Postman and Swagger Demo

SWEN 343: Engineering of Enterprise Software Systems

Department of Software Engineering Rochester Institute of Technology

Swagger Overview

- It is an Open API description for REST API's
- Swagger is an Interface for describing RESTful APIs expressed using JSON.
- ▶ It can be used by various tools to automate API-related processes.
- It can be used to share documentation among product managers, testers and developers

Steps to run the project

Make sure you have Maven and Java installed on your system.

If it's already installed then run the below commands:

- mvn clean install
- mvn spring-boot:run

After running the above command you will see tomcat gets started on port 8080 as shown in the right



2022-02-15 11:30:29.086	INFO 39839 [main]	e.r.r.RestswaggerdemoApplication	Starting RestswaggerdemoApplication using Java 17 on sandeeps-mbp.wireless.
rs/sandeepkaur/Downloads	/restswaggerdemo/i	target/classes si	tarted by sandeepkaur in /Users/sandeepkau	ur/Downloads/restswaggerdemo)
2022-02-15 11:30:29.087	INFO 39839 [main]	e.r.r.RestswaggerdemoApplication	: No active profile set, falling back to default profiles: default
2022-02-15 11:30:29.457	INFO 39839 [main]	o.s.b.w.embedded.tomcat.TomcatWebServer	: Tomcat initialized with port(s): 8080 (http)
2022-02-15 11:30:29.461	INFO 39839 [main]	o.apache.catalina.core.StandardService	: Starting service [Tomcat]
2022-02-15 11:30:29.461	INFO 39839 [main]	org.apache.catalina.core.StandardEngine	: Starting Servlet engine: [Apache Tomcat/9.0.56]
2022-02-15 11:30:29.487	INFO 39839 [main]	o.a.c.c.C.[Tomcat].[localhost].[/]	: Initializing Spring embedded WebApplicationContext
2022-02-15 11:30:29.487	INFO 39839 [main]	w.s.c.ServletWebServerApplicationContext	: Root WebApplicationContext: initialization completed in 382 ms
2022-02-15 11:30:29.696	INFO 39839 [main]	o.s.b.w.embedded.tomcat.TomcatWebServer	: Tomcat started on port(s): 8080 (http) with context path ''
2022-02-15 11:30:29.696	INFO 39839 [main]	d.s.w.p.DocumentationPluginsBootstrapper	Context refreshed
2022-02-15 11:30:29.702	INFO 39839 [main]	d.s.w.p.DocumentationPluginsBootstrapper	: Found 1 custom documentation plugin(s)
2022-02-15 11:30:29.704	INFO 39839 [main]	s.d.s.w.s.ApiListingReferenceScanner	: Scanning for api listing references
2022-02-15 11:30:29.747	INFO 39839 [main]	e.r.r.RestswaggerdemoApplication	: Started RestswaggerdemoApplication in 0.842 seconds (JVM running for 0.968)

Swagger Homepage

http://localhost:8080/swagger-ui.html#/

	← → C ☆ ③ localhost:8080/swagger-ui.html#/	û 🕁 📴
	🗰 Apps 🗎 Study Material 👩 Mail - sandeep.ka 🗎 csx 🗎 Data Structure 🗎 OWB 🚺 NDTV 24x7: Wa	atc 🗎 NPI Flex 📋 LRP 📋 RIT 📋 EAWS 🗎 SWEn-601 🗎 Cloud comuting
	🕀 swagger	default (/v2/api-docs) ♥ api_key Explore
	REST Swagger Demo "Swagger configuration for application "	
Name of the Controller	student-controller : Student Controller	Show/Hide List Operations Expand Operations
	POST /student/create	saveUser
All the REST API's handled	DELETE /student/delete/{userid}	deleteUserById
by mis connolion	GET /student/fetch/{useriu}	Returns all students
There is Just one controller in this example. In real applications there are many	[base url; / , api version: 1.1.0]	
controllers		

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POST request

POST /stude	nt/create		
Response Clas OK Model Model S	s (Status 200) Schema		
<pre>{ "country": "firstname" "lastname" "studentId "zipCode": } Response Conte Parameters</pre>	<pre>"string", ": "string", : "string", ": "string", "string"</pre>		Response after hitting the API
Parameter	Value	Description	
user	<pre>{ "country": "United States", "firstname": "Kenn", "lastname": "Martinez", "studentId": "01", "zipCode": "14623" } Parameter content type: application/json ~</pre>	user	



GET Request

	GET /student/f	etch/{userid}					
	Response Class (Status 200) OK Model Model Schema						
Response Model Structure	<pre> "country": "string", "firstname": "string", "lastname": "string", "studentId": "string", "zipCode": "string" } Response Content Type */* Parameters </pre>						
Request	Parameter Val	ue		Description	Parameter Type	Data Type	
Param	userid 01			userid	path	string	
	Response Message	25					
	HTTP Status Code	Reason Response Model		del			
	401	Unauthorized					
	403	Forbidden					
	404	Not Found					
button	Try it out! Hide Re	<u>sponse</u>					

Delete Request

Required Request Param

DELETE /studen	nt/delete/{studentid}			Response Body
Response Class	s (Status 200)			Response body
Response Conte	nt Type 🔭			Deleted Successfully
Parameters			Response	
Parameter	Value	Description	after	
studentid	(required)	studentid	the API	Response Code
Response Mess	sages			200
HTTP Status Code	Reason	Response Model		
204	No Content			
401	Unauthorized			
403	Forbidden			
Try it out!				

Postman Overview

Postman is an API client which makes easier for developers to create, share, test and document APIs.

It allows users to create and save simple and complex HTTP/s requests, as well as read their responses

GET Request



	GET V http://localhost:8080/stu	Different Formats				
	Key	Value	Description			
Make sure	studentId	01		JSON 🗸		
checked	New key	Value				
	Authorization Headers (1) Body	Authorization Headers (1) Body Pre-request Script Tests				
	Туре	No Auth 🗸		XML		
	Body Cookies Headers (5) Test	Results	Status	я: 200 ОК HTML		
	Pretty Raw Preview JSON 🗸			Text		
Response In JSON	<pre>1 + { 2 "firstname": "Kenn", 3 "lastname": "Martinez", 4 "country": "US"</pre>			Auto		
format	5 "zipCode": "14623", 6 "studentId": "01" 7 }					

Post Request



