

## Music App

A music store is providing services using a mobile app. The clients are able to view the available songs and add one or more of them to their list of favorites. The employees are able to manage the list of songs.

On the server side at least the following details are maintained:

- Id - the internal song id. Integer value greater than zero.
- Title - the song title. A string of characters representing the song title.
- Description - a short description. A string of characters.
- Album - the name of the album. A string of characters.
- Genre - the song genre. A string of characters.
- Year - the release year. Integer value.

The application should provide at least the following features:

- Client Section (separate activity - available offline too)
  - a. (1p) View the songs genres in a list. Using **GET /genres** call, the client will retrieve the list of available genres in the system. If offline, the app will display an offline message and a way to retry the connection and the call.
  - b. (1p) Using **GET /songs** call by specifying a genre retrieve the list of songs of that genre. Available online only.
  - c. (1p) From the list of songs the client can select a song to retrieve and display all the song details. Available online only.
  - d. (1p) From the details page the client can mark the current song as a favorite one.
  - e. (1p) View the list of his favorite song titles. The list is persisted on the device, on the local storage, available offline.
- Clerk Section (separate activity - available only online)
  - a. (1p) The list of songs ascending by album and title. The list will be retrieved using the same **GET /all** call. In this list along with the title, album and genre, the app will display the year also. Note that from the server you are retrieving an unsorted list.
  - b. (1p) Add a song. Using a **POST /song** call, by sending the song object a new song will be added to the store list, on success the server will return the song object with the id field set.
  - c. (1p) Delete a song. Using **DELETE /song** call, by sending a valid song id, the server will remove the song. On success 200 OK status will be returned.

(0.5p) On all server operations a progress indicator will be displayed.

(0.5p) On all server interactions, if an error message is received, the app should display the error message using a toast or snackbar. On all interactions (server or db calls), a log message should be recorded.