

Entities:

I. User:

- Description:
 - Contains the information on each of the singers.
- Attributes:
 - A unique identifier for each user.
 - The name of each of the users.
- Relationships:
 - The user can search for a song by song name.
 - The user can search for a song by artist name.
 - The user can search for a song by contributor.
 - The song file is given to the user.
 - They can add the song to one of the two different queues.

II. Songs:

- Description:
 - Stores the information on each of the songs.
- Attributes:
 - A unique identifier for each song.
 - The name of the song.
- Relationships:
 - The user can search for a song from the table.
 - The ID from the artist can be supplied to find all the songs by that artist.
 - The ID from the contributor can be supplied to find all of the songs by that contributor.
 - The ID is passed to the karaokeFile to find which version to use.

III. Artist:

- Description:
 - Stores the information on each of the artists.
- Attributes:
 - A unique ID for the artist.
 - The name of the artist.
- Relationships:
 - The user can look up one of the identifiers to find the artist.
 - The artist can then be supplied to look up all the songs by that artist.

IV. Contributor:

- Description:
 - Stores the information on each of the contributors.
- Attributes:
 - A unique ID for the contributor.
 - The name of the contributor.
 - The contribution the contributor made.
- Relationships:
 - Can be searched to find a song by the user.

V. **ContributeTo:**

- Description:
 - Holds the ID of the contributor from the song.
- Attributes:
 - An ID to represent the contribution from the contributor to the song.
- Relationships:
 - A contributor is given and searched from the songs table.

VI. **KaraokeFile:**

- Description:
 - Holds the different versions of each song.
- Attributes:
 - A unique identifier for each song.
 - The name of the type of version.
- Relationships:
 - The song version to look up is passed from the song entity.
 - The identifier is returned to the user.

VII. **FreeQueue:**

- Description:
 - A queue to add non-paid songs into.
- Attributes:
 - An identifier to hold each request.
 - The time the user is to sing.
 - A Boolean value to see if the user has gone.
- Relationships:
 - The song and information are passed by the user entity.

VIII. **PaidQueue:**

- Description:
 - A queue to add paid songs into.
- Attributes:
 - An identifier to hold each request.
 - The time the user is to sing.
 - A Boolean value to see if the user has gone.
 - The price of the queue position.
- Relationships:
 - The song and information are passed by the user entity.