Requirements

Song

Required

- title (>= 1 char)
- artist (>= 1 char)
- genre (pop, rap, r&b, blues, rock, country, classical)

Optional

- album (>= 1 char)
- year (positive)
- rank (1-5)
- tags (0 or more tags, each >= 1 char)

Seed info to AI Build

Optional

- artist
- song
- genre
- tag
- target length of playlist

1 – Add

User Story

Who: As a Listener,

What: I want to **add** a **song (mp3, name, artist, title, genre)** to my **library**,

Why: So that the **song** is available to be used in a **playlist**

Acceptance Tests

1 – TODO

When add a unique song with correct info, **Then** song will be in library and can be added to playlists.

When add a unique song with missing required info, **Then** system will prevent add and notify user of missing info and expectations.

When add a unique song with incorrect info, **Then** system will prevent add and notify user of incorrect info and expectations.

Given Library has songs, **When** add a non-unique song, **Then** system will prevent add and notify user of error and expectations

2 – Rank

User Story

Who: As a Listener,

What: I want to be able to **rank** a **song**,

Why: So that I can inform the system about my preferences

Acceptance Tests

Given Library has songs, **When** select song, **Then** able to add, edit, or rank song; and all infor for song is displayed.

Given song is selected, **When** rank is provided, **Then** song rank is updated and displayed.

3 – Tag

User Story

Who: As a Listener,

What: I want to be able to **tag** a **song** with a **descriptor**,

Why: So that I can inform the system how I would describe the song

Acceptance Tests

Given Library has songs, **When** select song, **Then** able to add, edit, or rank song; and all infor for song is displayed.

Given song is selected, **When** tag descriptor is provided, **Then** song tags are updated and displayed.

4 – Edit

User Story

Who: As a Listener,

What: I want to **edit** a **song** in my **library**,

Why: So that I can update any missing or erroneous information about a **song**

Acceptance Tests

Given Library has songs, **When** select song, **Then** able to add, edit, or rank song; and all information for song is displayed.

Given song is selected, **When** new, correct information is provided for song, **Then** song information is updated and displayed.

Given song is selected, **When** new, incorrect information is provided for song, **Then** song information is not updated and user is notified of error and expectations.

Given song is selected, **When** new, incomplete information is provided for song, **Then** song information is not updated and user is notified of error and expectations.

5 – AI Build

User Story

Who: As a Listener,

What: I want to be able to have the system **build** a **playlist**,

Why: So that I can find music to listen to

Acceptance Tests

Given no seed information is provided and user has not ranked any songs, **When** AI generate playlist, **Then** select songs randomly with random target length between 10 and 15 songs without duplicating songs (may be shorter if not enough songs present).

Given no seed information is provided and user has ranked some songs, **When** AI generate playlist, **Then** generate songs based on user rank preferences with random target length between 10 and 15 songs without duplicating songs (may be shorter if not enough songs present).

Given seed information is provided without target length and user has not ranked some songs, **When** AI generate playlist, **Then** generate songs based on seed information only with random target length between 10 and 15 songs without duplicating songs.

Given seed information is provided with target length and user has not ranked any songs, **When** AI generate playlist, **Then** generate songs based on seed information only with specified target length without duplicating songs (may be shorter if not enough songs present).

Given seed information is provided with target length and user has ranked some songs, **When** AI generate playlist, **Then** generate songs based on seed information and user rank preferences with specified target length without duplicating songs (may be shorter if not enough songs present).