

## Swagger UI



- **Swagger UI** is a powerful tool for documenting and **testing RESTful APIs**. It provides an interactive web-based interface that makes it easy for developers to understand and explore APIs.

**Swagger (now known as OpenAPI)** is a specification for documenting REST APIs.

With **Springdoc OpenAPI, Swagger** docs are auto-generated from your Spring Boot app — so clients can test endpoints via a web UI.

### What is Swagger UI?

**Swagger Ui** is a part of the Swagger system, which provides a set of tools for **designing, building, and documenting RESTful APIs**. Swagger UI is specifically designed for API documentation. It generates a user-friendly, interactive documentation interface based on your API's **OpenAPI (formerly known as Swagger) specification**.

### Features of Swagger UI

1. An interactive interface for API exploration and also for testing API's.

2. Clear and easy-to-read documentation.
3. Built-in support for various API authentication methods.
4. Automatic generation of API client SDKs.
5. Integration with various programming languages and also with frameworks.

## Use of Swagger UI

**Swagger UI** is a versatile tool that can be used for various use cases related to API development and documentation. Here are some common use cases for Swagger UI:

- **API Documentation:** Swagger UI is primarily used to create interactive and user-friendly documentation for your **RESTful APIs**. It allows developers, testers, and consumers to understand the endpoints, parameters, request and response structures, and authentication methods of an API.
- **API Testing:** Swagger UI provides an interactive interface for testing APIs. Users can make real API requests and see the responses directly within the **Swagger UI interface**. This is useful for both API development and quality assurance.
- **Integration with API Gateways:** **Swagger UI** can be used in conjunction with API gateways and management tools.

By providing a well-documented API through **Swagger UI**, API gateways can enforce policies, rate limits, and security measures while developers still have easy access to documentation.