The advent of digital music has brought with it plenty of tools for discovering new music. From online music blogs to crowd sourced recommendation services, modern music lovers have no shortage of resources for seeking out new tunes and old favorites to listen to wherever they are. However, current music discovery tools do not address a significant aspect of the music discovery process; music is an incredibly social form of art that connects users. The social element of music discovery is so inherent to the process of music discovery that some users only listen to new songs or artists on the suggestion of a trusted friend. Currently, the only tools that users have to facilitate this social music discovery require users to actively participate in this process. Merge seeks to remedy this by automating the process of music discovery and selection based on music preferences of peers as well as environmental factors and listening history.

Tasks

Simple: Discovering new music

The first task is the main focus of our entire app. This task is initiated just by opening the app. Upon opening, the app either presents the user with new recommendations (if the user has some,) or with another user’s playlist. A new song immediately begins playing for the user. The user can also swipe through the currently playing playlist or recommendations. Finally, the user can browse other user profiles and view the playlists of those users.

Medium: Sharing new music

This task has also been built into the main screen of our interface; in order to share a new song, the user just has to swipe a user picture up to the playing song. A change we made to this action in this iteration of our interface was that as soon as a user begins swiping on a profile, a circle appears on top of the album art to prompt the user to swipe the picture there to share.

Complex: Discovering users/forming new relationships

The process of forming new relationships is facilitated by any interaction with our app. The goal of Merge is to introduce users the the music tastes of their friends and acquaintances. This happens through the recommendation and now playing functionality of the app. In addition, we allow users to search for other friends and acquaintances by swiping up at the bottom of the screen. The user profile also contains an option to message the user. By helping users become familiar with the music tastes of their peers, we are helping build bonds that will lead to new and strengthened relationships with friends.
We made several significant changes as a result of our user testing. The first was the Recommendations screen, as shown in screenshot 1. This screen allows a user to view and listen to songs that their friends have sent them. It is shown when the app is opened and can be accessed through the inbox button. This change was necessary because our original prototype had no way to view recommendations, which is something testers wanted. The next change we made was to the user profile, which now shows a user’s 10 most recently favorited songs. These songs constitute a user’s “playlist.” Users can also lock songs to this screen, which cements them in the playlist. We did this in order to simplify the “playlist” for each user and to allow the user to view and edit that playlist. The now playing screen has also been simplified. The drag to share functionality remains the same; however, the search bar is now accessible by dragging up on the search icon on the bottom of the screen.

Several other changes were made to the interface that are not clearly visible. For instance, we decided to remove the “Favorites,” “Discover,” and “Settings” pages in order to simplify the user interface. The functionality provided by these screens has largely been implemented into other parts of the app. The currently playing song indicator has been simplified into a single line. We also removed the separate “Search” page, since this functionality is already available in the Now Playing screen. The friends suggestion part of the Now Playing page also now contains a partial picture on the right side in order to indicate that the user can scroll to see more friends. Finally, the Friend Profile screen now contains buttons for favoriting songs. These changes were all made as a response to feedback from the users of our low-fi prototype.
Scenarios:

**Task 1 - Discover new music**

- Recommendations appear whenever the app is opened.
- Now playing loads a new user playlist automatically.
- Users can skip to next song by swiping artwork.
- Browse other user playlists by tapping profile picture.
- Can also be accessed through “Inbox” button in slide out menu.

**Task 2: Share new music**

- Drag on a user profile to share.
- Dialogue appears.
- Recommendations appear on the friend’s phone in Merge.
Task 3: Form new relationships

Prototype Overview:

We decided to use proto.io as our prototyping tool. It had all of the options that you would expect to see on an actual phone, such as swiping and other gestures, and allowed us to lay out each of the screens exactly as we intended. The product flow was easily implemented after a slight learning curve as well. Proto.io also implemented animations which helped the prototype feel more realistic and gave us a better sense of what the final product would look like going between screens. However, the main aspect that inhibited our work was the fact that there was no way for collaboration across multiple computers. Only one person could be logged on at a time, so we had to coordinate across the group to set up a work schedule, or we had to huddle around a single computer to work together. Also, we can only use it for free for about another week, which could be problematic later on in the design process. Our main limitation of the prototype is that we can’t actually play music or have an algorithm that will recommend songs and people for the user. We had to hard-code these screens in so that it would look like an app and function correctly, and everything was pre-determined by the group.
Extra Screenshots