

#### By:

- Jesús Garces
- Santiago Arboleda
- Juan Pablo Acevedo

## Introduction:

The React Task "Task 5" workshop is a continuation of the workshop held last time in the course, By:

- Jesús Garces
- Santiago Arboleda
- Juan Pablo Acevedo

### Introduction:

The React Task "Task 5" workshop is a continuation of the workshop held last time in the course, which is called "Task 4". The problem is the same with subtle differences, since it asks to develop an application using the BooksLibrary library that we developed in React that consumes the Spring Boot REST API developed in the previous workshop. To manage books and authors. Additionally, you must implement a

Authentication system using JWT (JSON Web Tokens)

# Step by Step:

The development of the system was divided into the following stages:

- Data Modeling: Classes were created to represent the books, perform data access operations, and perform business operations related to the books. Classes were created to represent the books, perform data access operations, and perform business operations related to the books. Also, a clean interface so that the user can feel satisfied with using the program.
- Controller Implementation: The Controller class was created to perform the actions of creating, editing, and listing books.
- Implementation of the views: The development of the system was divided into the following stages. The Controller class was created to perform the actions of creating, editing, and listing books.





• View Implementation: All HTML were created to display a list of all books, display details of a specific book, create a new book, delete an existing book, and edit an existing book respectively. Various components in the BooksLibrary folder were used for modularization of the application.

## **Achievements:**

- Correctly integrate JPA, configuring its necessary entities.
- Define respective relationships
- \* Creation of scripts for creating the initial schema and loading data into the database.
- Updated drivers and services to use JPA and DTO entities.
- \* Use of Jacoco to generate reports.

## **Difficulties encountered:**

- a) The integration of H2 with JWT, problems arose due to tokens but could be solved with a specific configuration in the configure method of the WebSecurityConfig class.
- b) Be able to store various users so that they can log in directly.

## **Conclusion:**

We felt it was a great activity that made us push our knowledge to the limit. Every moment was worked in a great way, and we are satisfied with our result. It is very gratifying to be able to combine the API with React, it was a magnificent process. Additionally, the use of Jacoco and the integration of H2 were great advances to maintain good quality in our program.