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## Table Of Contents

- I. Business Concept
- II. User Research Summary
- III. Personas
- IV. User Story Map
- V. App Map
- VI Wireframes
- VII. Usability Testing Summary
- VIII. Implemented changes  
from Usability Testing
- IX. Next Steps
- X. Appendix



# I. Business Concept



## Problem:

It is hard to find new music and music streaming recommendations are heavily based on the music you most recently listened to

## Solution:

**Sierra** is a music streaming platform that offers a new music song discovery feature that does not currently exist within music streaming platforms. Sierra allows users to

**Personalize** their music recommendations, providing users more control over their music discovery algorithm.

**Discover** new music using a New Music Discovery Feature



## User Needs:

Currently, there is no music streaming platform that provides you complete control over your music recommendations and allows you the option to discover new songs as a designated feature on there music streaming service.

To fulfill the needs of creating a completely personalized music streaming platform, these new featuress must be familiar and easy to use for users of this new music streaming platform



# Business Needs:

To create a new music streaming platform within the desired market space, it must be able to fulfill the basic functionality of other music streaming platforms to compete within the market space.

Important components of competing in the music streaming platform space is the ability to

Provide a competitive price that is similar to those in the Music Streaming Platform market

Provide a large selection of music, competitive to your competition in the Music Streaming Platform market



# II. User Research Summary



By using the information I collected from 15 survey participants and 5 interview participants I found the following key points when researching users experience discovering new music:

- Users generally describe finding new music as challenging yet rewarding experience. The difficulty and frustration of trying to find new music provides a rewarding and satisfying experience when they finally do find music they like
- Users have trouble finding new music due to their narrow preferences of music they like. They often times struggle finding music they because their recommendations that do not align with their music taste or not knowing where to look for new music
- Users music recommendations are heavily related to the music that they recently listened to and most of the time do not account for music they listened to in the past



# III. Personas





Sarah attends NYU. On top of her coursework, she is constantly looking for new music to listen to while she studies during the week. However, Sarah has very specific music taste, so she looks for music only within her niche music preferences

Name: Sarah Age: 20 Occupation: Full-time Student Profile: **Niche Music Collector**

## Personality

Introvert



Extrovert

Sensing



Intuition

Thinking



Feeling

## Goals

- Find music that is specifically tied to the music she likes
- Minimizing the time she has to spend looking for music to allow more time for her to study and do other activities

## Frustrations

- Struggle to find music she likes, she does not know where to look for music and does not have a central place to find music
- Due to her not having a central place to find music, she gets tired looking in multiple places for new music and the music search process becomes exhausting to her





Matthew is an investment banker, as a result, he works very long hours and demanding hours. His outlet to relax is to listen to music that he likes, depending on his mood

Name: Matthew Age: 23 Occupation: Investment Banker Profile: **Music taste depends on Mood**

## Personality

Introvert



Extrovert



Sensing



Intuition



Thinking



Feeling

## Goals

- Matthew does not specifically have a goal in mind looking for music, he prefers to listen to music based on the mood he is in and looks for music he likes based on his mood
- Casually be able to browse to look for new music he likes based on his mood and songs he likes related to his mood

## Frustrations

- There is no way to control his recommendations catered to what he is feeling, his recommendations are all music he recently listened to but aren't reflective of his current mood
- Gets bored of the music he listens to for the playlists he has created related to his mood, but is frustrated with the process of having to look for new music as the type of music he likes to listen to changes so often





Jason is a recent college graduate who listens to music all the time and listens to all different types of music, he is not picky about his music selection at all

Name: Jason Age: 22 Occupation: Recent College Graduate Profile: **Lover of All Music**

## Personality

Introvert



Extrovert



Sensing



Intuition



Thinking



Feeling



## Goals

- Look for music he wants to listen to based on what his preference of music is for that day
- Look for new music that he has not heard before, he listens to a lot of music, and as a result, must replace music frequently

## Frustrations

- Has trouble finding new music he has not heard before, looking becomes a repetitive experience for him
- His repetitive experience in hearing the same music within his music recommendations is frustrating for him, as he feels he can not only predict his music recommendations, but loses interest in songs he used to like before due to the repetition of those songs being recommended



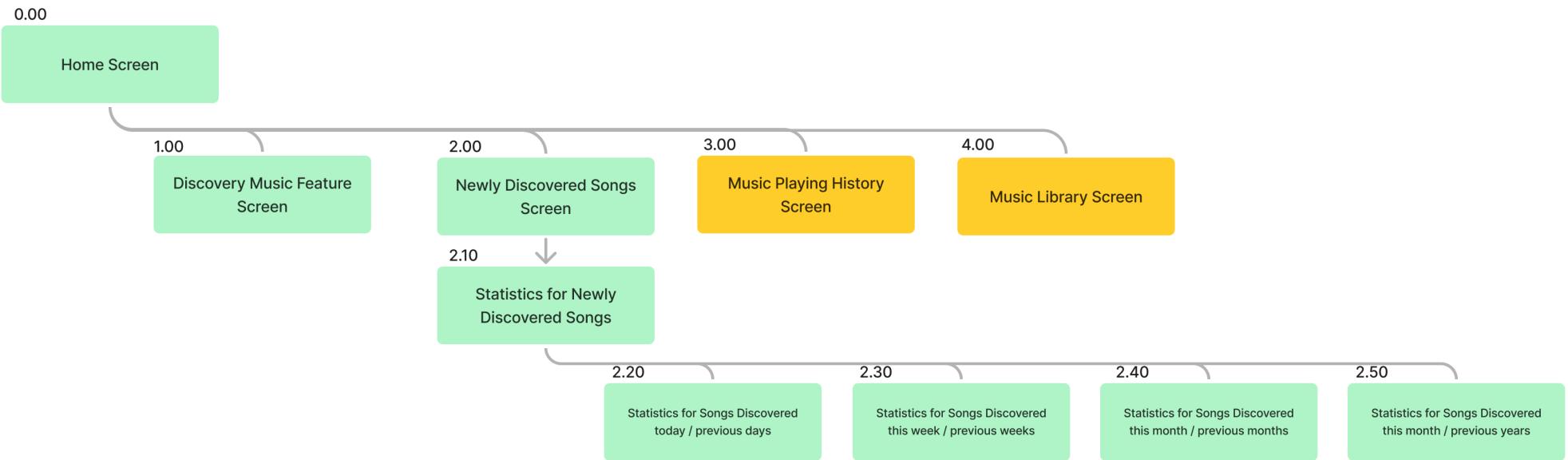
# IV. User Story Map



	Find Songs	Listen to songs	Sort Songs	Add Songs to Playlists	Track progress for finding new songs				
Goals									
User Steps	Look for Songs on Playlist Reccomendations	Look for Songs on Music Discovery Feature	Listen to songs from Playlist Reccomendations	Listen to songs from Music Discovery Feature	Filter Playlist Reccomendations	Filter Music from Music Discovery Feature Reccomendations	Add songs from Playlist Reccomendations	Add songs from Music Discovery Feature	Check Newly Discovered Songs Statistics
User Stories	Search For New Songs on Playlist Reccomendations <small>Michael Lee</small>	Use Music Discovery Feature	Listen to songs from Playlist Reccomendations	Listen to songs from Music Discovery	Filter by Recently Listened to music	Delete Songs from Reccommended Section	Add songs from Playlist Reccomendations to Playlists	Add songs from Music Discovery Feature to Playlists	Check Newly Discovered Song statistics in terms of days
				Filter by Past Listened to music	Add Songs from Selected Songs Section of Music Discovery Feature	Add songs from Playlist Reccomendations to Newly Discovered Songs Library	Add songs from Music Discovery Feature to Newly Discovered Songs Library		Check Newly Discovered Song statistics in terms of weeks
				Filter by Genre	Remove Songs from Selected Songs Section of Music Discovery Feature				Check Newly Discovered Song statistics for in terms of months
				Filter by Frequently listened to songs					Check Newly Discovered Song statistics for in terms of years
				Filter by Assortment of songs of users choosing					

# V. App Map

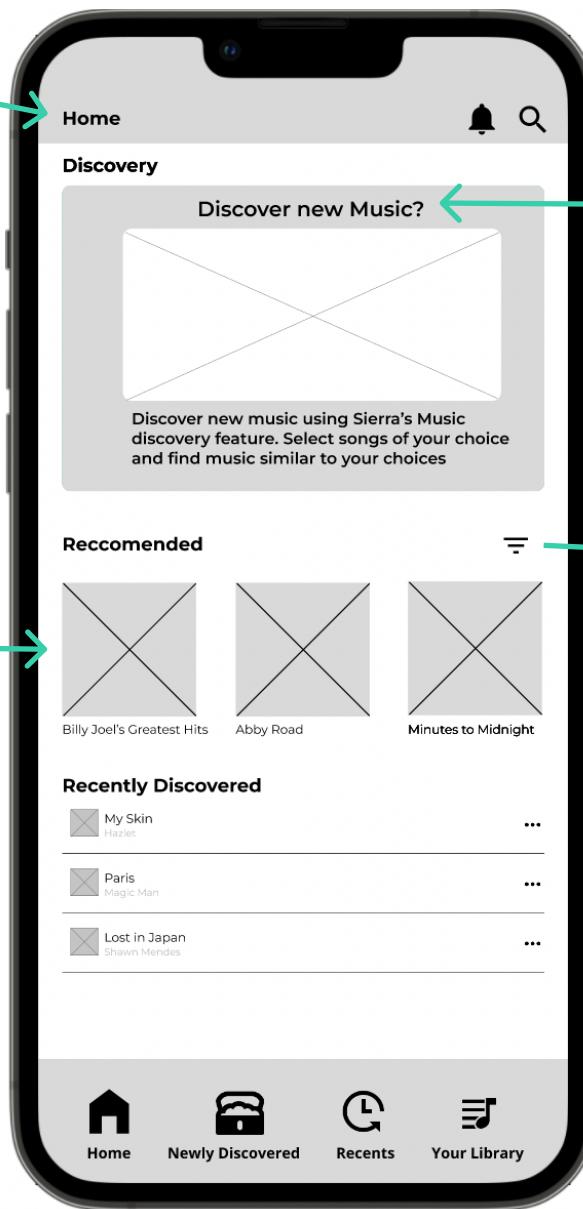




# VI. Wireframes



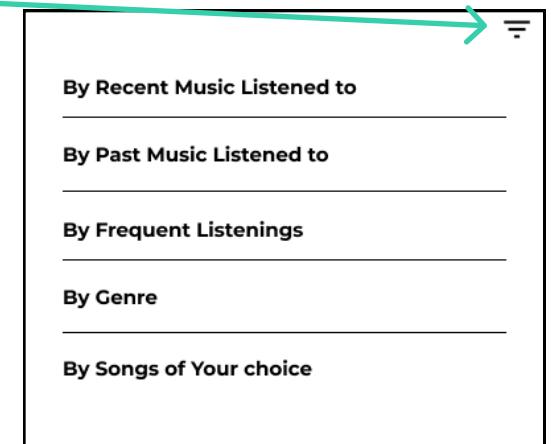
Current Screen Header

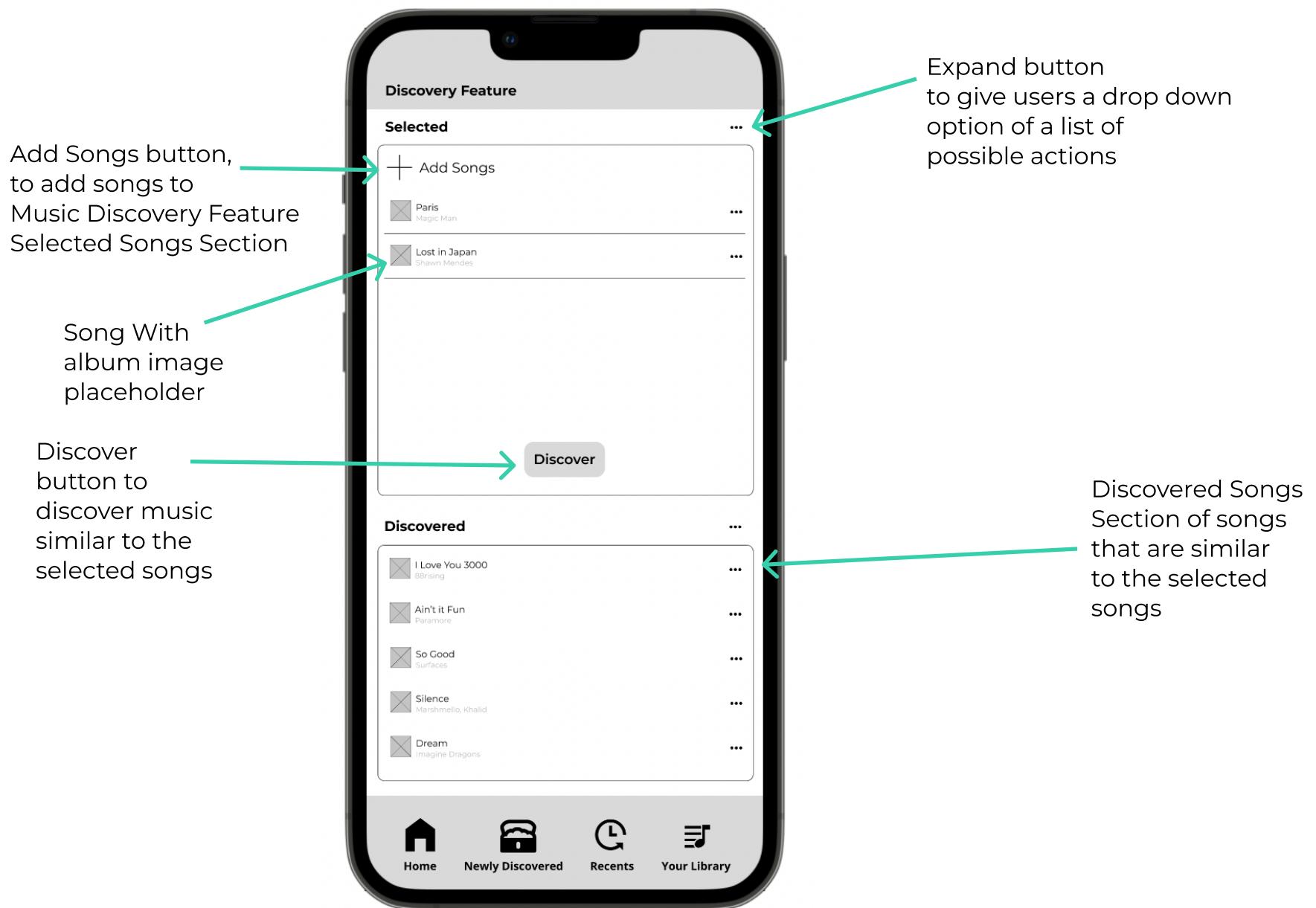


Placeholder for  
album image

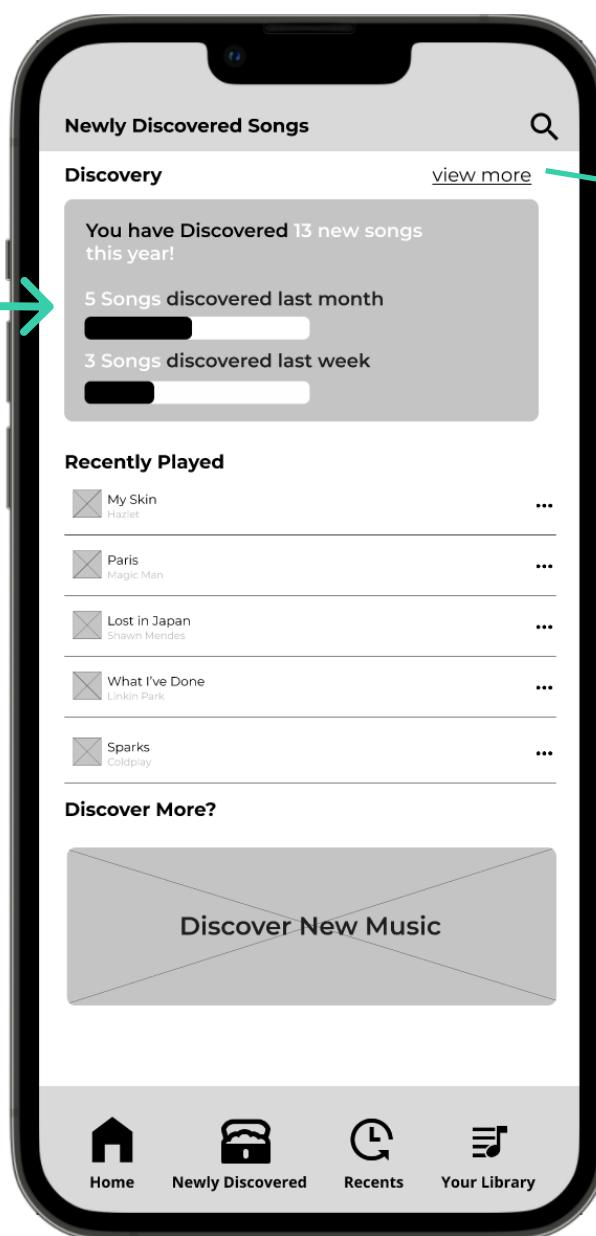
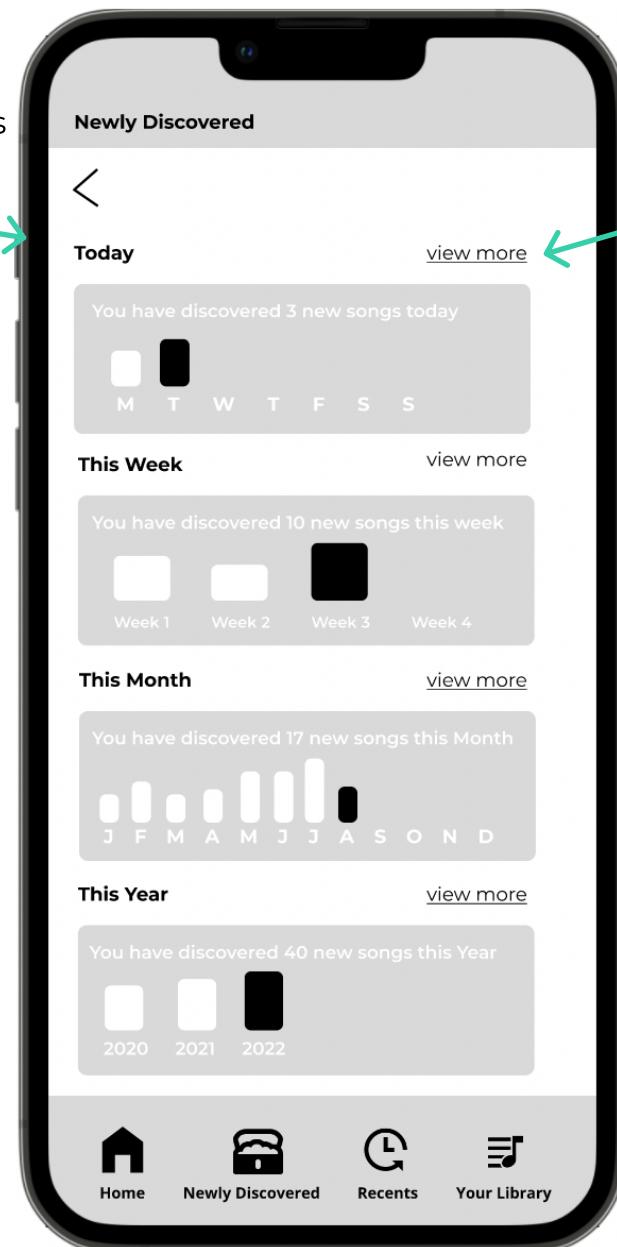
Subheader for Music Discovery Feature

Expanded Dropdown for  
Recommended Playlists Section  
filtering option





View more  
about  
songs  
discovered  
today  
statistics



Achievements  
of for the  
new music  
you discovered,  
with  
intention  
to increase  
likelihood of  
user satisfaction

# VII. Usability Testing



# Overview of Testing

For the Usability testing I conducted, I set out to find if the new features I created fulfilled the following requirements:

- The use case of these features being understandable and clear for someone who has never used them before
- If their use case is not clear, what issues need to be addressed with the following features

## Tasks to complete:

1. Find the Music Discovery Feature on the Home Screen and use the Music Discovery feature to find new music
2. Filter your Playlist Recommendations on the Home Screen by a assortment of songs of your choice
3. Starting from the Home Screen, find the Newly Discovered songs that you discovered from today



# Results of Testing

**Task 1:** Find the Music Discovery Feature on the Home Screen and use the Music Discovery feature to find new music

Problem: Users did not read description of feature and upon clicking on the feature, did not know how to use the feature

Suggestion: Replace descirption and remove redundant headings

**Task 2:** Filter your Playlist Recommendations on the Home Screen by a assortment of songs of your choice

Problem: Users did not understand the question or understand the labeling of the correct option of "Songs of your Choice"

Suggestion: Have clearer labeling for recommendation filtering for users to better understand the options

**Task 3:** Starting from the Home Screen, find the Newly Discovered songs that you discovered from today

Problem: Users simply were unable to locate the Screen at first and when both users reached the screen, they were confused on what they were looking at first, which gave me the impression this screen was not clear in functionality or labeling

Suggestion: Create clearer labeling within screens and look for ways to minimize the number of screens to produce the same kinds of actions with less screens



# VIII. Implemented Changes from Usability Testing



# Overview of Changes

I Implemented the following changes to attempt to solve the confusion present within my usability testing tasks and to improve clarity within my application:

1. Removed redundant headers and language and replaced with different terms

**Justification:** There was too much repetition in language around the word “Discover”, which could potentially cause confusion among users differentiating content.

2. Removed “Recently Discovered” from Homepage and Replaced with “Created Playlists”

**Justification:** To give the Home Screen content separation from the Discover Screen content

3. Removed “Recents” from Navigation Bar

**Justification:** To eliminate confusion for users between “Recents” in the Discover Screen versus “Recent Playing History” in reference to the users previously listened to songs

4. Replaced “Newly Discovered” with “Discover” Screen and remodeled screen to have “dated” discovered songs opposed to statistics about songs found

**Justification:** The original functionality of the “Newly Discovered” was track the new songs users discovered. However, the screen had too many redundant and confusing terms and labeling for users to understand the screen. I converted the page to a discovered song history page, and giving the option of also using to the “Explorer” feature to find new music.

5. Updated App Map and User Story Map to accurately reflect changes in screens

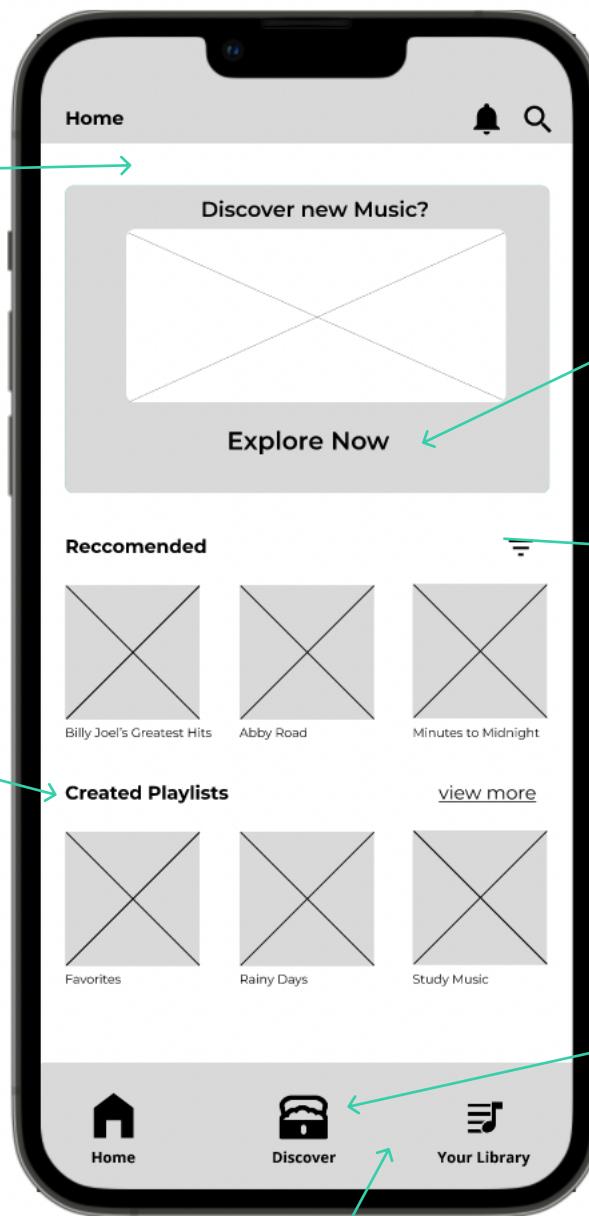
**Justification:** Deletion and changing of screens and content within screens



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Removed header of "Discovery" to create less confusion between different screens

Replaced "recently discovered" with "Created Playlists" to create less cognitive overload and allow users to access playlists from Home Screen



Changed to just "Explore Now" from a lengthy description of feature

Expanded Dropdown for Recommended Playlists Section filtering option

- By Recent Music Listened to
- By Past Music Listened to
- By Frequent Listenings
- By Genre
- By Songs

Changed "Songs of your Choice" filter option to "Songs"

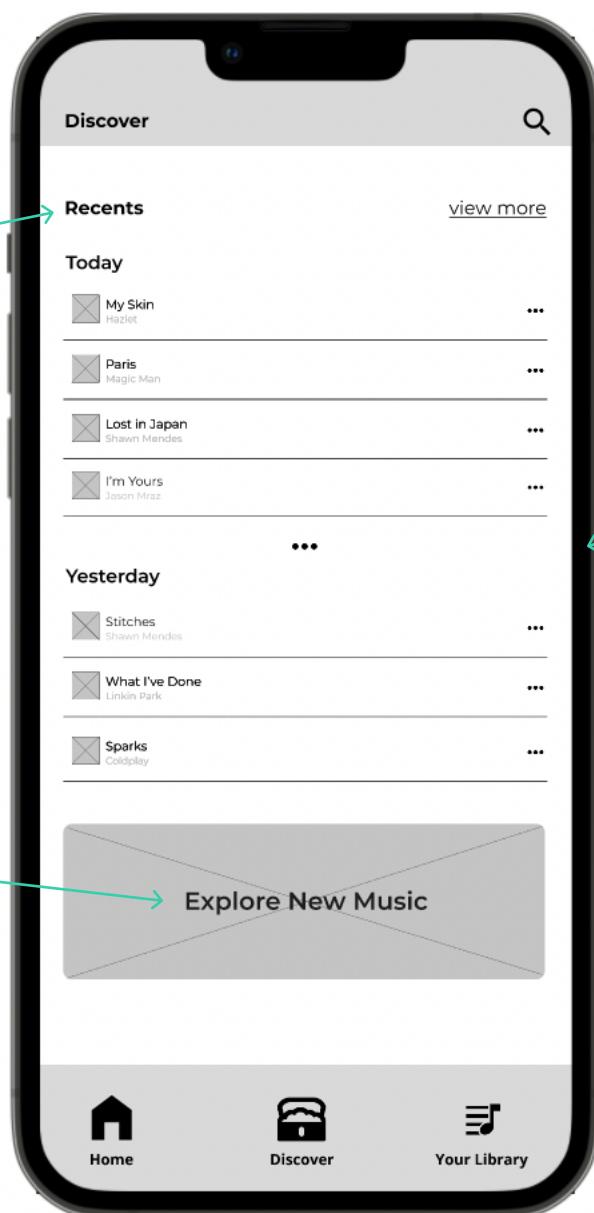
Replaced "Newly Discovered" with "Discover" Feature in navigation bar

Removed "Recents" from bottom navigation bar



Changed “Music Discovery Statistics page” to “Recents”, showing your last 2 days of recently discovered songs and a ability to view farther back by clicking the “view more” button

Changed “Discover” to “Explore” to reduce cognitive overload of the redundancy of terms



Removed “Recently Played” to avoid confusion of mistaking page with “Recents”

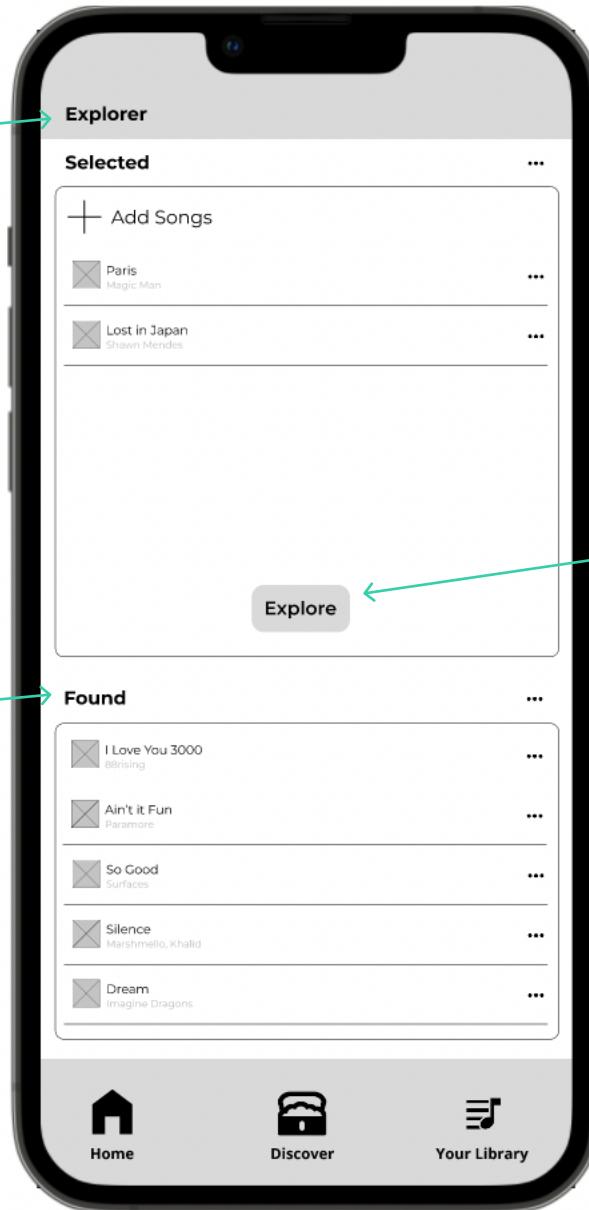


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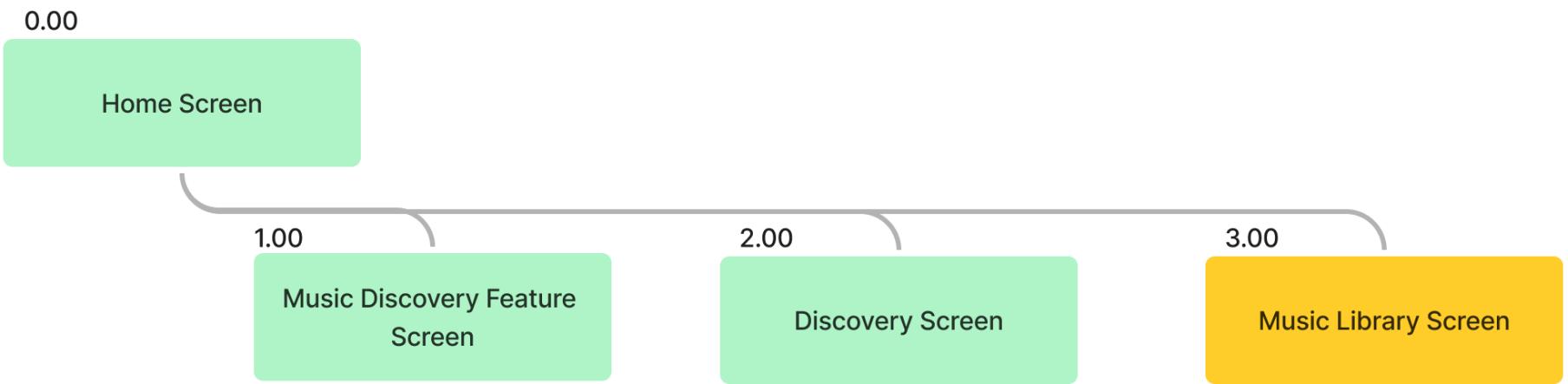
Changed  
Discovery Feature  
Header to  
“Explorer” and  
changed Screen name  
to “Explorer” from  
“Music Discovery Feature”  
to reduce redundancy of  
terms

Changed  
“Discover” button  
to “Explore” to reduce  
redundancy of terms

Changed subheader of  
“Discovered”  
to “Found” to reduce  
redundancy of terms



	Find Songs	Listen to songs	Sort Songs	Add Songs to Playlists	Check out songs found from Playlsit Reccomendations and Explorer Feature				
Goals	Find Songs	Listen to songs	Sort Songs	Add Songs to Playlists	Check out songs found from Playlsit Reccomendations and Explorer Feature				
User Steps	Look for Songs on Playlist Reccomendations	Look for Songs on Explorer Feature	Listen to songs from Playlist Reccomendations	Listen to songs from Explorer Feature	Filter Playlist Reccomendations	Filter Music from Explorer Feature Reccomendations	Add songs from Playlist Reccomendations	Add songs from Explorer Feature	Check Discover Feature
User Stories	Search For New Songs on Playlist Reccomendations	Use Explorer Feature	Listen to songs from Playlist Reccomendations	Listen to songs from Explorer Feature	Filter by Recently Listened to music	Delete Songs from Reccommended section	Add songs from Playlist Reccomendations to Playlists	Add songs from Explorer Feature to Playlists	See Songs discovered from past 2 days
				Filter by Past Listened to music	Add Songs from Selected Songs section of Explorer Feature	Add songs from Playlist Reccomendations to Discover Feature	Add songs from Explorer Feature to Discover Feature		View all discovered songs
				Filter by Genre	Remove Songs from Selected Songs section of Explorer Feature				
				Filter by Frequently Listenings					
				Filter by Songs					



# IX. Next Steps



# Next Steps

1. Test new changes to wireframes to validate findings
2. Create login and sign up feature and additional features and screens that would be necessary to fulfill functionality of product
3. Develop final prototype upon successful completion of all necessary rounds of usability testing



# X. Appendix



# Competitive Analysis

Features	 Spotify	 Apple Music	 SoundCloud	 Amazon Music UNLIMITED	 YouTube Music	 TIDAL
Position in Market (Top, Middle, Bottom)	Top	Top	Top	Middle	Middle	Low
Music Discovery Features	Recommended playlists, artists, Recommended songs	Recommended playlists	Suggested Tracks (Suggested songs)	Recommended playlists and albums	Recommended songs for playlists	Recommended playlists, albums, songs
Paid Subscriber Total	182 million	60 million	76 million	55 million	50 million	3 million
Size of Music Collection	82 million songs	50 million songs	125 million songs	75 million songs	80 million songs	90 million songs
Key Features Provided	Search Music, playlists, Recommended Music, Music release notifications	Search Music, playlists, Recommended music	Search Music, playlists, Recommended music, commenting feature	Search Music, playlists, Recommended music	Search Music, playlists, Recommended music	Search Music, playlists, Recommended music
Best Feature	Offline Listening	Sound quality of Music	Ability to share music without account	Sound quality of Music	Music Recommendations algorithm	Personalized Music Recommendations
Cost for Paid Membership	\$9.99/month	\$4.99/month	\$9.99/month	\$9.99/month	\$9.99/month	\$9.99/month



# Low Fidelity Sketches

