DBWS Project

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1 General description

1.1 Intended functionality

Our project, named AwardsHub, is a one-stop resource intended for learning about the tradition of the Grammy Awards and celebrating the artists who have performed on stages throughout the world. Our website is designed to satisfy the user's musical curiosity, whether it's about award-winning music, music videos, and favorite Grammy-winning artists, or even suggestions tailored to one's interests.

AwardsHub starts out as a website where the user chooses a Grammy award category and gets back the winners from the past few years, while also receiving suggestions of related content (similar songs, albums, or artists). One can also search for an artist or musical creation and check if it was celebrated as Grammy-winning.

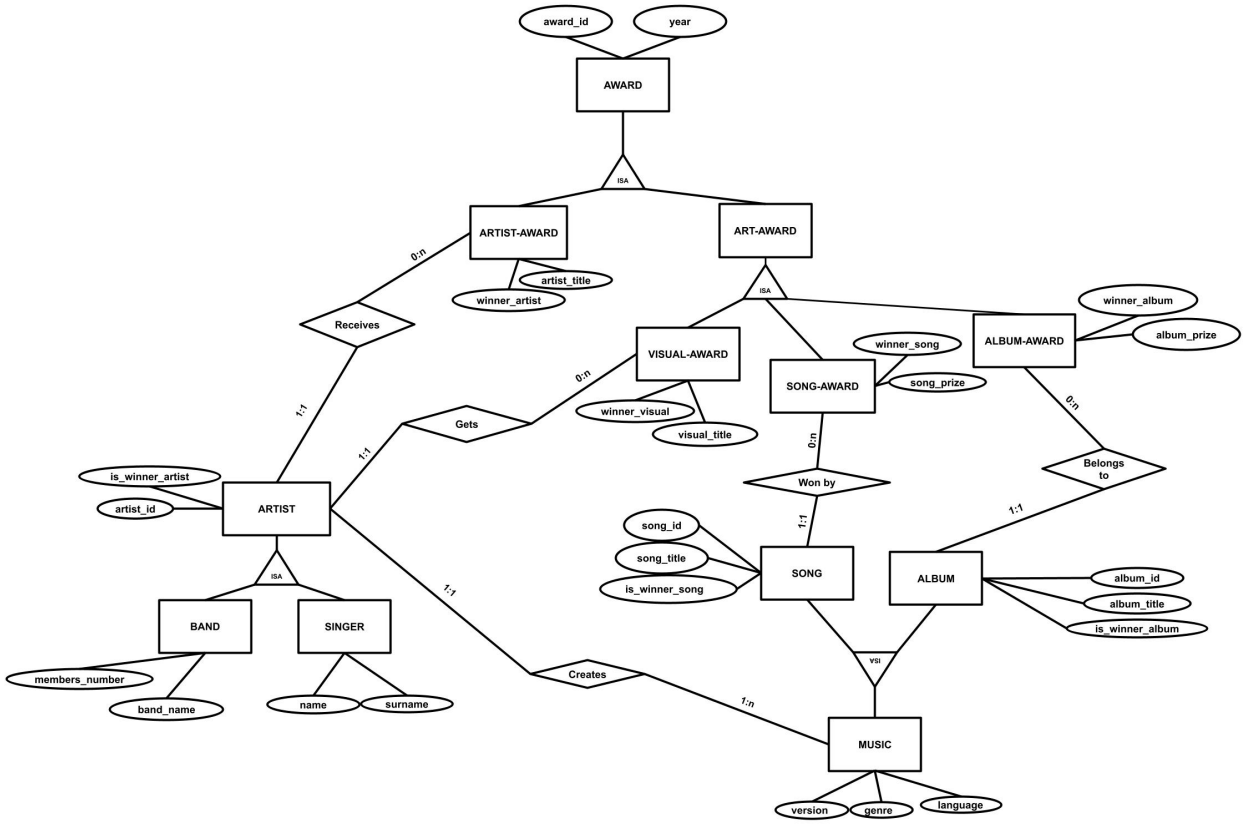
The results on the suggested similar music will be based on the artist or on the genre - no matter if the song or album was released in the same year or if it won one or several Grammy awards. Therefore, the user can get a variety of recommendations, not just current radio hits, but also "throwback" or "hidden-gem" songs.

The user isn't required to create an account, as the website doesn't store any data regarding their personal information or past searches.

The project is highly scalable, as it could be expanded in the future. It could be upgraded to create actual playlists of similar songs (with links to a music service app), to extend the database to contain other awards (like MTV Music Awards, Billboard Music Awards, etc.), to offer information about artists and the labels they are affiliated with, and even to store lyrics and by them, and so on.

1.2 ER diagram

Our project is built upon the following ER model. This model can be easily expanded and scaled as it is not in its final form.



1.3 User interaction with the system

1.3.1 What the user sees

- The user sees a list of awards to choose from.

- The user is also able to see the list of the winners of a specific award, and also if an artist they search for won an award or not.

- After the search he user will be able to see a list of recommendations based on the artist or on the music genre.

1.3.2 What actions can the user take

- The user can search for a specific award (in our drop-down list) and get a list of previous winners, if they do not specify the year. If they specify the year, only one result will show up.

- The user can search for an artist by his name, surname or band name and then see if they won an award, more awards or none and which awards were won in which year. Again, if they specify the year they are looking for, then only the relevant information for that year will show up.

- The same action as above can be taken but by searching by the title of the song, visual creation, or album.

- The user will have a button to request for recommendations: suggested songs, albums or artists that are similar to the ones that popped up as the result.

1.3.3 Action results

The results of the actions a user can do are the following:

- If the user chooses an award from our drop down list, it will result in a list of artists that won this award in the last years or in the mentioned year.

- One can get a list of awards won by the searched for artist/musical creation or a message saying that no prizes were awarded to the artist/artwork (that year or in general).

- According to the user's searches, they can be provided a list of musical recommendations based on genre or artist.

1.3.4 Illegal actions

Some illegal actions the user can possibly take are, for example, entering new types of awards, modifying the winning artist or artwork, or adding songs, albums, singers or bands to the database. By using SQL code injection technique (by illegally entering our system), the user can write an SQL statement that could possibly ruin the database. By writing different varieties of SQL statements, a hacker may delete all the information or add false data.