# **What is Swagger?**

# Swagger is an open-source tool to develop REST APIs, interact with APIs, and mainly to generate **documentation** for REST APIs.

## **Why we need documentation for REST API?**

The API documentation is a technical content deliverable containing instructions about how to effectively use and integrate with an API.

It’s a reference manual containing all the information required to work with the API, with details about the endpoints, functions, classes, return types, arguments, etc.

## **How Can Swagger be used to documenting APIs?**

Swagger allows developers or Programmers to add the metadata to the API application and then generates documentation in various forms like JSON, YAML and [HTML](https://medium.com/javarevisited/5-free-html-and-css-courses-to-learn-front-end-web-development-online-8b04517c6ecb?source=collection_home---4------0-----------------------). Developers do not need to update the documentation. So Swagger will takes care.

**About YAML:**

**Note**: [https://www.redhat.com/en/topics/automation/what-is-yaml#:~:text=YAML%20is%20a%20data%20serialization,is%20for%20data%2C%20not%20documents](https://www.redhat.com/en/topics/automation/what-is-yaml" \l ":~:text=YAML is a data serialization,is for data%2C not documents).

**What are the things we needed to work with Springboot REST API and Swagger tool**

=> **Dependencies**

**For Swagger:**

*<dependency>*

*<groupId>io.springfox</groupId>*

*<artifactId>springfox-swagger2</artifactId>*

*<version>2.4.0</version>*

*</dependency>*

*<dependency>*

*<groupId>io.springfox</groupId>*

*<artifactId>springfox-swagger-ui</artifactId>*

*<version>2.4.0</version>*

*</dependency>*

*<dependency>*

*<groupId>org.springdoc</groupId>*

*<artifactId>springdoc-openapi-ui</artifactId>*

*<version>1.6.9</version>*

*</dependency>*

**For Springboot REST API:**

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-data-jpa</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-test</artifactId>

<scope>test</scope>

</dependency>

**For H2 database or MySQL or MongoDB:**

<dependency>

<groupId>com.h2database</groupId>

<artifactId>h2</artifactId>

</dependency>

**Or**

<dependency>

<groupId>com.mysql</groupId>

<artifactId>mysql-connector-j</artifactId>

<scope>runtime</scope>

</dependency>

**Or**

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-data-mongodb</artifactId>

</dependency>

Note: use the below given link to open swagger documentation for your REST API application,

**URL:** http://localhost:8080/swagger-ui/index.html