

Input Checking and Validating

For the add form, album name, artist name, a single, and year are required fields because all real albums have at least these four characteristics. Album, artist and song name are set to 34 characters because that is an appropriate length for such names and it fits the table cell. Most names would not go above maybe 30 characters. The year input is extensively checked. First it must be an integer and then if it is, it must be between 1973 and 2017, inclusive because Hip-Hop did not exist outside of this period. I allow special characters because artists take much liberty in their song/albums names and some artists' names contain special characters.

Duplicate entries are allowed. I made this decision because I realized that some albums have multiple Single hits and more importantly, they are often rereleased as special editions, or they may win multiple awards and certifications.

Sample Queries

Searched for:

- Certification: Platinum
- Awards: Grammy

Expected Result:

ALBUM NAME	ARIST	SINGLE	YEAR	RIAA	AWARDS
TO PIMP A BUTTERFLY	KENDRICK LAMAR	ALRIGHT	2015	PLATINUM	GRAMMY
COLORING BOOK	CHANCE THE RAPPER	NO PROBLEM	2016		GRAMMY

Should not result:

ALBUM NAME	ARIST	SINGLE	YEAR	RIAA	AWARDS
TO PIMP A BUTTERFLY	KENDRICK LAMAR	ALRIGHT	2015	PLATINUM	GRAMMY

Search

I conduct an and search because it seems most appropriate when user inputs multiple fields. For instance if a user inputs a specific artist and album, then the user is most likely looking for that specific album. It would not make sense then to output all the other albums by that artist. And searches cover for this.

Additional Notes

The WOW factor is a reset button that deletes the contents of the data.txt file containing album data. Be careful resetting because it will remove all past inputs. The user is extensively notified of search mistakes. For instance, if a user inputs a year before 1973 or after 2017, a message will pop up explaining that Hip-Hop did not exist then.