

Objective

The assignment is designed to allow the candidate to demonstrate their skills in requirements understanding, system analysis, software architecture, documentation research, and development. The task is kept intentionally open so the candidate can leverage his skills and preferences and adapt to the task's needs.

Necessary Technology should include but not be limited to

1. PostgreSQL Database
2. Postman
3. SpringBoot, Java 8+
4. Cache/In memory db

Task Overview (Library Archive)

- All the APIs should be functional via Postman
- There should be a swagger for APIs
- The database layer shall use PostgreSQL.
- Users should be able to sign up with a username and password
- Users should be able to sign in
- Users should be authenticated and authorized using a stateful JWT token
- Users should be able to get a refresh token
- Users should be able to create/update/read/delete authors
- Users should be able to create/update/read/delete books by author. One book may have multiple authors
- Users should be able to create/update/read/delete genres. One book may have multiple genres
- Users should be able to filter genre and/or author-specific books
- Users should be able to get genre and author by book name (this name may be partial)
- Users should be able to combine genre and author to get a book list
- Users should be able to see a report containing books added by period. This report should contain a book author and genre

Submission

Code preferably in a git repository

Call flow/API diagram

One should be able to run and test this project in a stand-alone fashion with minimum to no supervision.

Notes

The ideal way of completing this project should include clean code best practices and a clear demonstration of understanding the technology and architecture. Optionally, the consideration for scalability would be a great plus.