

JukeBox application

Problem

JukeBox application is intended to maintain a catalog of music albums by various musicians. The application should also maintain information about musicians, music and the relationships between musicians and music (i.e, who has sung/played which album).

You are required to a set of REST APIs that can be consumed by any UI/client application to retrieve information about artists and music albums & also to add new music albums, artist details.

Following information should be maintained by music albums

- Album name (Mandatory, Should be minimum 5 characters)
- Date of creation (Mandatory)
- Type of music
- Price (Mandatory, value between 100 to 1000)
- Description

Following information should be maintained by musicians

- Name (Mandatory, Should be minimum 3 characters)
- Musician type (either Vocalist or Instrumentalist)

Constraints

- A music album can be sung/played by one or more musicians
- A musician can contribute (sing or play) in multiple music albums

APIs to be Developed

Define Create the

- API to create music album records
- API to create musician records
- API to retrieve the list of Music albums by a musician sorted by Date of creation in ascending order (i.e Oldest first)
 - **Sorting should be done in the code and NOT at the Database level using SQL**
- API to retrieve the list of Music albums by a musician sorted by price in ascending order (i.e Lowest first)
 - **Sorting should be done at the Database level using SQL**
- API to retrieve the list of musicians for a music album sorted by musician's name

Evaluation Criteria:

- Completeness of Data model
- Number of APIs completed
- Problem solving ability
- Code Quality
- Adherence to coding standards
- Implementation of JUnit test cases and code coverage
- Effective use of Git repository, i.e., Task breakdown and Issue creation, Separate commits per task against issue.