This project is a basic Spring Boot application designed to manage a collection of books in a library using RESTful APIs. It leverages technologies such as Spring Web, Spring Data JPA, and H2 Database for in-memory storage.

**🛠 Technologies Used**

* Java 17
* Spring Boot Framework
* Spring Web (for REST APIs)
* Spring Data JPA (for database operations)
* H2 Database (in-memory)
* Maven (for build and dependency management)

**▶️ Steps to Run the Application**

**🔧 Prerequisites**

Ensure the following tools are installed:

* Java JDK 17 or higher
* Maven
* VS Code (or any IDE with Java support)

**📂 Run Instructions**

1. Open **terminal** or **command prompt**.
2. Navigate to the project folder using:

bash

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cd library-management

1. Start the application with:

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./mvnw spring-boot:run

This will start the Spring Boot server on the default port 8080.

**📘 Available API Endpoints**

**➕ POST /books**

**Function:** Adds a new book to the library database.

**📝 Summary**

This project demonstrates the basic structure of a Spring Boot application with RESTful web services and JPA-based database operations. It is ideal for beginners looking to understand the integration of backend technologies for simple CRUD operations in Java.