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| How do I generate OpenAPI documentation for a Spring Boot application. |

Certainly! To generate OpenAPI documentation for a Spring Boot application, you can use the **springdoc-openapi** library. Here are the steps to set it up:

1. **Add the springdoc-openapi dependency** to your project. In your pom.xml file, include the following Maven dependency:

**XML**AI-generated code. Review and use carefully. [More info on FAQ](https://www.bing.com/new#faq).

<dependency>

<groupId>org.springdoc</groupId>

<artifactId>springdoc-openapi-starter-webmvc-ui</artifactId>

<version>2.2.0</version>

</dependency>

[This version is compatible with Spring Boot 3.x1](https://www.baeldung.com/spring-rest-openapi-documentation).

1. **Define your API documentation** using OpenAPI annotations. Annotate your controllers, methods, and models with OpenAPI annotations to describe your API endpoints, request/response formats, and other relevant details.
2. **Access the generated documentation**:
   * By default, the OpenAPI descriptions are available at the path /v3/api-docs. You can access them at http://localhost:8080/v3/api-docs.
   * To customize the path, set the springdoc.api-docs.path property in your application.properties file. For example:
   * springdoc.api-docs.path=/api-docs

Now you can access the docs at http://localhost:8080/api-docs.

1. **Integrate with Swagger UI**:
   * The springdoc-openapi library includes Swagger UI, which allows you to interact with your API specification and exercise the endpoints.
   * Access the Swagger UI at http://localhost:8080/swagger-ui/index.html.
2. **Additional Swagger UI properties**:
   * You can customize the Swagger UI behavior using properties like springdoc.swagger-ui.path and springdoc.swagger-ui.operationsSorter.
   * For example, to change the path of your API documentation, modify the springdoc.swagger-ui.path property:
   * springdoc.swagger-ui.path=/swagger-ui-custom.html

Now your API documentation will be available at http://localhost:8080/swagger-ui-custom.html.

1. **Sample API**: Suppose you have a controller for managing books:

**Java**AI-generated code. Review and use carefully. [More info on FAQ](https://www.bing.com/new#faq).

@RestController

@RequestMapping("/api/book")

public class BookController {

@Autowired

private BookRepository repository;

@GetMapping("/{id}")

public Book findById(@PathVariable long id) {

return repository.findById(id)

.orElseThrow(() -> new BookNotFoundException());

}

@GetMapping("/")

public Collection<Book> findBooks() {

return repository.getBooks();

}

@PutMapping("/{id}")

@ResponseStatus(HttpStatus.OK)

public Book updateBook(@PathVariable("id") final String id, @RequestBody final Book book) {

return book;

}

}

This controller will be documented automatically by springdoc-openapi based on the annotations you’ve added.

Remember to replace the example paths and URLs with your actual application details. [Happy documenting! 📄🚀1](https://www.baeldung.com/spring-rest-openapi-documentation)[2](https://fullstackcode.dev/2022/06/26/spring-boot-rest-api-documentation-with-springdoc-openapi/).

Learn more:

[1. baeldung.com](https://www.baeldung.com/spring-rest-openapi-documentation)[2. fullstackcode.dev](https://fullstackcode.dev/2022/06/26/spring-boot-rest-api-documentation-with-springdoc-openapi/)[3. asbnotebook.com](https://asbnotebook.com/spring-boot-openapi-3-example/)[4. bing.com](https://bing.com/search?q=how+to+generate+OpenAPI+documentation+for+a+Spring+Boot+application)[5. howtodoinjava.com](https://howtodoinjava.com/spring-boot/springdoc-openapi-rest-documentation/)[6. baeldung.com](https://www.baeldung.com/spring-boot-openapi-api-first-development)[7. springdoc.org](https://springdoc.org/)[8. github.com](https://github.com/EvadS/SeSpringBootLearning/tree/1c2a3a2d85ec2ea311a83218c5dd9e1e59a1efb6/spring-documentation%2FopenApi3%2Fgradle%2Fopen-api-3-demo%2Fsrc%2Fmain%2Fjava%2Fcom%2Fse%2Fsample%2FBookController.java)[9. github.com](https://github.com/ZaraDeveloper/Tutorial/tree/91b0ceaf9a8d0e6842005b886a4e1db2687bcd5a/spring-boot-modules%2Fspring-boot-springdoc%2Fsrc%2Fmain%2Fjava%2Fcom%2Fbaeldung%2Fspringdoc%2Fcontroller%2FBookController.java)[10. github.com](https://github.com/vipinsharma26/youtube-codes/tree/a72971124069ea238e1869b731199a420cc3212c/tutorials-master%2Fspring-rest-simple%2Fsrc%2Fmain%2Fjava%2Fcom%2Fbaeldung%2Fweb%2Fcontroller%2FBookController.java)+8 more