# **Technical Assignment**

You are required to develop a simple web application for managing a library's book inventory. The application should allow users to add, view, update, and delete books from the inventory. The front end should be developed using HTML, CSS, and JavaScript, and the backend should be implemented using Java, Spring, and Hibernate. The application should expose RESTful APIs for performing CRUD operations on the book inventory, and the data should be stored in a MySQL database. The application should be deployed with Docker.

#### **Data Requirements:**

It should be possible to manage books with the following data:

- Id
- Title
- Author
- ISBN
- Published date
- Price

## **Functional Requirements:**

Develop a REST API for CRUD operations on the book inventory:

- GET /api/books Retrieve a list of all books.
- GET /api/books/{id} Retrieve details of a specific book by ID.
- POST /api/books Add a new book.
- PUT /api/books/{id} Update an existing book by ID.
- DELETE /api/books/{id} Delete a book by ID.

Provide the following functionalities on the web interface:

- Display a list of all books.
- Add a new book.
- Update details of an existing book.
- Delete a book.

## **Deployment:**

- Deploy the application using Docker.
- Ensure that the application is accessible via a web browser.

#### **Deliverables:**

- Make all artifacts available via a private GIT repository, made available to us.
- Along with instructions for compiling, running and using the exercise.