Group02

Beatify Use-Case Specification: Recommend Song

Version 1.0

| Beatify | Version: 1.0 |
|--|------------------|
| Use-Case Specification: Recommend Song | Date: 13/11/2024 |
| | _ |

Revision History

| Date | Version | Description | Author |
|------------|---------|---|------------|
| 13/11/2024 | 1.0 | Initial version. Created use-case specifications for Recommend Song including necessary fields, basic and alternative flows, and specific preconditions and postconditions. | Lê Gia Huy |
| | | | |
| | | | |
| | | | |

| Beatify | Version: 1.0 |
|--|------------------|
| Use-Case Specification: Recommend Song | Date: 13/11/2024 |
| | |

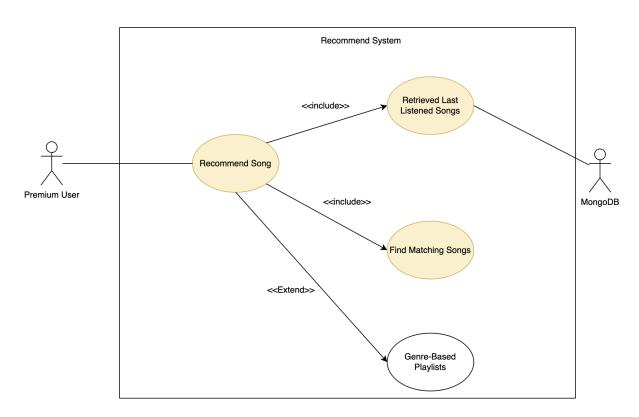
Table of Contents

| 1. Use-Case Name: Recommend Song | 4 |
|--|---|
| 1.1 Brief Description | 4 |
| 2. Flow of Events | 4 |
| 2.1 Basic Flow | 4 |
| 2.2 Alternative Flows | 5 |
| 2.2.1 Limited Listening History | 5 |
| 2.2.2 No New Recommendations Available | 5 |
| 3. Special Requirements | 5 |
| 4. Preconditions | 5 |
| 5. Postconditions | 5 |
| 6. Extension Points | 5 |

| Beatify | Version: 1.0 |
|--|------------------|
| Use-Case Specification: Recommend Song | Date: 13/11/2024 |
| | |

Use-Case Specification: Recommend Song

1. Use-Case Name: Recommend Song



1.1 Brief Description

This use case allows the Beatify system to recommend new songs based on the description of the premium user's previously listened songs. The recommendation engine identifies songs with similar descriptions, such as genres or styles (e.g., "Hip-Hop"), to suggest new songs that align with the user's preferences.

2. Flow of Events

2.1 Basic Flow

- 1. System Analyzes Last Listened Songs: The system retrieves the description of the user's most recently listened songs, which includes general categories or genre labels.
- 2. System Identifies Matching Songs: The system searches the song database for other songs with the same description as the last listened songs.
- 3. Display Recommendations to User:
 - The top matches are presented to the user in the "Recommended for You" section.
 - Each recommended song includes relevant details such as the song title, artist, and description, giving context to the recommendation.
- 4. User Interacts with Recommendations:
 - The user can play, save each recommended song.
 - o Listening to a recommended song updates the user's last listened song and refines future

| Beatify | Version: 1.0 |
|--|------------------|
| Use-Case Specification: Recommend Song | Date: 13/11/2024 |
| | |

recommendations.

2.2 Alternative Flows

2.2.1 Limited Listening History

• If the user has limited listening history (e.g., new account or few plays), the system defaults to general recommendations based on popular songs, trending artists, or songs from commonly enjoyed genres.

2.2.2 No New Recommendations Available

 If no new songs match the user's listening history, the system displays a message indicating no new recommendations are currently available and suggests exploring other sections like trending playlists or new releases.

3. Special Requirements

- The recommendation system requires regular updates to accurately match new songs to user preferences.
- The system should be optimized to handle large amounts of user data and recommend songs with minimal latency.

4. Preconditions

- The user must have an active premium account with at least some listening history.
- The song database should contain song descriptions and metadata relevant for matching user preferences, such as genre, mood, and artist.

5. Postconditions

- Recommended songs are updated in the user's interface.
- The user's interactions with the recommendations (e.g., playing, saving, dismissing) influence future recommendations.

6. Extension Points

Genre-Based Playlists: The system could create a playlist based on the user's preferred genre.