

Project using Spring Boot, Git, Swagger and Docker.

Scenario: Building and Deploying a "BookStore" Spring Boot API:

You're a backend developer at a company working on a **Book Store REST API** using Spring Boot. Your tasks include:

- Create a new application using Spring Boot taking help of **GitHub Copilot** which should cover CRUD Operation of Book Store REST API.
- Setting up version control with Git
- Documenting the API using Swagger
- Packaging and deploying the app using Docker

Questions:

1. You want to start a new Spring Boot project for the BookStore API.
2. You just started the BookStore project. How do you create a Git repository for it?
3. You want to track all your files. How do you add and commit everything with a message?
4. You are going to create a new feature to add books. How do you create a new Git branch?
5. Before pushing your changes, you want to ignore the build folder. What do you add in .gitignore?

```
target/
```

6. You finished the "add books" feature. How do you merge it into the main branch?
7. A teammate pushed changes to GitHub. How do you pull them into your local main branch?

8. You want to enable Swagger UI. What dependency do you add to your pom.xml?

```
<dependency>  
    <groupId>org.springdoc</groupId>  
    <artifactId>springdoc-openapi-starter-webmvc-ui</artifactId>  
    <version>2.5.0</version>  
</dependency>
```

9. After starting your app, which URL do you visit to view the Swagger UI?

10. How do you write a Dockerfile to build the BookStore app?

11. How do you build the Docker image?

12. How do you run the container so it listens on port 8080?

13. How do you list all running containers?

14. How do you deploy this Docker image to a cloud container registry?

15. Deploy the Spring Boot application on OpenShift Sandbox by using Git Repository.