

Table: **Genres**

Column Name	Description	Data Type	Column Size	Format	Key
libraryID	Unique identification code for the library containing all the playlists and collections of music of each individual user	int	7	AA999999	FK
songID	Unique identification code for each song within the Music Player database	int	20		FK
songToLibrary	Date song was added to library	datetime	8	YYYY/MM/DD	
lastPlayed	Indicated when song from library was last played	varchar	45		

Table: **LibrarySongs**

Column Name	Description	Data Type	Column Size	Format	Key
libraryID	Unique identification code for the library containing all the playlists and collections of music of each individual user	int	7	AA999999	FK
songID	Unique identification code for each song within the Music Player database	int	20		FK
songToLibrary	Date song was added to library	datetime	8	YYYY/MM/DD	
lastPlayed	Indicated when song from library was last played	varchar	45		

Table: **MusicLibraries**

Column Name	Description	Data Type	Column Size	Format	Key
libraryID	Unique identification code for the library containing all the playlists and collections of music of each individual user	int	7	AA999999	PK
userID	Unique identification code that represents each individual user account with a series of varied characters	varchar	12		FK
libraryname	The name of each individual library characterized by the user's choosing	varchar	45		

Table: **PlayCount**

Column Name	Description	Data Type	Column Size	Format	Key
playCountID	The unique identifier that represents the cumulative number of times a song is played by each individual user	int	25		PK
playCount	The aggregation of instances of a song played by each individual user	int	10	9999	
songID	Unique identification code for each song within the Music Player database	int	20		FK
skipCount	Represents the number of times a song is skipped. Used to formulate the algorithm for each user	int	10		

Table: **PlayerSessions**

Column Name	Description	Data Type	Column Size	Format	Key
sessionID	Unique identifier for each session of time spent on the webpage. Stores historical data.	int	15		PK
userID	Unique identification code that represents each individual user account with a series of varied characters	varchar	30		FK
songID	Unique identification code for each song within the Music Player database	int	20		FK
startTime	The time the session begins based on time-zone time data.	datetime	12	YYYY/MM/DD, 12:59	
endTime	The time the session ends based on time-zone time data.	datetime	12	YYYY/MM/DD, 12:59	

Table: **Playlists**

Column Name	Description	Data Type	Column Size	Format	Key
playlistID	Unique identification code that represents each playlist made within a library.	int	15		PK
playlistName	Name given to a playlist determined by the user.	varchar	45		
userID	Unique identification code that represents each individual user account with a series of varied characters	varchar	12		FK
privacyType	Represents whether the playlist is publicly viewable or private playlist	varchar	45		
playlistCreation	When the playlist was created in the user's music library	datetime	8	YYYY/MM/DD	
likeCount	Represents the number of users who have liked a song	varchar	45		

Table: **PlaylistSongs**

Column Name	Description	Data Type	Column Size	Format	Key
songID	Unique identification code for each song within the Music Player database	int	20		FK
playlistID	Unique identification code that represents each playlist made within a library.	int	15		FK
songToPlaylist	Date the song was added to the associated playlist	datetime	8	YYYY/MM/DD	

Table: **SongGenres**

Column Name	Description	Data Type	Column Size	Format	Key
songID	Unique identification code for each song within the Music Player database	int	20		FK
genreID	Unique identification code that represents each genre of music within the Music Player database.	int	15		FK
genreRelevance	Represents the importance level of the genre for songs with multiple genres in the form of a percentage	decimal	5	999.99	
dateAssigned	The date the genre was assigned to the song	datetime	12	YYYY/MM/DD, 00:00	

Table: **Songs**

Column Name	Description	Data Type	Column Size	Format	Key
songID	Unique identification code for each song within the Music Player database	int	20		PK
title	The song title given by the artist within the Music Player database	varchar	45		
artist	The artist who has the rights to the music and individual songs, including collaborations. Can be multiple artists on each song with varying roles	varchar	45		
album	The album or collection to which songs belong to under an artist. Not a mandatory category.	varchar	45		
duration	The length of each song given by time characters.	datetime	4	0:00	
genre	The genre category to which songs, artists and albums belong to. Multiple genres can apply to each of these attributes.	varchar	45		
releaseDate	Represents the date the song was officially released on the platform	datetime	8	YYYY/MM/DD	

Table: **TopFiveSongs**

Column Name	Description	Data Type	Column Size	Format	Key
topFiveID	The unique identifier that represents the ranking of a user's top 5 songs based on the play count related to the song ID.	int	15		PK
position	The position of each song within the ranking system of 5 songs.	int	1		9
songID	Unique identification code for each song within the Music Player database	int	20		FK
playCountID	The unique identifier that represents the cumulative number of times a song is played by each individual user	int	25		FK

Table: **Users**

Column Name	Description	Data Type	Column	Format	Key
userID	Unique identification code that represents each individual user account with a series of varied characters	varchar	12		PK
username	Sequence of simple characters that identify a user on the front-end of the platform, typically needs to be unique	varchar	45		
lastName	The registered last name of the user	varchar	45		
firstName	the registered first name of the user	varchar	45		
dateOfBirth	The date of birth of the user indicated in their login information	datetime	8	YYYY/MM/DD	
age	The age of the user indicated in their login information, used for privacy, security and parental controls	int	3		999