Song

Title	CreatorID	Pitch	BPM	Validate	Uploads

Playlist

Name	ListenerID	date_created	Creates

Contains

Title	CreatorID	PlaylistName

Follows

CreatorID	ListenerID

User

ID	First_name	Last_name	Password

Listener

ListenerID

Content Creator

CreatorID

Admin

AdminID

Security

SecurityID	Verify Login

Customer Support

SupportID

Account Support

SupportID	ListenerID

Song Expert

ExpertID

ER Diagram

User — Name, First_name, Last_name, Password, ID

Listener — date_created, Name, listener_ID

Playlist

creates (1 : N)

Follows (M : N)

Content Creator

Uploads (1 : N)

Song — BPM, Pitch, CreatorID, Title

Contains (M : N)

Validates (1 : N)

Song Expert

Admin — d

Customer Support

Account Support (N : M)

Verify Login (1 : N)

Security

WonderBeats Phase 2: Project Overview

404: Team Not Found **Members:**

Ezrela Amoako EBA190002

Cristina Kovacs CMK190001

Alexandra Swift AVS200006

Kayla Tucker KAT190004

Your report should have the following components:
1. A list of relations and their attributes.
• Write a detailed description of each attribute (for each table), its purpose, and data type.
• Indicate each attribute's default value (if any) or if the attribute can be set to 'null'.
• Indicate the primary key and foreign keys (if any) for each relation.
• Explain the actions taken on any foreign key when the primary key (that the foreign key refers to) is deleted
(For example no action, delete cascade, set null, or set default)

1. **USER**
   Attributes:
   ID
   Type: Int
   No default value, cannot be NULL
   Each user will have a unique ID for their account.

   First_name
   Type: CHARVAR(15)
   Default value = NULL
   First name of the user

   Last_name
   Type: String
   Default value = NULL
   Last name of the user

   Password
   Type: CHARVAR(15)
   No default value, cannot be NULL
   Each user will have a password that coupled with their ID will allow them to log in to their account

   Primary Key: ID
   Foreign Key(s): None

2. **LISTENER**
   Attributes:

ListenerID
Type: INT
No default value, cannot be null
Listeners' IDs will link them to all of their playlists

Primary Key: ListenerID
Foreign Key(s): ListenerID, references USER(ID), if user ID deleted, listener with matching ID will be deleted as well. If user ID updated, value will cascade to ListenerID

3. **CONTENT CREATOR**
Attributes:
CreatorID
Type: INT
No default value, cannot be null
Content creators' IDs will link them to all of their songs

Primary Key: CreatorID
Foreign Key(s): CreatorID, references USER(ID), if user ID deleted, creator with matching ID will be deleted as well. If user ID updated, value will cascade to CreatorID

4. **ADMIN**
Attributes:
AdminID INT Not Null Default = 0- indicates non used entry
This attribute is a way to track each admin user by number. This entity has subclasses that each have a different role and are all tracked as admin users with in this entity class
Primary Key: AdminID
Foreign Key(s): AdminID, on delete set null, on update cascade

5. **SECURITY**
Attributes:
SecurityID INT Not Null Default = 0- indicates non used entry
This attribute is a way to track each security personnel by number. It will inherit its value from the admin entity. This is needed to track which security personnel approved which login attempt.

Verify login   boolean   not null default= false
This attribute is to check that the user using an account has the correct credentials. It will turn true once the account has been verified on login.

Primary Key: SecurityID
Foreign Key(s): SecurityID, on delete set null, on update cascade

6. **CUSTOMER SUPPORT**
Attributes:

SupportID   INT Not Null Default = 0- indicates non used entry
This attribute is a way to track each customer support representative by number. It will inherit its value from the admin entity

Primary Key: SupportID
Foreign Key(s): SupportID, on delete set null, on update cascade

7. **ACCOUNT SUPPORT**
   Attributes:

   SupportID   INT Not Null Default = 0- indicates non used entry
   This attribute is a way to track each customer support representative by number. It will inherit its value from the admin entity. This is needed to track which representative is helping resolve an issue.

   ListenerID INT Not Null Default = 0 - indicates non used entry
   This attribute is a way to track each listener by number. It will inherit its value from the user entity. It is needed here to track the listeners account that needs help from customer support

   Primary Key: SupportID, ListenerID
   Foreign Key(s): SupportID, ListenerID for both, on delete set null, on update cascade

8. **SONG EXPERT**
   Attributes:

   ExpertID   INT Not Null
   Default = 0 (indicates non used entry)
   This attribute is a way to track each song expert by number. It will inherit its value from the admin entity. This is needed to track which song expert is assigned to analyze a specific song.

   Primary Key: ExpertID

9. **SONG**
   Attributes:

   Title   CHARVAR(15)
   Default = NULL (indicates non used entry)
   This attribute is used to identify the title of the song. This is needed to track the song in various relationships.

   Pitch   CHARVAR(2)
   Default = NULL (indicates non used entry)
   This attribute is used to identify the song's pitch on a scale from A to G#.

   BPM   INT Not null
   Default = 0 (indicates non used entry)
   This attribute is used to identify the song's BPM.

   Primary Key: Title
   Foreign Key(s): CreatorID – On delete cascade, on update cascade.

10. **PLAYLIST**
    Attributes:

    Name   CHARVAR(15)
    Default = NULL (indicates non used entry)
    This attribute is used to identify the title of the playlist. This is needed to track the playlist in various relationships.

    Date_created   DATE
    Default = NULL (indicates non used entry)
    This attribute is used to identify the date of the playlist's creation.

    Primary Key: Name
    Foreign Key(s): ListenerID – On delete cascade, on update cascade.

11. **CONTAINS**
    Attributes:
    Title
    Type: CHARVAR(15)
    No default value, cannot be null
    Holds title of song contained in playlist

    CreatorID
    Type: Int
    No default value, cannot be null
    Holds the account ID of the creator of the song contained in the playlist

    PlaylistName
    Type: CHARVAR(15)

No default value,cannot be null
Holds name of playlist the song is part of

Primary Key: Title, CreatorID, PlaylistName
Foreign Key(s): Title - On delete cascade, on update cascade
CreatorID - On delete cascade, on update cascade
PlaylistName- on delete cascade, on update cascade

12. FOLLOWS
Attributes:
CreatorID
Type: Int
No default value, cannot be null
ID of creator followed by listener

ListenerID
Type: Int
No default value, cannot be null
ID of listener who is following creator

Primary Key: CreatorID, ListenerID
Foreign Key(s): CreatorID - On delete cascade, on update cascade
ListenerID - On delete cascade, on update cascade