

## BIM222 – Internet Programming

### Homework 4

**Due Date: June 20, 2021**

In this homework, students are expected to create a single-page application to visualize music playlists for users. All technologies introduced during the course can be used in the development process of the application. *Students are also expected to provide a final progress report which presents their software.*

#### Simple Playlist Visualizer

You are required to develop a web application that is capable of processing JSON data files and presenting music playlists in these files. Please read the following instructions carefully:

- You are given some sample JSON files from the Million Playlist Dataset. Inspect the structure and content of these files. Your application must be able to process these files.
- The user should be able to select the file to be visualized. The system should only allow JSON files at this stage.
- Once the user chooses an input data, the system should dynamically read and process the file.
- The system should present playlists available in the data. The mandatory fields to show are playlist id, name, and number of tracks.
- The user should be able to select a playlist to view in more detail.
- The system should present the tracks in a selected playlist. The mandatory fields to show are track position, track name, artist name, and album name.
- OPTIONAL → You can decorate your application with actual album covers, artist profile pictures, and playable demos (and many other stuff) using the Spotify Web API<sup>1</sup>. However, this requires some more practice and experience. Thus, it is optional.

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<sup>1</sup> <https://developer.spotify.com/documentation/web-api/>

Your final progress report must have:

- Cover page (info about course, student, and project)
- Data description
- Application details
- Conclusion (brief summary of your effort in this homework)

**Please consider following warnings and reminders before your submission:**

- i.** This is not a group assignment; all work should be done individually.
- ii.** Any shared work between students will be graded as 0.
- iii.** All submissions should be done through Mergen<sup>2</sup>; any work sent by e-mail will not be taken into consideration.
- iv.** Submissions must be done within the announced deadlines; no late submissions will be available. Problems faced within the last 20 minutes of the homework deadline (due to any systematic error) will not be considered valid. Hence, it is recommended not to leave your homework submission to the last minutes.
- v.** Your submission must include every file necessary to run your project (e.g., source code, images, and videos) and a final progress report.

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<sup>2</sup> <https://mergen.anadolu.edu.tr/>