# Spotify Streaming Data Management System - One-Pager Application Description

## Application Overview:

The Spotify Streaming Data Management System is a comprehensive platform managing user-related data, playlists, albums, and subscription information. The system facilitates relationships between users, playlists, albums, authors, and tracks, creating a dynamic and interconnected ecosystem for an enhanced music streaming experience. The data model supports user interactions, content curation, and subscription management, offering a seamless and personalized music streaming service.

## Forms:

**frmUserDetails Mainform:** Main user details form providing comprehensive information about a user.

**frmAlbums:** Form for managing and displaying details of albums, including AlbumID, Title, Release Date, and CategoryID.

**frmAlbumAudioTracks:** Form for managing and displaying audio tracks within albums, including AudioID, AlbumID, Title, and Duration.

**frmUserPlaylists:** Form for managing and displaying user-created playlists, including UserID, Username, Title, PlaylistID, and CreationDate.

**frmUserPlaylistsAudioTracks :** Form for managing and displaying associations between user playlists and audio tracks.

**frmUserPlaylistsAudioTracks (subform):** is a component embedded within another form, likely frmUserPlaylists

**frmUserFavorites (subform) :** Form for managing and displaying user-marked favorite audio tracks and albums.

**frmUserFavoritesList:** Subform within frmUserFavorites for managing and displaying a list of user favorites

**frmUsersSubscription:** is a form designed for managing and displaying user subscription details, allowing users to view and update information such as SubscriptionType, StartDate, EndDate, and PaymentStatus.

## Reports:

**rptFavoriteAlbumRanks:** Ranking report of favorite albums including AlbumID, Title, and Favorite Time.

**rptAlbums:** Album details report with AlbumID, Title, Release Date, and CategoryID.

**rptAlbumAudioTrack:** Audio track details report with AudioID, AlbumID, Title, and Duration.

**rptFavAuthors:** Ranking report of favorite authors of audio content.

**rptUserPlaylists:** User playlist details report including UserID, Username, Title, PlaylistID, and CreationDate, accompanied by a pie chart illustrating audio ID distribution by PlaylistID.

**rptUserPlaylistsAudioTracks:** Report on associations between user playlists and audio tracks with attributes PlaylistID, UserID, Title, and Duration.

**rptUsersSubscriptions:** provides comprehensive details about user subscriptions in the Spotify Streaming Data Management System.

## Queries

**qryFavoriteAuthorRank:** Query ranking favorite authors based on user preferences.

**qryFavoriteAudioRank:** Query ranking favorite audio tracks based on user preferences.

**qryFavoriteAlbumRank:** Query ranking favorite albums based on user preferences.

**qryUserPlaylistRank:** Query ranking user playlists based on certain criteria, providing insights into popular or frequently accessed playlists.

**qryUsers:** Query retrieving information about users in the system

**qryUsersSubscribtion:** Query retrieving information about user subscriptions

**qryAlbumAuthors:** Query retrieving information about album authors, showing associations between albums and authors.

**qryUserFavAuthor:** Query retrieving information about users' favorite authors, providing insights into the most liked or frequently favored authors.

**QryAlbumAudioTracks**: to retrieve specific information related to audio tracks within albums in the Spotify Streaming Data Management System.