

Imagine you are building a program to manage a music library. Design a C++ program that demonstrates the concept of composition by creating classes for Song, Album, and Library.

1. Song Class:

- Create a class called Song with attributes like title, artist, and duration.
- Implement a constructor to initialize these attributes
- Include member functions to display song details.

2. Album Class:

Create a class called Album that contains a list of Song objects. Use composition to achieve this, where each Album object is composed of an array (or vector) of Song objects.

Implement a constructor for the Album class that takes the album's title and size of the song list as parameters. Initialize the song list accordingly.

Include member functions to:

- Add a song to the album's song list.
- Remove a song by title
- Display the details of all songs in the album.

3. Library Class:

Create a class called Library that holds a collection of Album objects. Again, use composition to achieve this, where each Library object is composed of an array (or vector) of Album objects.

Implement a constructor for the Library class that takes the library's name and size of the album list as parameters. initialize the album list accordingly.

Include member functions to

- Add an album to the library's album list.
- Remove an album by title.
- Display the details of all albums in the library.

4. Main Function:

In the main function, create instances of the Library class and add several albums to the library.

For each album, add multiple songs.

Demonstrate adding, removing, and displaying albums and songs using the Library and Album classes' member functions.

Note: Please use 'const' appropriately in both the programming question. Also, write the interface, implementation, and driver code in different files.