

CSCI 466 Group Project ER Diagram Description

Entities:

The entity User is used to store information for the user. It has two attributes an identifier UserNum and the name of the user.

The entity paidQueue has the identifier AddNum which is used to track when something is added to the queue.

The entity freeQueue has the identifier AddNum which is used to track when something is added to the queue.

The entity MainFile has the attributes SongNum and path and it holds information about the songs. SongNum is the identifier.

The entity Title is used to store the titles of the songs. It has the identifier TitleNum in case to songs have the same title. It has the attribute Text for the song title.

The entity Artist holds information about the artists of each song. It has the identifier ArtistNum in case some artists have the same name and it also has the attribute Name for each artist's name.

The entity Contributor holds information about each contributor to a song. It has the identifier ContNum if two contributors have the same name. It has the attribute Name for each of the contributors names and it has type for the type of contribution the person made to the song.

Relationships:

The Paidadd relation is a ternary relationship (1 to 1 to many relationship) between User, PaidQueue and MainFile. This relationship should hold the AddNum from paidQueue, UserNum from User and SongNum from MainFile. It also has its own attribute time so that it knows what time something was added. For each combination of User and MainFile there can be many instances in PaidQueue. For each instance of paidQueue and User there is 1 entry in MainFile. For each instance of paidQueue and MainFile there is one User.

The freeadd relation is a ternary relationship (1 to 1 to many relationship) between User, freeQueue and MainFile. This relationship should hold the AddNum from freeQueue, UserNum from User and SongNum from MainFile. It also has its own attribute time so that it knows what time something was added. For each combination of User and MainFile there can be many instances in freeQueue. For each instance of freeQueue and User there is 1 entry in MainFile. For each instance of freeQueue and MainFile there is one User.

The relationship between Title and MainFile is a 1-to-many relationship. There are many titles in MainFile but each Title is in MainFile once.

The relationship between Title and Artist is a many-to-many relationship. There are many titles for each author and there are multiple authors for each Title.

The Relationship between Contributor and MainFile is a 1-to-many relationship. There are many contributors in MainFile but each contributor is in MainFile once.