

Swagger Documentation & Open API



Presented By



Open API & Swagger

- OpenAPI: A specification for defining APIs in a standardized format, formerly known as Swagger Specification.
- Swagger: An open-source toolset for designing, building, documenting, and consuming RESTful APIs.
- Swagger UI: A tool to generate interactive API documentation .
- ** It is not code, it is testing deliverable
- Swagger specifically deals with the Web API.

API Definition File / Document

- API Definition File / Document is a file(usually of a web page i.e., a HTML file) that contains all information about RESFful services of an application.
- This file contains the following details:
 - Server location
 - All the available resources in that API.
 - All the different data that can be sent in a request.
 - What data is returned.
 - What HTTP status codes can be returned

How Web API Works?

- The request sent to the web server is known as an API request.
- The web server will send the response known as API response
- The server will only send the data, not the whole web page.
- It is the responsibility of the app to display the web page.

Benefits of Using OpenAPI/Swagger

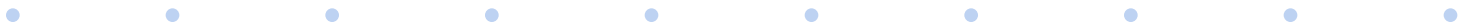
- Standardization: Consistent API documentation across projects.
- Interactivity: Enables interactive exploration and testing of APIs.
- Automation: Code generation reduces manual coding effort.

Swagger Dependencies

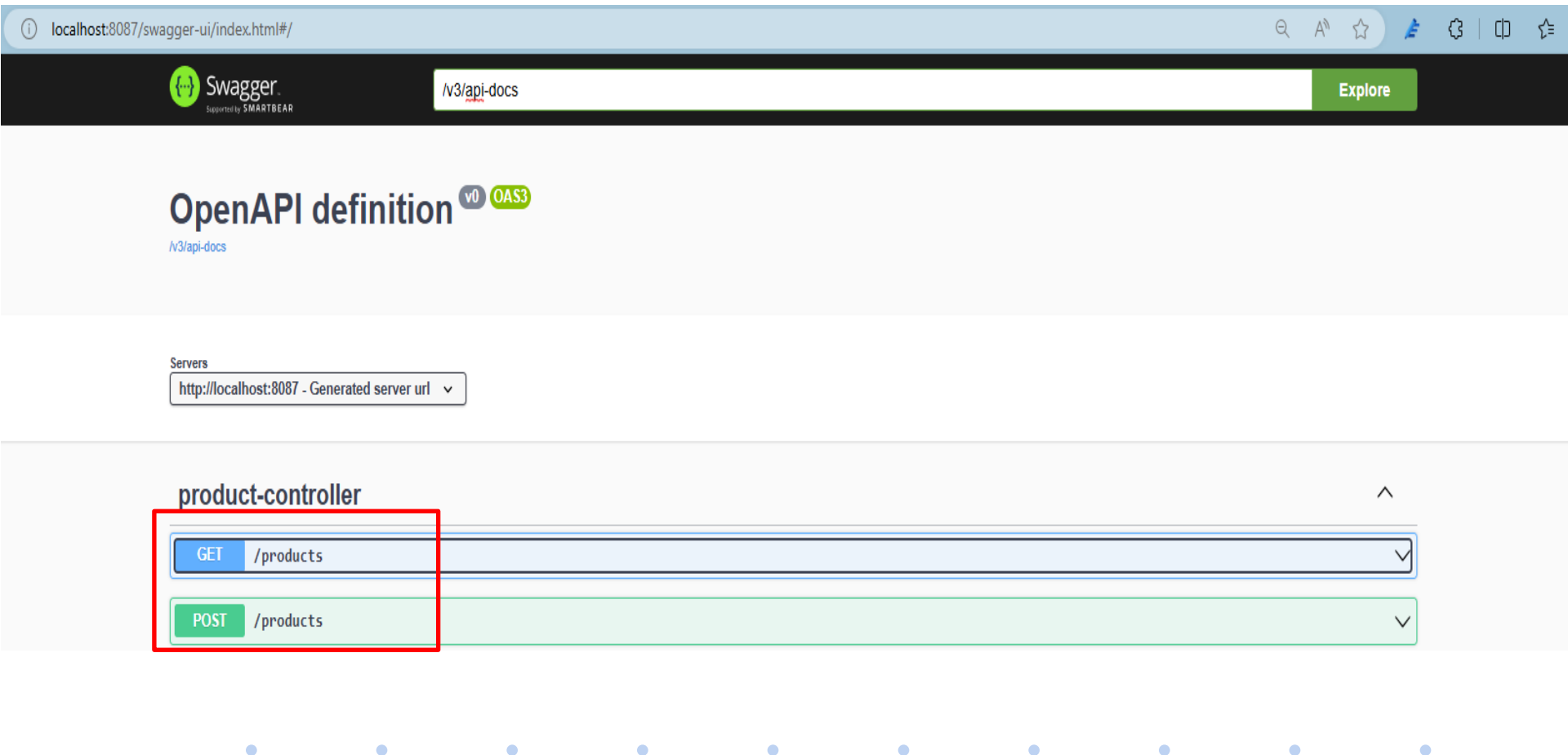
```
<dependency>
  <groupId>org.springdoc</groupId>
  <artifactId>springdoc-openapi-ui</artifactId>
  <version>1.6.4</version>
</dependency>

<dependency>
  <groupId>io.springfox</groupId>
  <artifactId>springfox-swagger2</artifactId>
  <version>2.7.0</version>
</dependency>

<dependency>
  <groupId>io.springfox</groupId>
  <artifactId>springfox-swagger-ui</artifactId>
  <version>2.7.0</version>
</dependency>
```



Swagger UI on Browser



Swagger UI on Browser ...

The screenshot displays the Swagger UI interface in a web browser. The address bar shows the URL `localhost:8087/swagger-ui/index.html#/product-controller/getProducts`. The Swagger logo and version `v0 OAS3` are visible. The `product-controller` section is expanded, showing the `GET /products` endpoint. The `Parameters` tab is selected, indicating no parameters are present. The `Responses` tab shows a successful response with status code `200`. The response body is highlighted with a red box and contains the following JSON array:

```
[
  "Mobile Phone",
  "Tab PC",
  "Vacuum Cleaner"
]
```

Below the response body, there are icons for copying and downloading the response.

** Demo

