#### Spring MVC News Application Documentation

#### 1. Introduction

The Spring MVC News Application is a web-based news management system built using the Spring Boot framework. It provides functionalities to list news articles and add new articles to the system. Additionally, the application is secured using Spring Security.

# 2. Project Overview

The project will be developed using Spring Boot, Spring MVC, Spring Data JPA, and Spring Security. The application will use JSP (JavaServer Pages) for the user interface.

## 3. Tools and Technologies

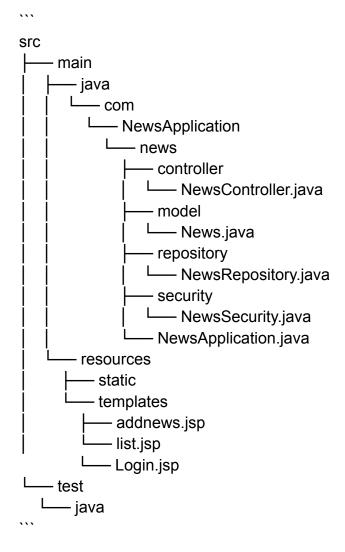
- Java 8 or later
- Spring Boot
- Spring MVC
- Spring Data JPA
- Spring Security
- Maven (for dependency management)
- IDE (Eclipse, IntelliJ IDEA, etc.)

### 4. Project Setup

### 4.1. Create a New Spring Boot Project

- 1. Open your preferred IDE (Eclipse, IntelliJ IDEA, etc.).
- 2. Create a new Spring Boot project.
- 3. Add the following dependencies:
  - Spring Web
  - Spring Data JPA
  - H2 Database
  - Spring Security

# 4.2. Project Structure



## 4.3. Dependencies

- Spring Boot Starter Web
- Spring Boot Starter Data JPA
- H2 Database
- Spring Boot Starter Security

### 5. Implementation

### 5.1. News Model

The News model represents a news article.

- \*\*Attributes:\*\*
  - id: Long (Primary Key)
  - category: Stringdescription: String

### 5.2. News Repository

The NewsRepository interface extends JpaRepository for CRUD operations on the News entity.

## 5.3. News Controller

The NewsController handles requests for listing news articles and adding new articles.

- \*\*List News:\*\*
  - GET '/list': Fetches and displays all news articles.
- \*\*Add News:\*\*
  - GET '/addnews': Displays the form to add a new news article.
  - POST '/addnews': Saves the new news article to the database.

#### 5.4. JSP Views

- \*\*list.jsp:\*\* Displays a list of all news articles.
- \*\*addnews.jsp:\*\* Form to add a new news article.

### 5.5. Spring Security Configuration

Spring Security is used to secure the application.

- \*\*NewsSecurity:\*\* Configures Spring Security for the application.
- 6. How to Run
- 1. Run the 'NewsApplication.java' file.
- 2. Access the application using the following URLs:
  - http://localhost:9000/list
  - http://localhost:9000/addnews

#### 7. Conclusion

The Spring MVC News Application provides a simple and efficient way to manage news articles. It offers basic functionalities such as listing news articles and adding new articles to the system. Additionally, it includes basic authentication using Spring Security.

This documentation provides a comprehensive overview of the project structure, implementation details, and how to run the application.