

## 1. Introduction

### 1.1 Purpose/Project Proposal

The project for listing finished books is a Maven - Spring Boot MVC project. This Web project was developed using the Java software language. JDK 8 was used as the platform. In this project, MySQL Image was created using Docker. Tables were created in Localhost using SQL query language in Sequelpro. HQL query language is used for database query. Hibernate was used as an ORM tool.

The purpose of this project is to save the finished books in the system, including the name of the type and the name of the authors. It is provided to be recorded in the database simultaneously.

Mockito Framework and Integration tests were applied to test the project. Thymeleaf, which is quite easy to integrate with Spring Boot, was used in frontend development. The use of Thymeleaf is important because it is used intertwined with the HTML language. Also, CSS was used for visualization.

### 1.2 Software Language/ Project Environment

<b>Platform</b>	: Java Development Kit 8
<b>Framework</b>	: Spring Boot
<b>IDE</b>	: Eclipse
<b>Database</b>	: MySQL
<b>Query Language</b>	: SQL - HQL
<b>ORM Framework</b>	: Hibernate
<b>Frontend</b>	: Thymeleaf – HTML – CSS
<b>Java Servlet</b>	
<b>Container</b>	: Apache Tomcat
<b>Test Framework</b>	: Mockito – Integration
<b>Other Tools</b>	: Docker – Postman - Sublime Text



JAVA



SpringBoot



Apache Tomcat



HIBERNATE



POSTMAN



HTML5



RESTFUL



MAVEN



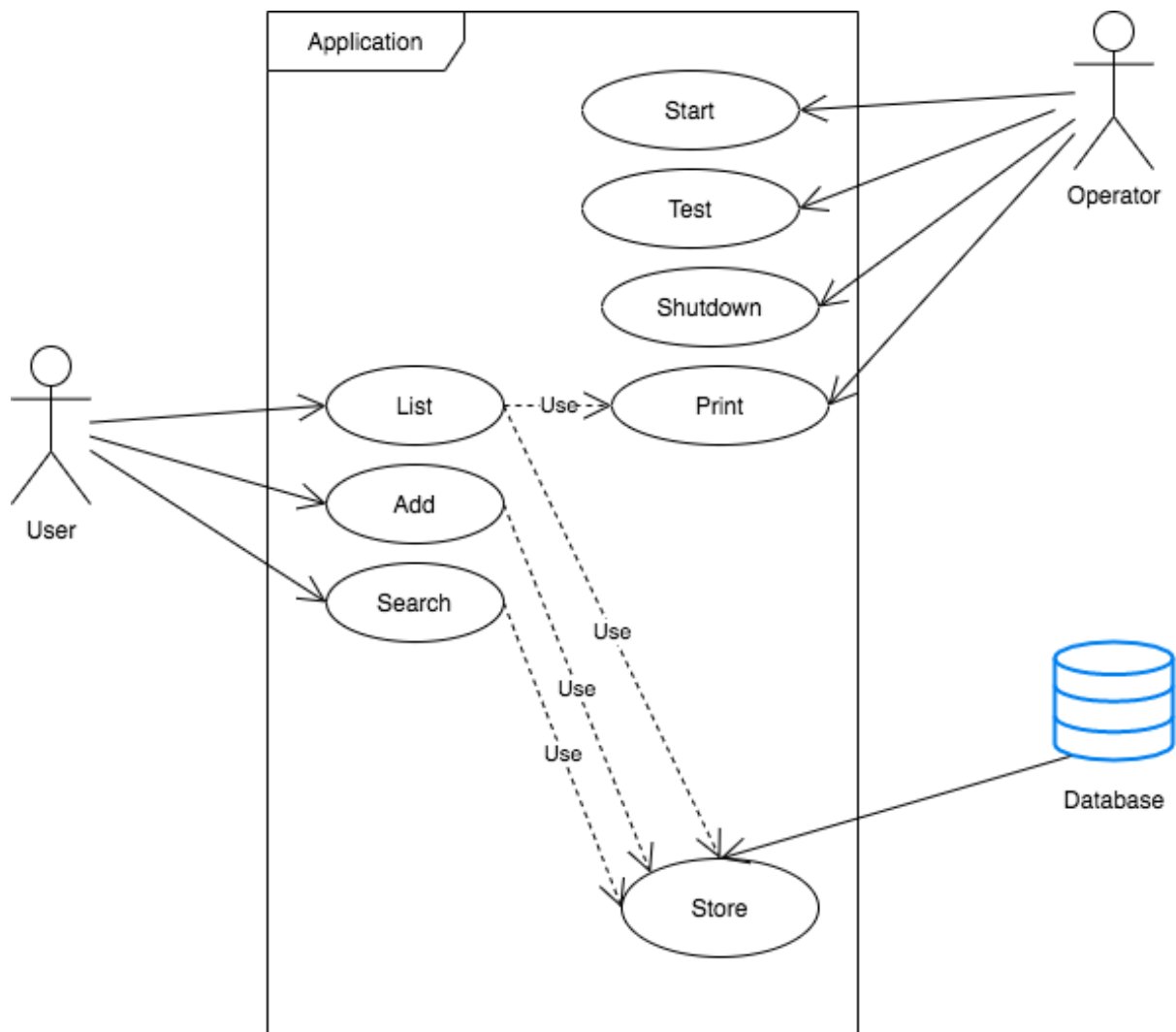
CSS



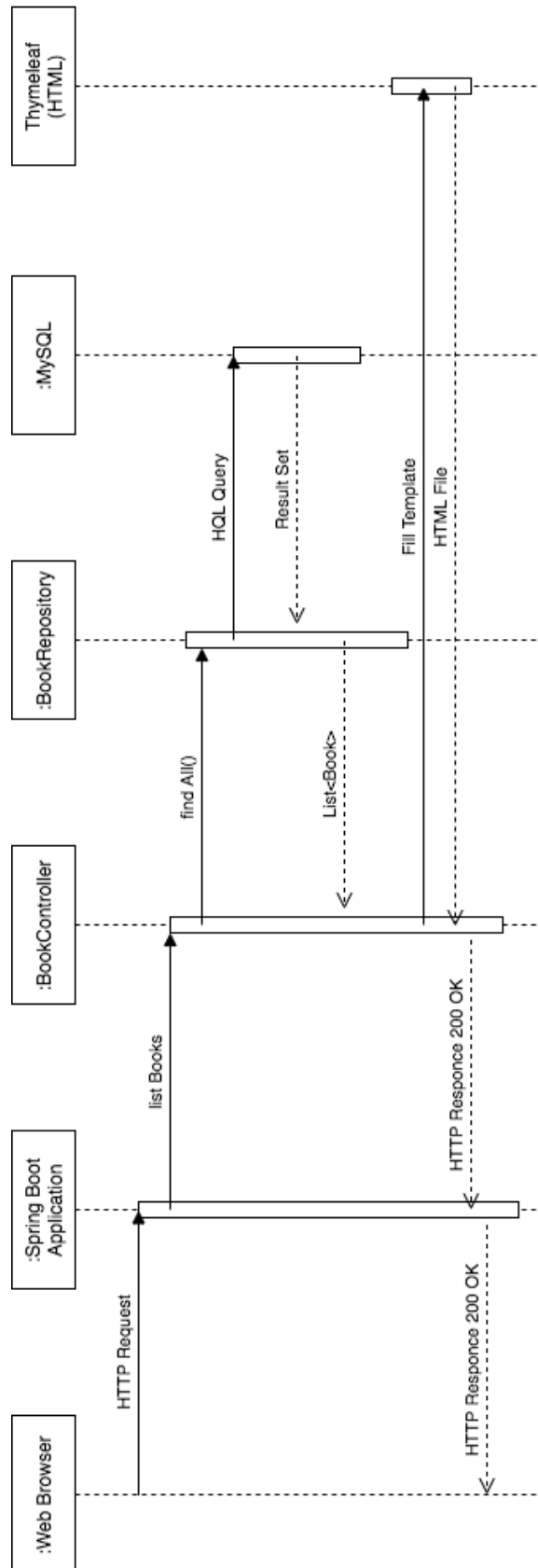
Unit testing with

mockito

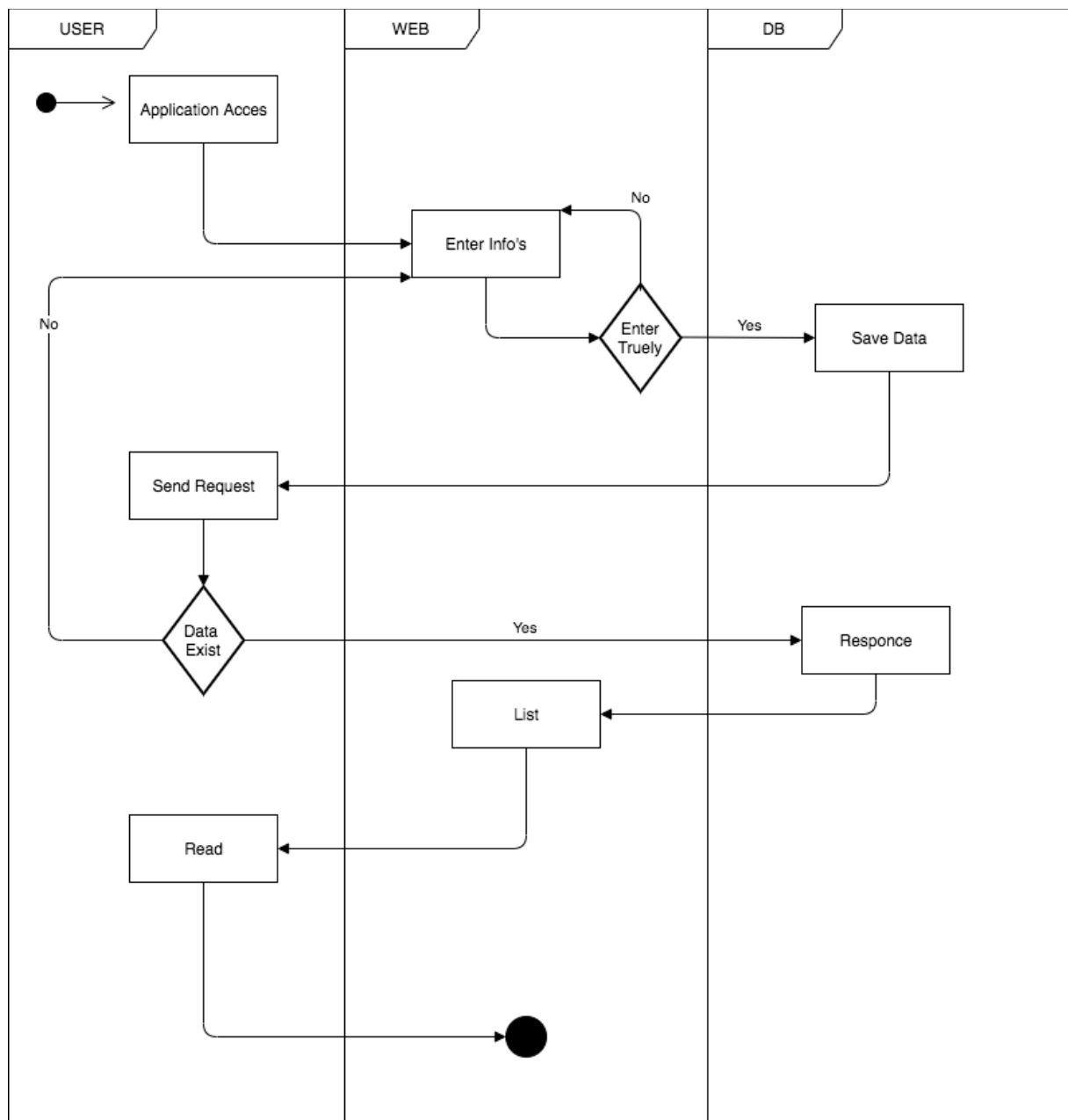
### 1.3 Use Case Diagram



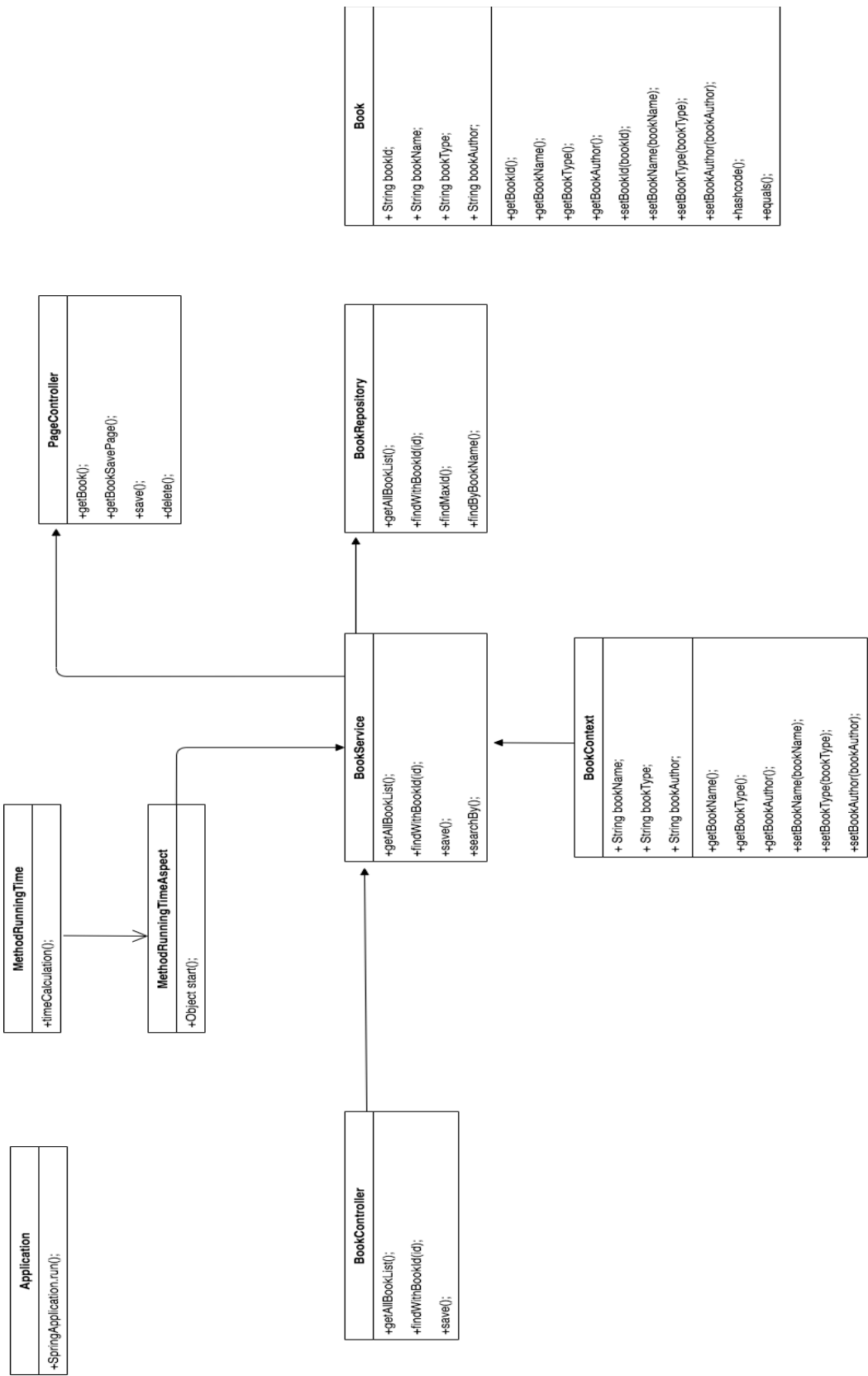
## 1.4 Sequence Diagram



## 1.5 Activity Diagram



# 1.6 Class Diagram



## 2. Software Architecture Patterns/Layers

