ease of use when chatting in a Broadcast.
- Chatting should not be intrusive to the interface.

Idea	User need addressed
Button next to song that makes an attachment automatically and brings up chat	-Easily share music with friends and groups -Chat with friends and groups
Doesn't pop up automatically when you get a message	-Chatting should not be intrusive to the interface
Notification to alert when you have a message	-Chatting should not be intrusive to the interface
Send message by clicking on friend – default is chatting not user profile	-Chat with friends and groups
Tab for artists vs. friends vs. broadcasters	-Chat with friends and groups
Drag a song over a name to share	-Easily share music with friends and groups
Chat window can be popped out and moved anywhere	-Chatting should not be intrusive to the interface
Ability to make groups from sidebar	-Chat with friends and groups
Drag a name over another name to make a group	-Chat with friends and groups
Button to make groups underneath group tab	-Chat with friends and groups
Search bar up already at bottom of sidebar	-Chatting should not be intrusive to the interface
Move broadcast chat to side bar	-Ease of use when chatting in broadcast
Tabs for different people within popped out chat window	-Chat with friends and groups
When you click a name chat automatically expands from sidebar	-Chat with friends and groups
Website tracks when you are listening to broadcast- shows up in sidebar	-Ease of use when chatting in broadcast
Drawer is larger when it expands from sidebar	-Chat with friends and groups
Names push up and down to reveal chat within sidebar	-Chatting should not be intrusive to the interface
Ability to go offline and hide chat	-Chatting should not be intrusive to the interface



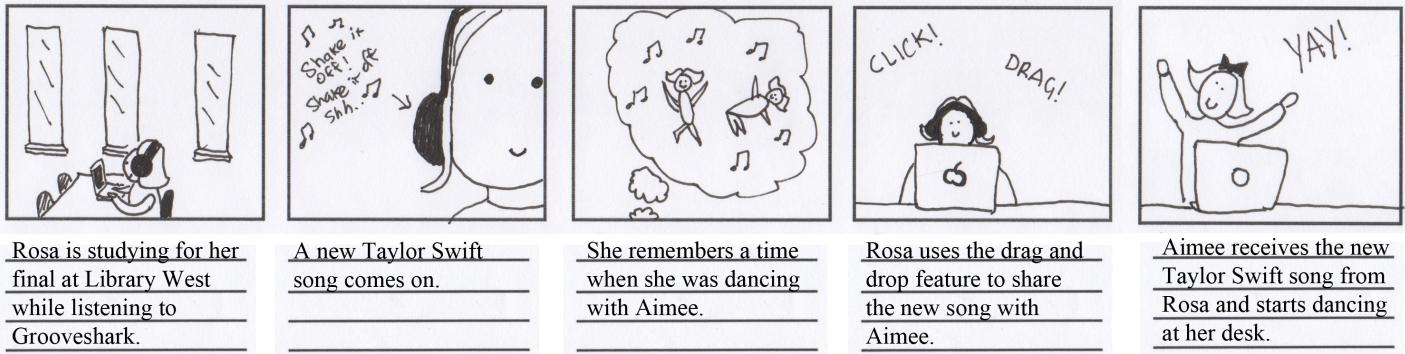
Our brainstorming process helped us connect our user needs with features to include in our chat. We were able to narrow it down to a few key elements the chat should have: ability to chat with friends and groups, ability to share music quickly and easily (through drag and drop or share button), ability to create groups of friends, pop out chat, and broadcast chat integrated into the sidebar.

By brainstorming a good amount of ideas individually and as a group and talking about the breakdowns and opportunities of each idea, we were able to merge and refine our ideas through the use of affinity diagramming. Through this process we were also able to determine the “holes” in our design and discard ideas that did not address user needs. We were also able to go beyond what our user’s said in the focus groups and anticipate their wants and needs.

Scenarios and Storyboards

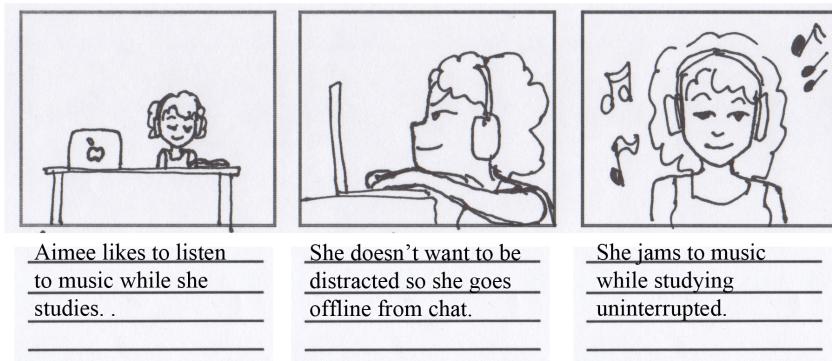
Scenario and Storyboard #1: Rosa drags and drops a song in chat to share with friend.

Rosa uses Grooveshark for occasional background music and sharing songs with friends. One day she was listening to music and studying, when she suddenly hears a Taylor Swift song she really likes. Rosa wanted to share the song with her friend Aimee. Usually, Rosa would copy/paste a link to a song and go to Facebook Messenger to send her friends songs. With Grooveshark Chat, Rosa dragged the song to her friend Aimee in the sidebar and quickly sent her a message. Rosa didn't have to go through Facebook anymore; creating a distraction-free experience for while she's studying.



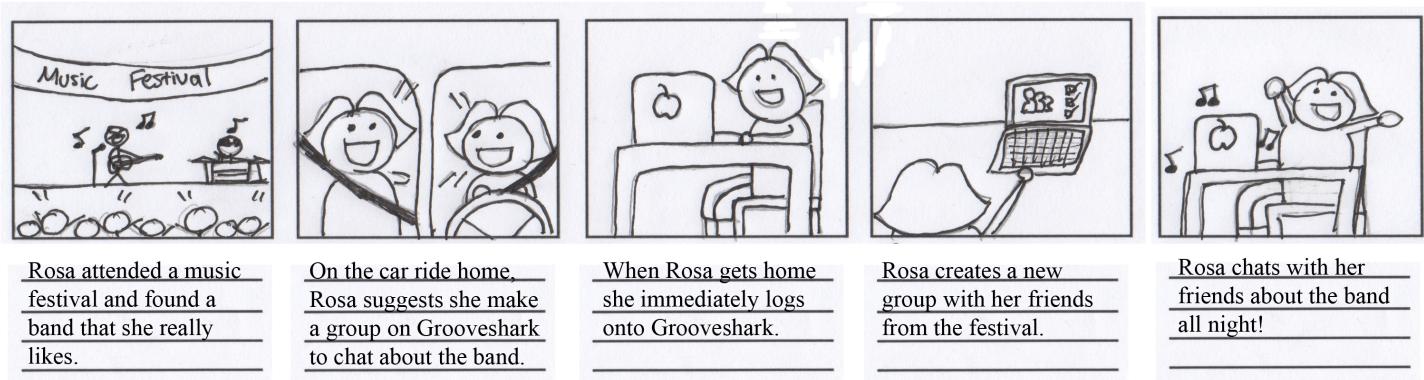
Scenario and Storyboard #2: Aimee doesn't want to chat to interfere with studying.

Aimee logs into Grooveshark so that she can create a playlist to listen to while she studies. As soon as she logs in, she sees some friends online, but she doesn't want them to distract her. She navigates to the side bar and clicks a button to turn chat off and collapse the side bar. Aimee creates her playlist and studies uninterrupted.



Scenario and Storyboard #3: Rosa wants to create a group to share music with.

After attending a music festival, Rosa and her friends discovered a band that they all really liked. On their way back home, they kept talking about the band and they all agree that they will look up the band on Grooveshark when they get back. Rosa suggests to make a group on Grooveshark so that they can all talk about the band more after they listen. Rosa gets back home and logs into Grooveshark. She creates a new group from her side bar and checks off all of her friend's names that went with her to the music festival to add them to the group. Now Rosa can talk to all of her friends and share music with them at once.



Rosa attended a music festival and found a band that she really likes.

On the car ride home, Rosa suggests she make a group on Grooveshark to chat about the band.

When Rosa gets home she immediately logs onto Grooveshark.

Rosa creates a new group with her friends from the festival.

Rosa chats with her friends about the band all night!

Scenario and Storyboard #4: Ed wants to browse tumblr while participating in a broadcast chat.

Ed loves to talk about and share music with his friends and family; In fact, Ed will talk about music with anyone who will listen. He is an avid user of the broadcast feature on Grooveshark and loves chatting within the broadcast with other users who are listening. However, Ed doesn't like how he has to be confined to the Grooveshark website while chatting; He wishes he could listen to the broadcast, chat, and browse Tumblr at the same time. While he is on Grooveshark, he decides to poke around the new chat feature and notices a new pop out feature in chat. He drags the chat window to one side of the screen and tumblr to the other. Ed continues browsing Tumblr while chatting with other users about the current song that is playing.



Ed loves to talk about music. In fact, he will talk about music with anyone who will listen.

Ed is an avid user of the Broadcast feature on Grooveshark.

However, Ed wishes he could chat, listen to a broadcast and browse tumblr at the same time.

Ed uses the pop out feature of chat so he can switch between tumblr and chat easily.

He spends all day chatting about music and browsing the web.

Scenario and Storyboard #5: Ed wants to send a private message to a broadcaster.

Ed listens to broadcasts almost daily. He thinks that it's a good way to discover new music and interact with the community. The broadcasters that he follows are sometimes friends, other times they are complete strangers. Ed is listening to a broadcast and he wants to ask the broadcaster about his favorite artists. Ed proceeds to follow the broadcaster on the broadcast page and in the hover drop down menu he sends the broadcaster a friendly message.



Ed listens to broadcasts daily.

He thinks it is a great way to discover new music and interact with the community.

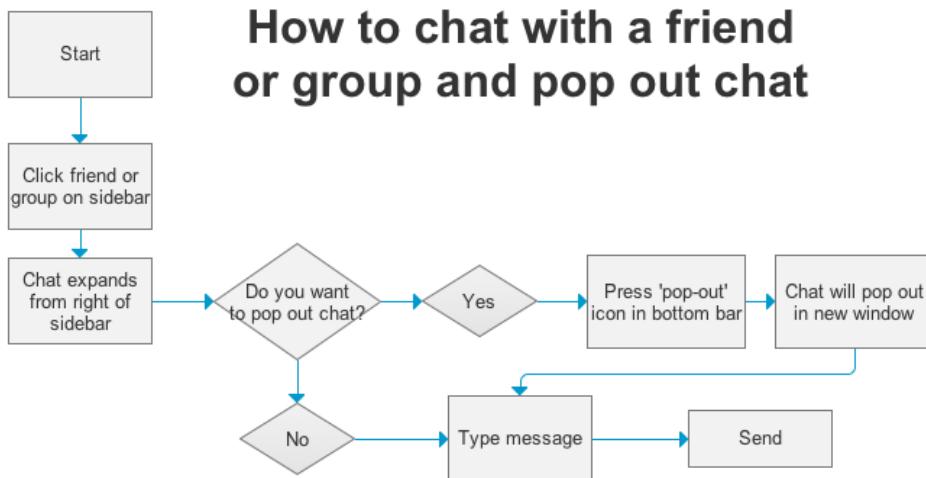
One day, Ed wants to ask a broadcaster about his favorite artists.

Ed sends a friendly message to connect with him.

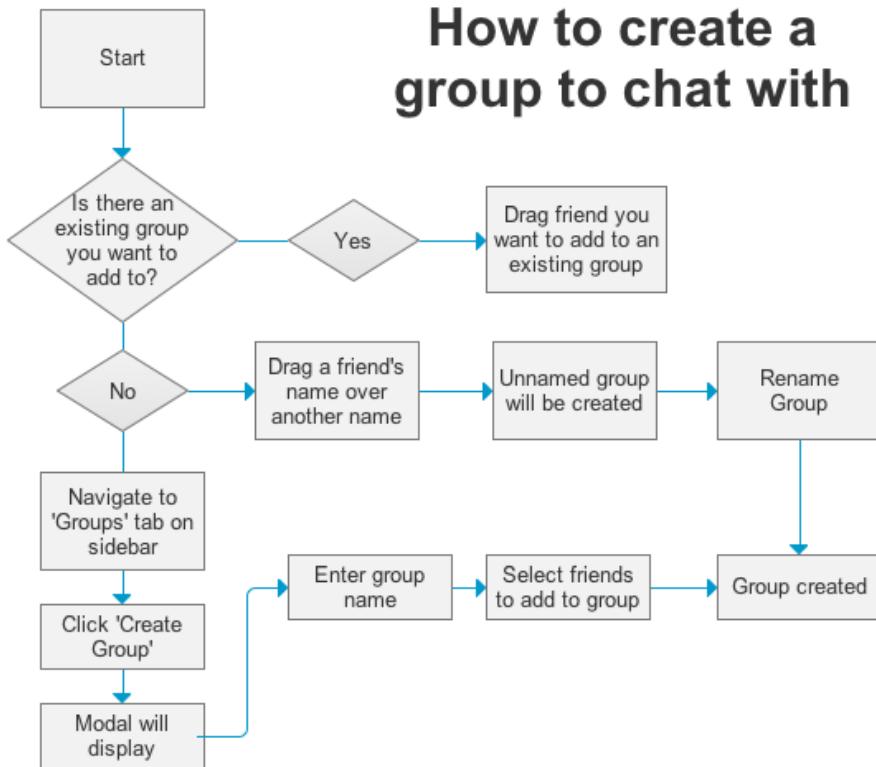
Our scenarios and storyboards highlight key features of our application: the user is able to chat with friends and groups, the user can share music quickly and easily with friends or groups, the chat feature is unobtrusive to the interface, the user can create groups of friends to share music with, and the user can pop out chat to enable browsing other websites while chatting.

We chose to write scenarios that illustrated the key functionality of our chat feature. We determined these key features by weighing how well they addressed our user needs. Our scenarios address the specific problems of our personas, which are representative of our target user base. Our scenarios provide solutions to user's problems through the use of a chat feature on Grooveshark. The storyboards give context to the user's problems and show how the chat feature could address these user's needs.

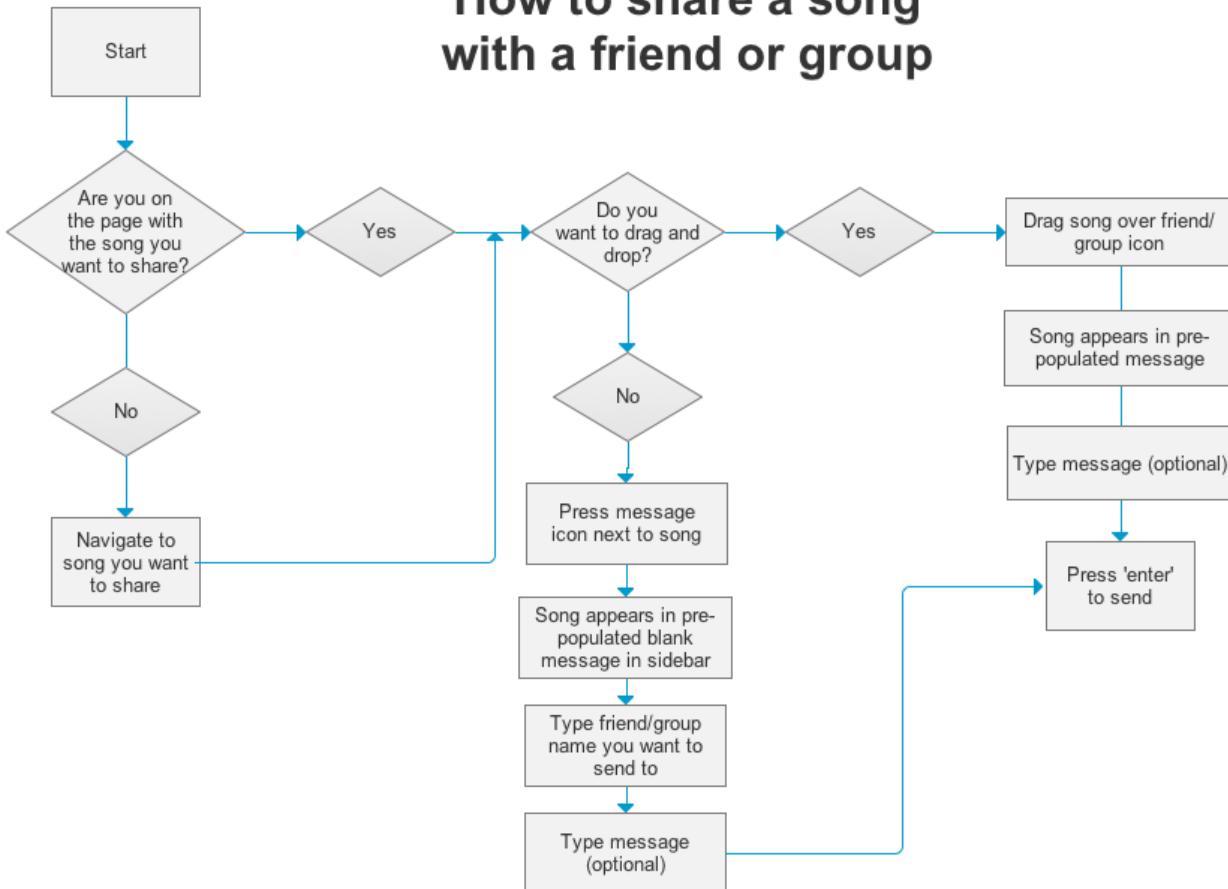
Iteration #1: Task Flows and Wireframes



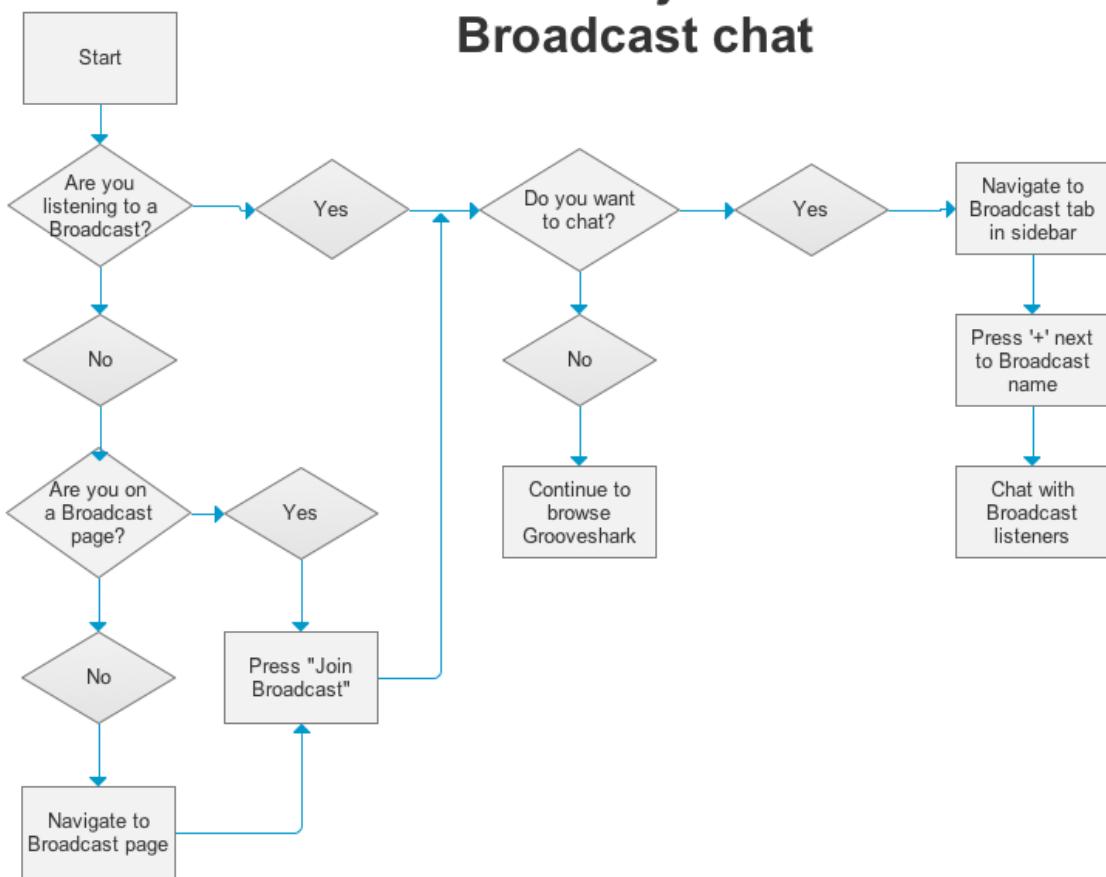
How to create a group to chat with



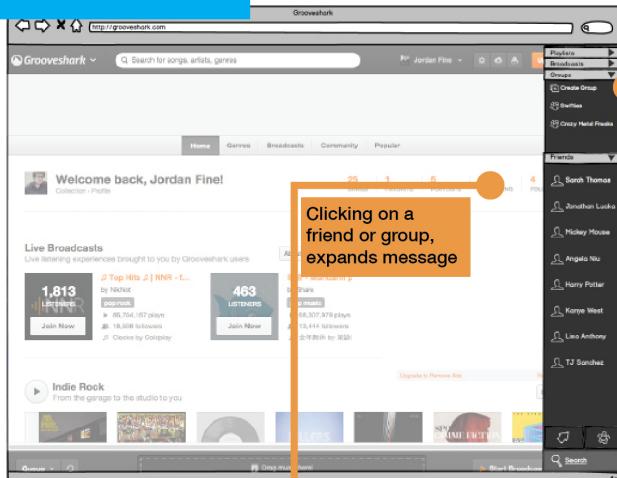
How to share a song with a friend or group



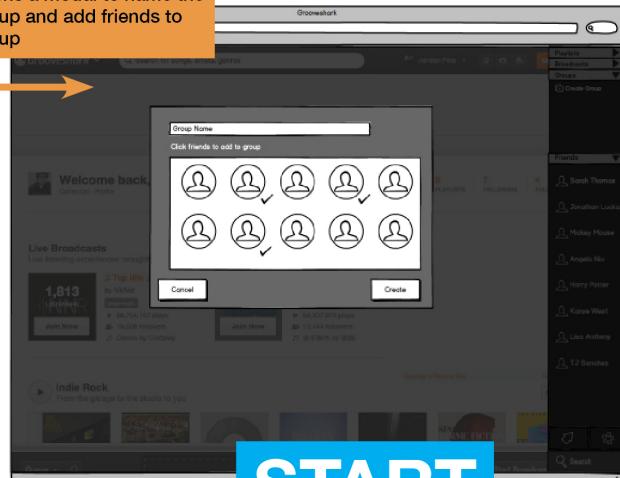
How to join a Broadcast chat



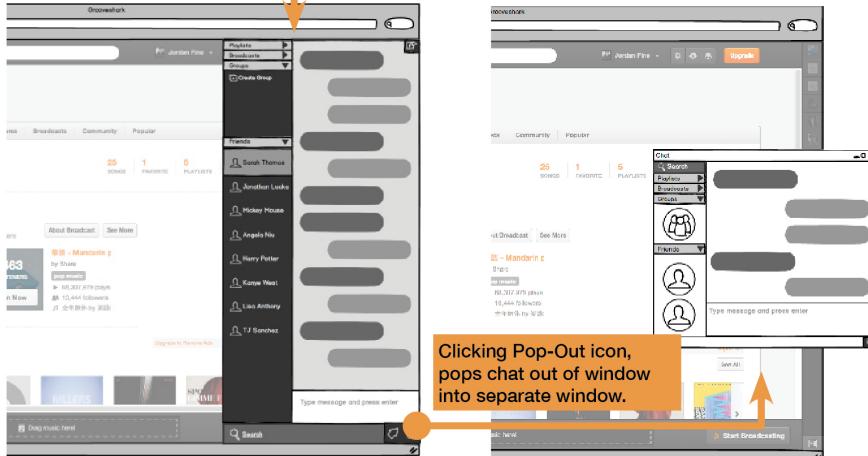
START



Clicking on "Create Group" opens a modal to name the group and add friends to group



START

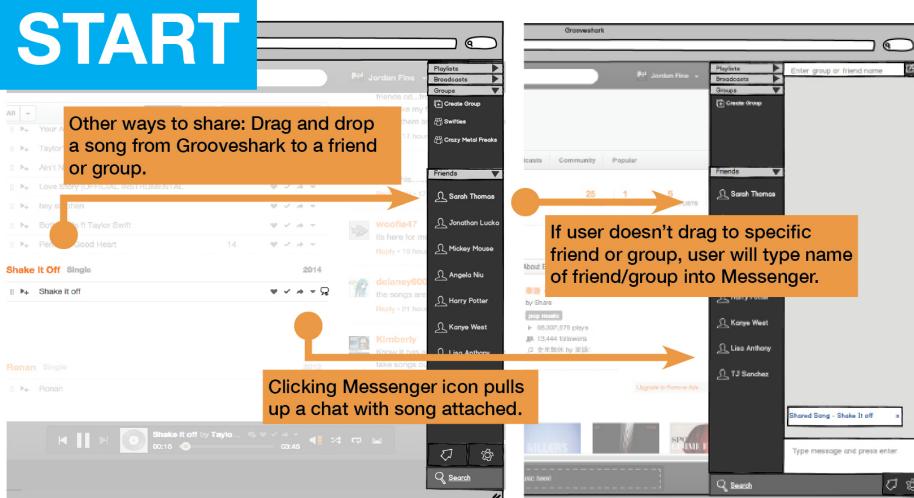


Clicking Pop-Out icon, pops chat out of window into separate window.



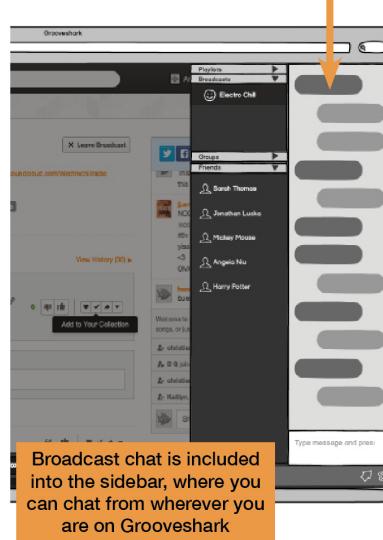
Click on "+" icon to Join Chat for a Broadcast.

START



If user doesn't drag to specific friend or group, user will type name of friend/group into Messenger.

Clicking Messenger icon pulls up a chat with song attached.

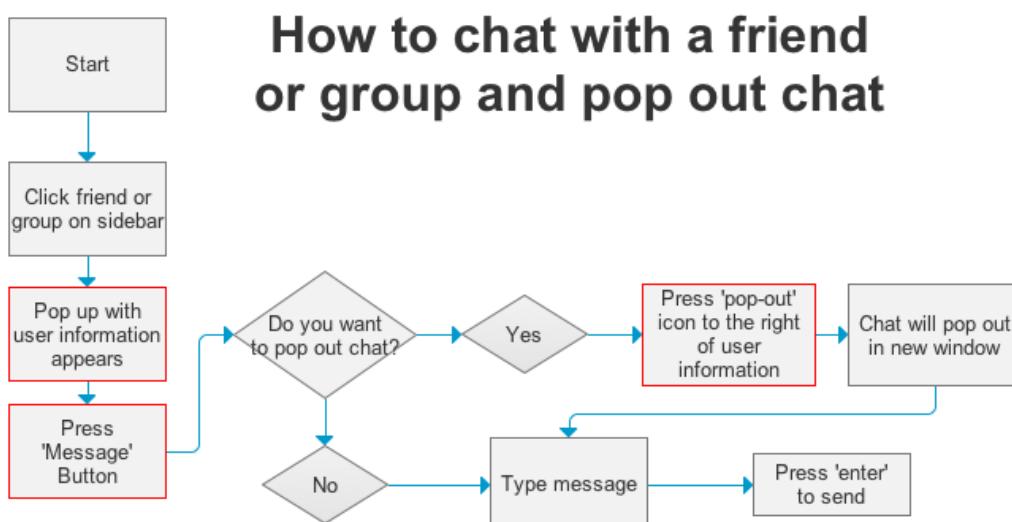


Our task flow diagrams break down step-by-step the main tasks a user would perform when using the chat feature. The wireframes for the first iteration illustrate all the main screens in our chat feature, what interactions are possible, and how to navigate between screens. The annotations in the wireframes clarify transitions between screens and the actions that are possible at each step.

The final wireframes for iteration one were derived from our brainstorming process. We chose the ideas we felt best addressed user needs and would seamlessly integrate into Grooveshark's already existing interface. Creating the wireframes in Balsamiq helped us to clarify our design ideas and see them take form in a low fidelity prototype.

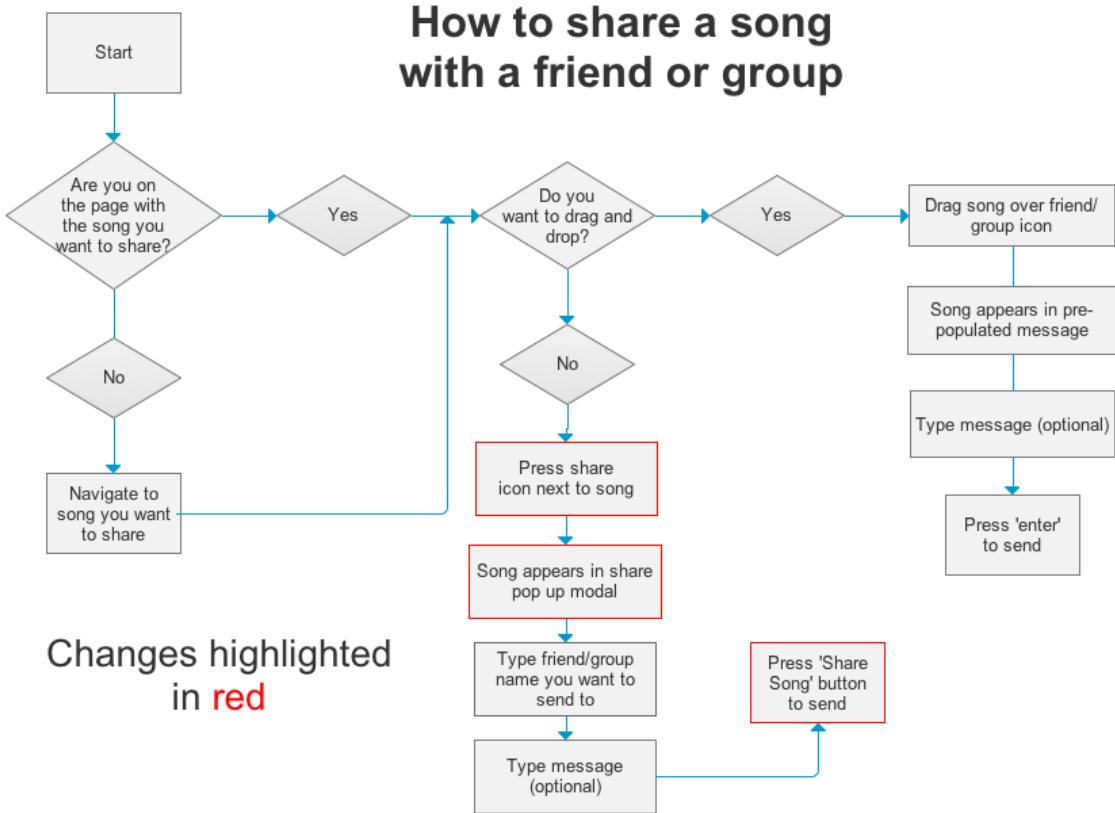
Iteration #2: Task Flows and Wireframes

Based on feedback received on Iteration #1, we made several changes to our design. One comment stated that the chat popping out from the right of the sidebar made the whole sidebar feel very heavy and took up a large portion of the screen, which may be intrusive to the interface and block out ads from view. Another comment stated that having the chat expand from the sidebar made the "Playlists" and "Broadcasts" tabs feel misplaced. To address these breakdowns, we integrated our chat into functionality that already exists in Grooveshark. Currently, when you hover over a friend's name, you can see their profile information: we added a message button that, when clicked, causes the chat to drop down. The group and broadcast chats were also changed to model this functionality. The other main piece of feedback we received was how we decided to implement sharing. Although the drag-and-drop feature was well received, the extra icon in the song rows for messaging seemed clunky. In order to address this, we again used functionality that is already implemented in Grooveshark: when you click the share button the same modal pops up, but the main screen has a place for a friend or group name and a message. You can then share the song with a friend or group.

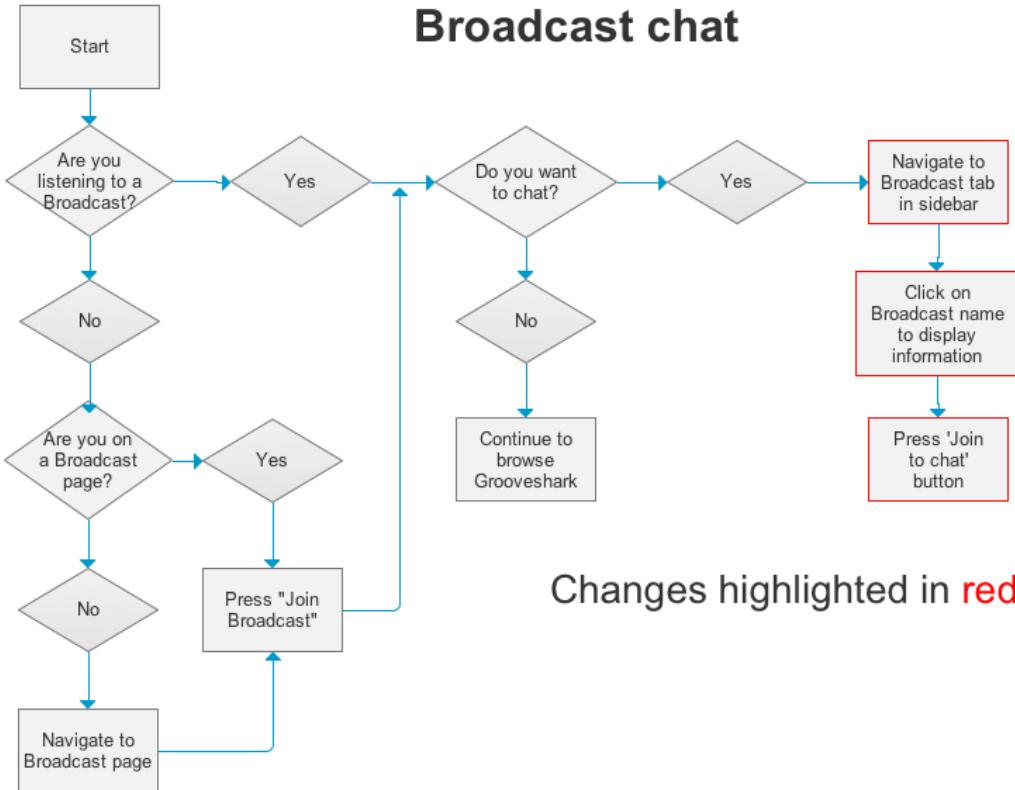


Changes highlighted in red

How to share a song with a friend or group



How to join a Broadcast chat



START

Clicking on "Create Group" opens a modal to name the group and add friends to group

Clicking on a friend or group, expands popover

Clicking Chat will expand the chat box for a specific user or group.

Clicking Pop-Out icon, pops chat out of window into separate window.

START

Other ways to share: Drag and drop a song from Grooveshark to a friend or group.

Clicking Share icon pulls open modified Share Modal

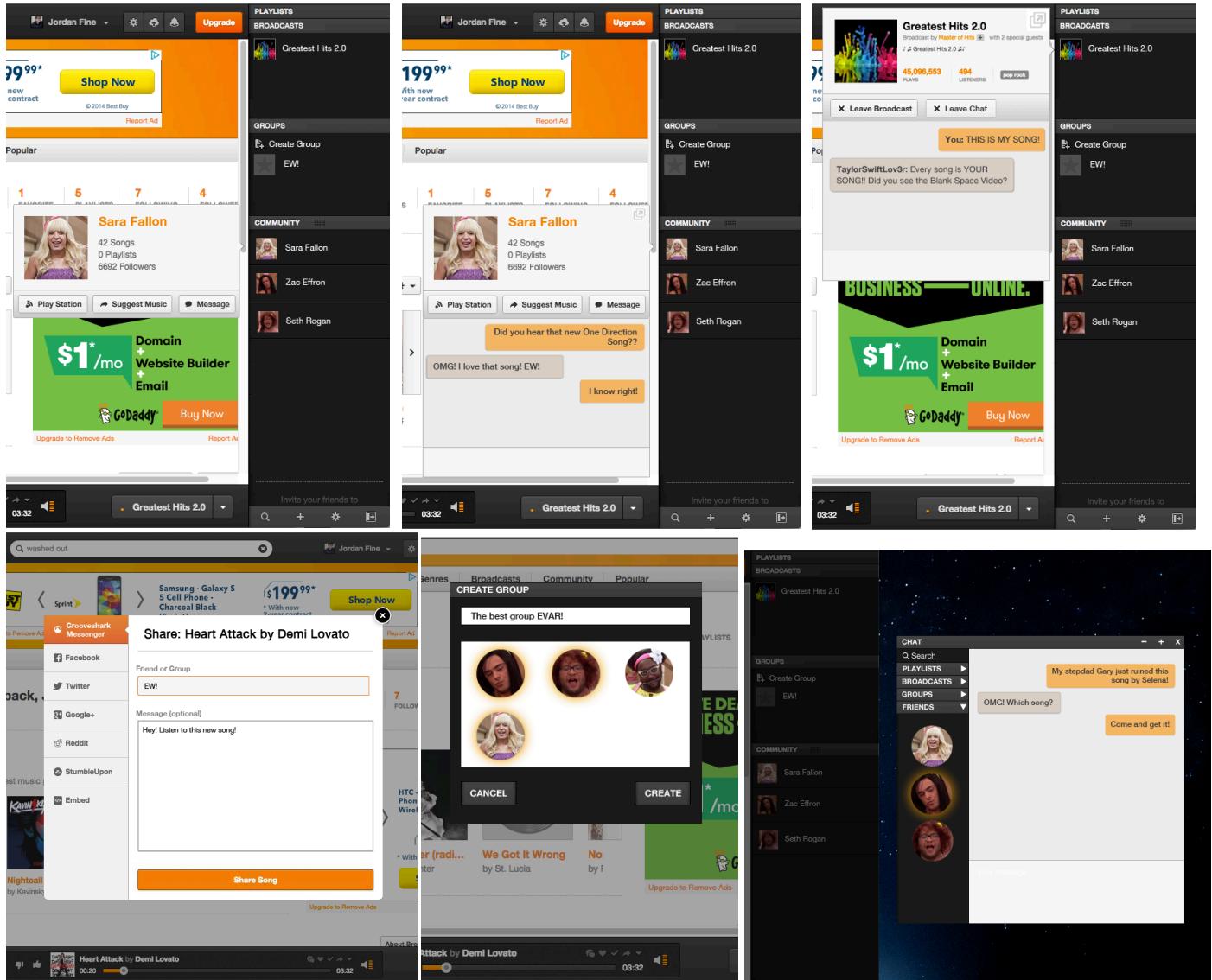
User will type name of friend/group into Messenger in Share Modal, along with an optional message.

Sharing a song with a friend or group attaches the song to a new or existing thread.

Click on "+" icon or press Chat button from popup to Join Chat for a Broadcast.

Broadcast chat is included into the sidebar, where you can chat from wherever you are on Grooveshark

Interactive Prototype



Our interactive prototype is a high fidelity prototype that is modeled after our second iteration of wireframes. The interactive prototype demonstrates all the main features of our chat feature: chatting with a friend or group, sharing music with a friend or group, popping out the chat, chatting in a broadcast and creating a group.

We created each screen using a combination of screenshots from the Grooveshark website and our own creations in Adobe Photoshop. We attempted to model our designs to closely match the aesthetic and design language of Grooveshark. It was important to us to make the integration of our chat feature as seamless as possible by creating an interactive prototype that demonstrated exactly how and what would be implemented – and how it could blend easily with Grooveshark's existing functionality. Pictured above are screenshots of our interactive prototype. For a complete and more detailed view, please refer to the demo video and software prototype.