Online music library project JEE implementation

You set out to revolutionise the world of music streaming by launching your own site.

On the home page of the site you can listen to the most popular songs of the month, i.e. those that have been listened to the most.
Optional: It also offers certain pieces under the name of "recommendations of the moment".

Access to the other features requires the user to authenticate with their client account, or create one if necessary.
To create a customer account, the user will need to enter the following information:
- civility
- name
- first name
- email address
- password
- password confirmation
- date of birth
- billing address
- preferred style of music (choose from the following musical genres : house, pop, metal, classical, jazz)

Once logged in, a user has access to the entire online music library.
He can select an item from the catalogue to listen to it, or add it to a playlist.
(we will not implement the audio playback functionality, just provide 2 "play" and "stop" buttons).
From his profile page, he can modify his personal information. *Optional: He can also manage his playlists: create/delete/rename a playlist.*

The application also makes it possible to update the content of the site.

Optional: To access the administration pages, you must first authenticate yourself.
The administration accounts are divided into 2 profiles:

- *customer manager profile: can modify customer information*
- • *music manager profile: can modify the information in the music library*

By default, any administrator has read-only access to all the

site information.

Music managers can create/modify/delete catalogue items.
The catalogue can contain the following elements (the
characteristics of each are specified):
- • Musical titles: title of the song, performer, year of creation, duration,
  musical genre...
- albums (composed of a set of titles): name of the album,
  interpreter, year, duration
- Podcasts: title, duration, author, category
- radio stations: name of the radio station, musical genre

Implement at least 2 of the 4 elements.

Optional: An item in the catalogue can be marked as
The "recommendation of the moment".
For statistical purposes, an administrator can consult a page listing the 10
most listened to titles for the current month, as well as the 10 users who have
listened to the most items in the library.

Technical specifications :

- java web application (jdk 11+)
- tomcat 9 server
- • mysql database (use the database provided for each team)
- use of java frameworks allowed provided that you can explain
  how they work

Deliverables expected :

- application packaged in war
- • procedure to install the application on a virgin environment
  containing a tomcat and mysql
- the application sources (access to a repo github, bitbucket, moodle...)
- technical report :
    - class diagram
    - data model: table structure and relationships between tables
    - explanation of the technical implementations of the
      different functionalities

Defense :

The project presentation will include :
- the global architecture of the application
- • a demo of the functionalities, explaining the important technical
  points

A 10' oral defense, during which all the members of
the team will express themselves.

Scoring of the JEE part :

Each project implementation will be graded by group. The elements taken into account in the evaluation are :

- the implementation of functionalities

- the quality of the code

- architecture

- the presence of all deliverables

- the quality of the technical report

- quality of the defense

-• bonus for optional features (but focus on basic features first)