

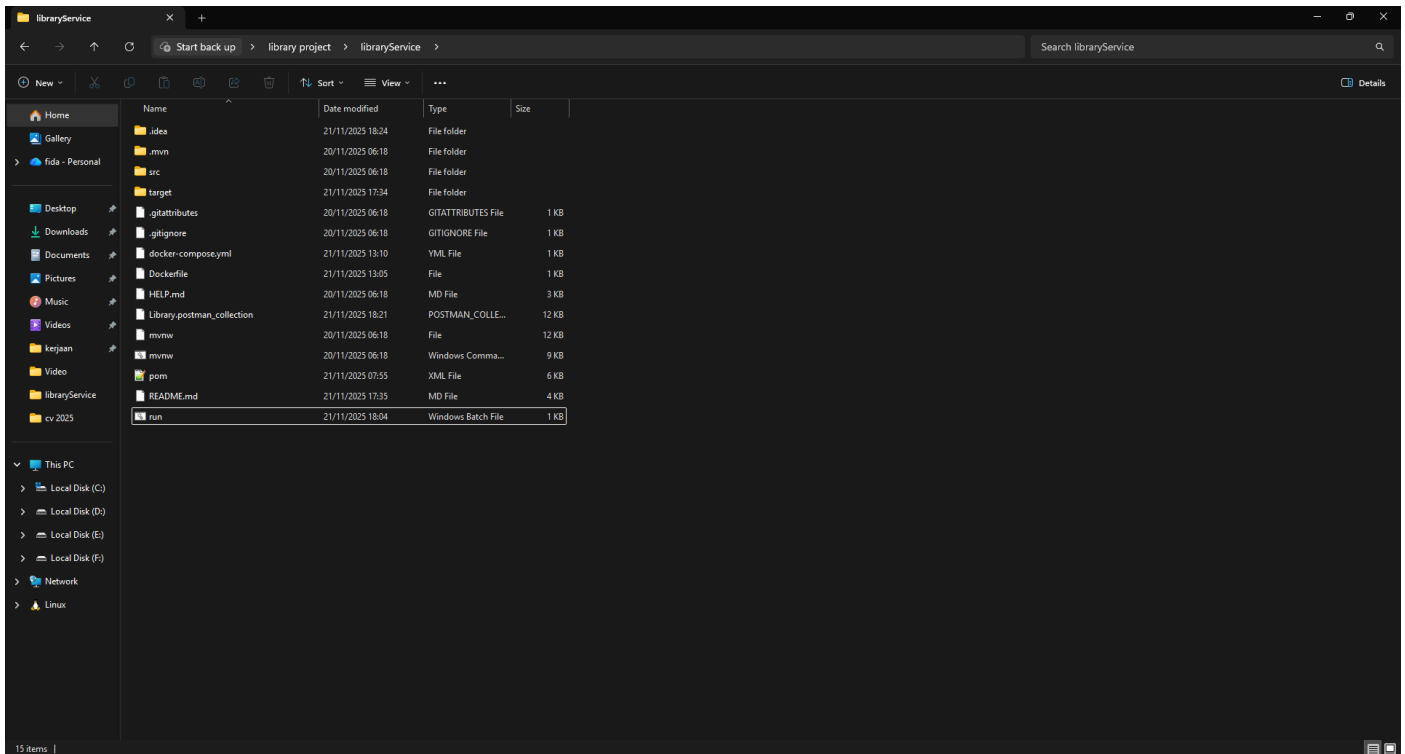
Library Service App Documentation

This project includes a README.md file that contains the project specifications, as well as a Library.postman_collection file for testing the APIs using Postman.

How To Run

Make sure already install docker and running it
or you can download on <https://www.docker.com/products/docker-desktop>

Open the project then double click on file run.bat



Or install the app first on command prompt by using (Optional because the app already installed)

.\mvnw clean package -DskipTests

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.26100.7171]
(c) Microsoft Corporation. All rights reserved.

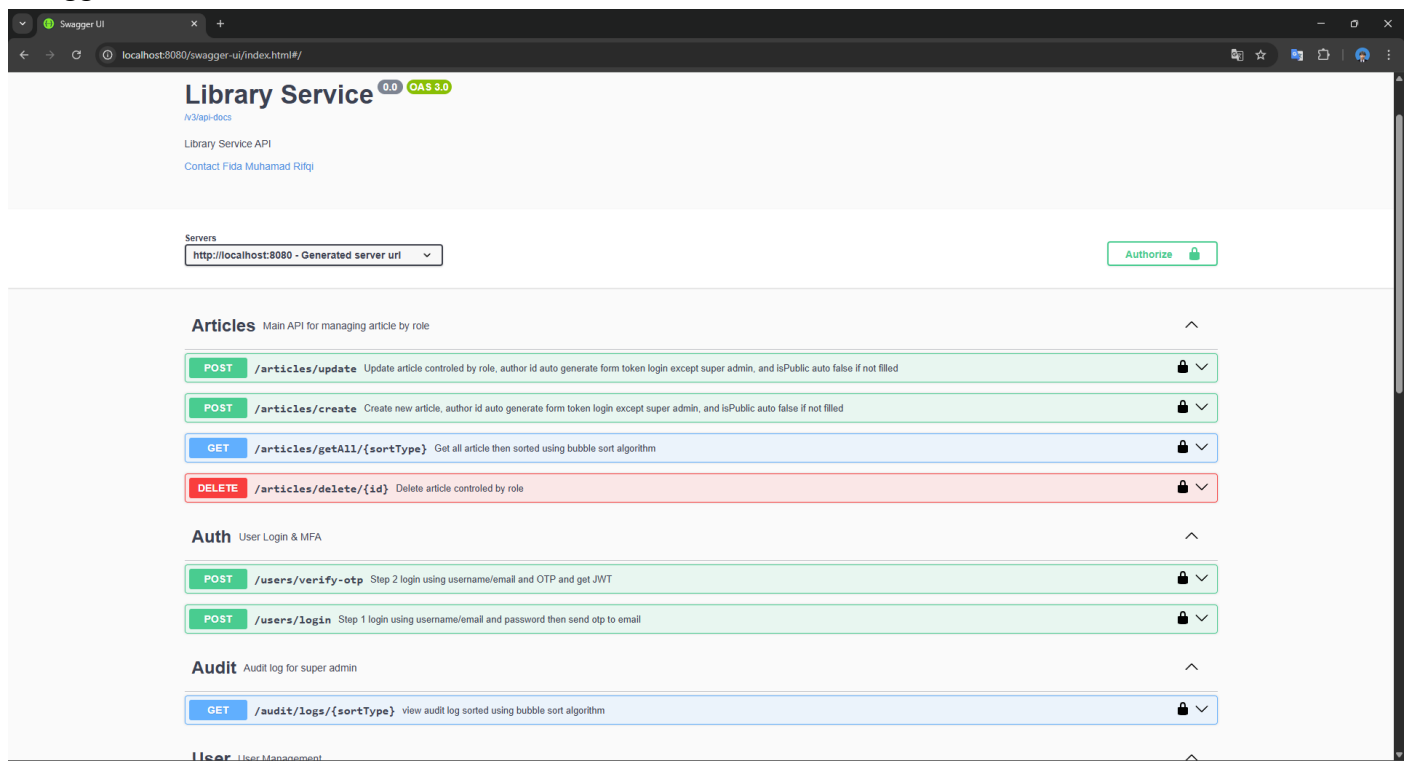
C:\Users\S05\Desktop\Library project\LibraryService>.\mvnw clean package -DskipTests
[INFO] Scanning for projects...
[WARNING]
[WARNING] Some problems were encountered while building the effective model for com.library:library-service:jar:0.0.1-SNAPSHOT
[WARNING] 'dependencies.dependency.(groupId:artifactId:type:classifier)' must be unique: org.springframework.boot:spring-boot-starter-mail:jar -> duplicate declaration of version (?) @ line 87, column 21
[WARNING]
[WARNING] It is highly recommended to fix these problems because they threaten the stability of your build.
[WARNING]
[WARNING] For this reason, future Maven versions might no longer support building such malformed projects.
[WARNING]
[INFO]
[INFO] -----< com.library:library-service >-----
[INFO] Building library-service 0.0.1-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- clean:3.4.1:clean (default-clean) @ library-service ---
[INFO] Deleting C:\Users\S05\Desktop\Library project\LibraryService\target
[INFO]
[INFO] --- resources:3.3.1:resources (default-resources) @ library-service ---
[INFO] Copying 1 resource from src/main/resources to target/classes
[INFO] Copying 0 resource from src/main/resources to target/classes
[INFO]
[INFO] --- compiler:3.14.1:compile (default-compile) @ library-service ---
[INFO] Recompiling the module because of changed source code.
[INFO] Compiling 49 source files with javac [debug parameters release 21] to target\classes
[INFO]
[INFO] --- resources:3.3.1:testResources (default-testResources) @ library-service ---
[INFO] skip non existing resourceDirectory C:\Users\S05\Desktop\Library project\LibraryService\src\test\resources
[INFO]
[INFO] --- compiler:3.14.1:testCompile (default-testCompile) @ library-service ---
[INFO] Recompiling the module because of changed dependency.
[INFO] Compiling 17 source files with javac [debug parameters release 21] to target\test-classes
[INFO]
[INFO] --- surefire:3.5.4:test (default-test) @ library-service ---
[INFO] Tests are skipped.
[INFO]
[INFO] --- jar:3.4.2:jar (default-jar) @ library-service ---
[INFO] Building jar: C:\Users\S05\Desktop\Library project\LibraryService\target\library-service-0.0.1-SNAPSHOT.jar
[INFO]
[INFO] --- spring-boot:3.5.7:repackage (repackage) @ library-service ---
[INFO] Replacing main artifact C:\Users\S05\Desktop\Library project\LibraryService\target\library-service-0.0.1-SNAPSHOT.jar with repackaged archive, adding nested dependencies in BOOT-INF/.
[INFO] The original artifact has been renamed to C:\Users\S05\Desktop\Library project\LibraryService\target\library-service-0.0.1-SNAPSHOT.jar.original
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 8.043 s
[INFO] Finished at: 2025-11-21T19:03:48+07:00
```

After the build success you can run the app by using file run or using command
docker compose up --build

```
C:\Users\S05\Desktop\Library project\LibraryService>docker compose up --build
time="2025-11-21T19:04:07.09" level=warning msg="C:\Users\S05\Desktop\Library project\LibraryService\docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Building 8.1s (11/11) FINISHED
=> [internal] load local bake definitions
=> => reading from stdin 568B 0.0s
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 197B 0.0s
=> [internal] load metadata for docker.io/library/eclipse-temurin:21-jdk-jammy 2.4s
=> [auth] library/eclipse-temurin:pull token for registry-1.docker.io 0.0s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [1/3] FROM docker.io/library/eclipse-temurin:21-jdk-jammy@sha256:81ad1240d91eeafelab4154e9ed2310b67cb966caad1d235232ae10abcb1fae2 0.0s
=> => resolve docker.io/library/eclipse-temurin:21-jdk-jammy@sha256:81ad1240d91eeafelab4154e9ed2310b67cb966caad1d235232ae10abcb1fae2 0.0s
=> [internal] load build context 2.7s
=> => transferring context: 73.2MB 2.7s
=> CACHED [2/3] WORKDIR /LibraryApp 0.0s
=> [3/3] COPY target/*.jar LibraryApp.jar 0.3s
=> => exporting to image 2.5s
=> => exporting layers 2.0s
=> => exporting manifest sha256:d86ec8a53921efd9163581ba7283827d3ad97f31a4bf827705b501d7030b473f 0.0s
=> => exporting config sha256:5ee17c88b3932c6bb3606a4ac2868e88165af2ec9ddbe10c52e6a3e1d133b817 0.0s
=> => exporting attestation manifest sha256:cf344c99b365b1c456e8cab87fccb34abae899eece3c09b08e867de64a0c21617 0.0s
=> => exporting manifest list sha256:eac09dd0a66e0d9fab92877b07bcf996ed03c53a966a7eb439986212a9998a0 0.0s
=> => naming to docker.io/library/libraryservice-app:latest 0.0s
=> => unpacking to docker.io/library/libraryservice-app:latest 0.4s
=> => resolving provenance for metadata file 0.0s
[+] Running 2/2
✔ Libraryservice-app Built 0.0s
✔ Container library-service Recreated 0.2s
Attaching to library-service, postgres-local, redis-local
postgres-local | PostgreSQL Database directory appears to contain a database; Skipping initialization
postgres-local |
redis-local | 1:C 21 Nov 2025 12:06:09.376 * o00o000o00o00o Redis is starting o00o000o00o00o
redis-local | 1:C 21 Nov 2025 12:06:09.376 * Redis version=7.4.7, bits=64, commit=00000000, modified=0, pid=1, just started
redis-local | 1:C 21 Nov 2025 12:06:09.376 * Configuration loaded
redis-local | 1:M 21 Nov 2025 12:06:09.377 * monotonic clock: POSIX clock_gettime
redis-local | 1:M 21 Nov 2025 12:06:09.380 * Running mode=standalone, port=6379.
redis-local | 1:M 21 Nov 2025 12:06:09.381 * Server initialized
redis-local | 1:M 21 Nov 2025 12:06:09.383 * Reading RDB base file on AOF loading...
redis-local | 1:M 21 Nov 2025 12:06:09.383 * Loading RDB produced by version 7.4.7
redis-local | 1:M 21 Nov 2025 12:06:09.383 * RDB age 113727 seconds
redis-local | 1:M 21 Nov 2025 12:06:09.383 * RDB memory usage when created 0.90 Mb
redis-local | 1:M 21 Nov 2025 12:06:09.383 * RDB is base AOF
redis-local |
redis-local | 1:M 21 Nov 2025 12:06:09.383 * Done loading RDB, keys loaded: 0, keys expired: 0.
postgres-local | 2025-11-21 12:06:09.515 UTC [1] LOG: starting PostgreSQL 16.11 (Debian 16.11-1.pgdg13+1) on x86_64-pc-linux-gnu, compiled by gcc (Debian 14.2.0-19) 14.2.0, 64-bit
redis-local | 1:M 21 Nov 2025 12:06:09.383 * DB loaded from base file appendonly.aof.1.base.rdb: 0.001 seconds
```

Swagger And Login Documentation

Swagger url : <http://localhost:8080/swagger-ui/index.html>



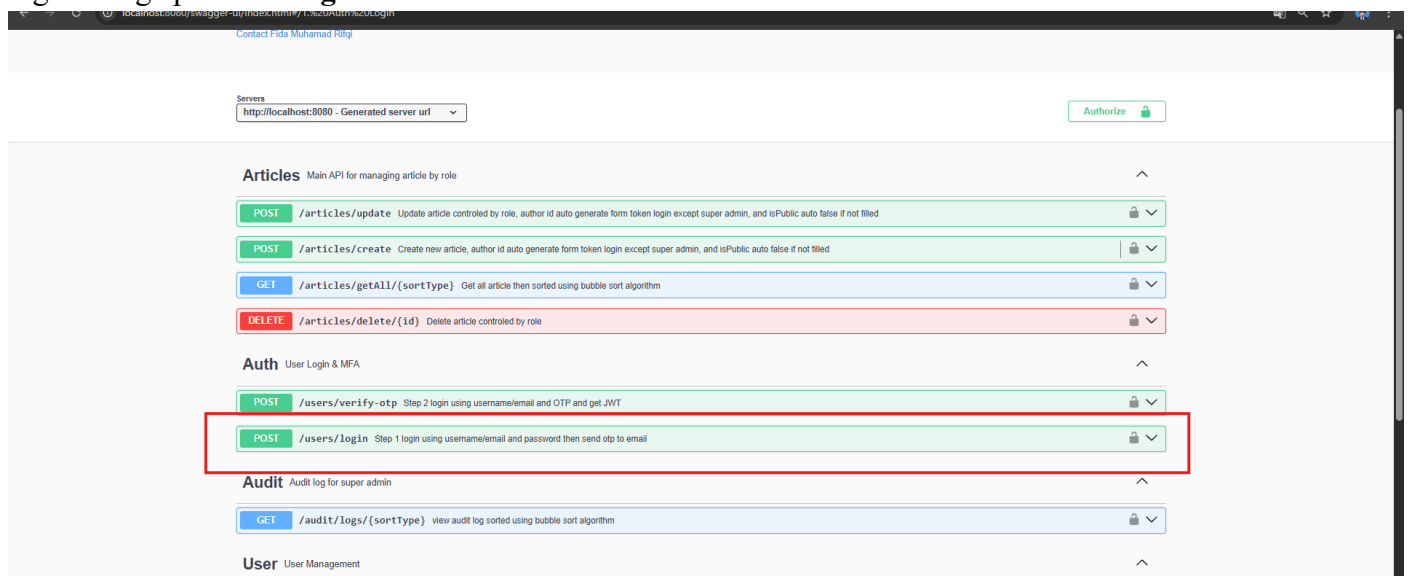
*use this super admin account for first time login

username : fida
password : P@ssw0rd

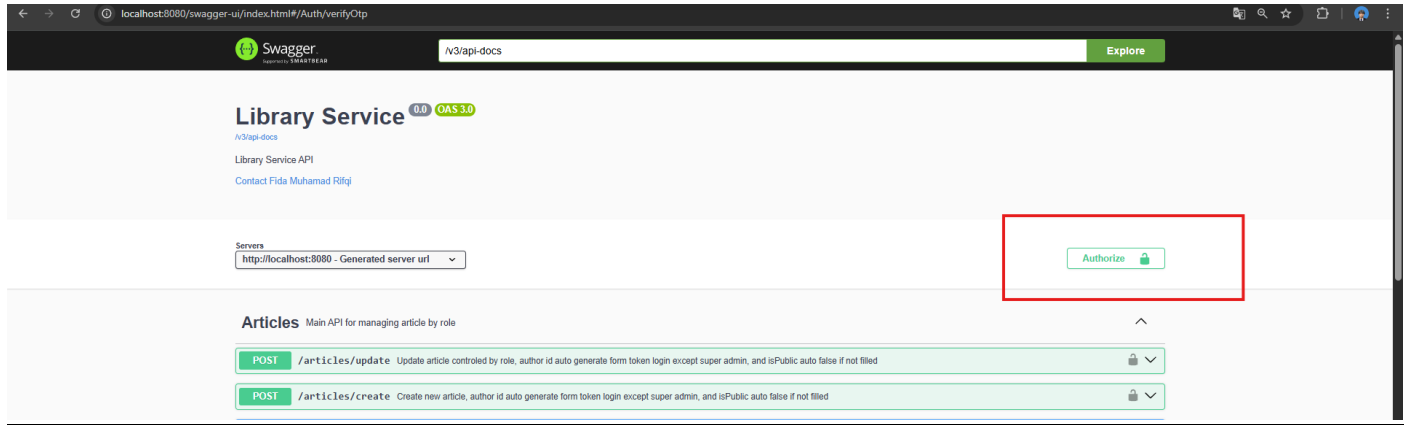
These credentials are used only for accessing the email inbox to retrieve the OTP sent during Multi-Factor Authentication:

Email : contact.fidamuharifqi@gmail.com
Email Password : Test123123!

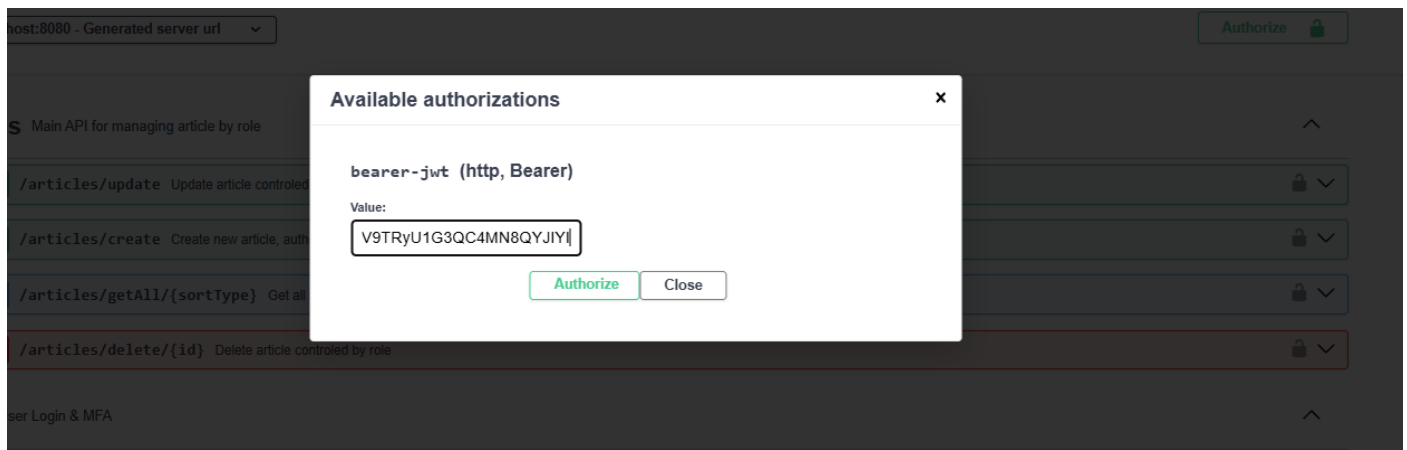
login using api **/users/login**



Verify Otp success then get the token then click on Authorize button



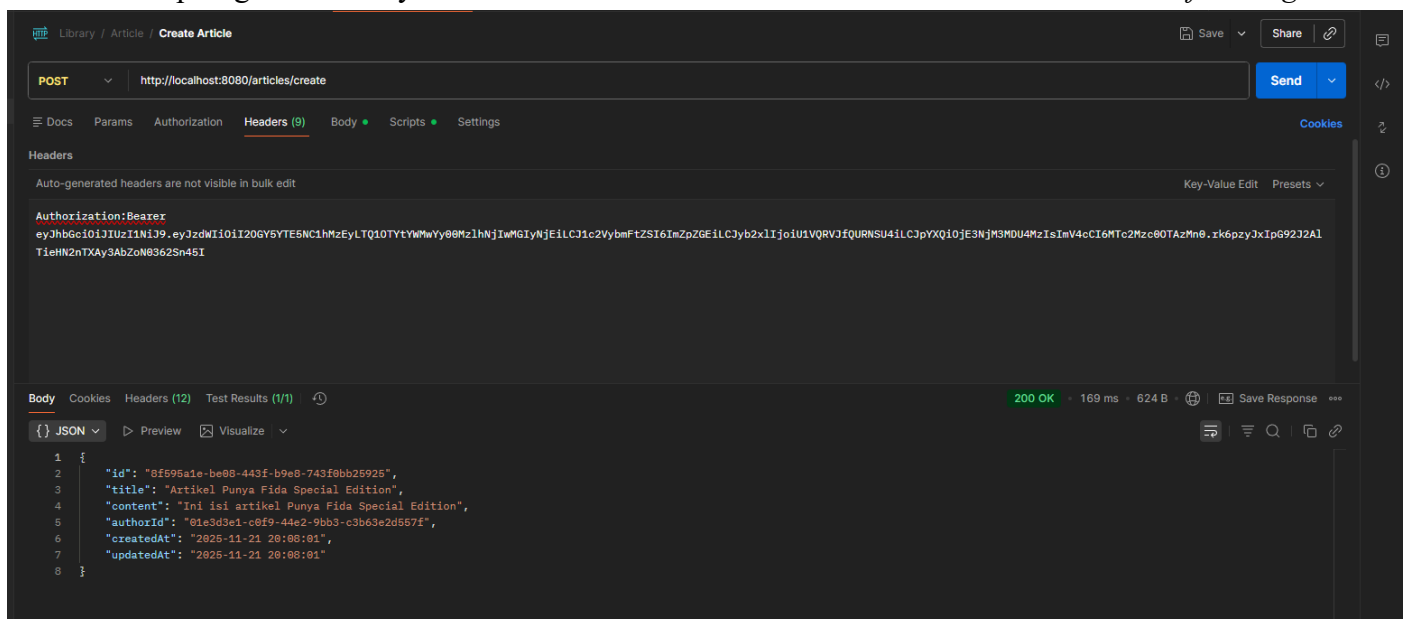
Put the token value to the value text area then click Authorize to access another APIs



APIs Documentation (using postman “more flexible”) Using Super Admin

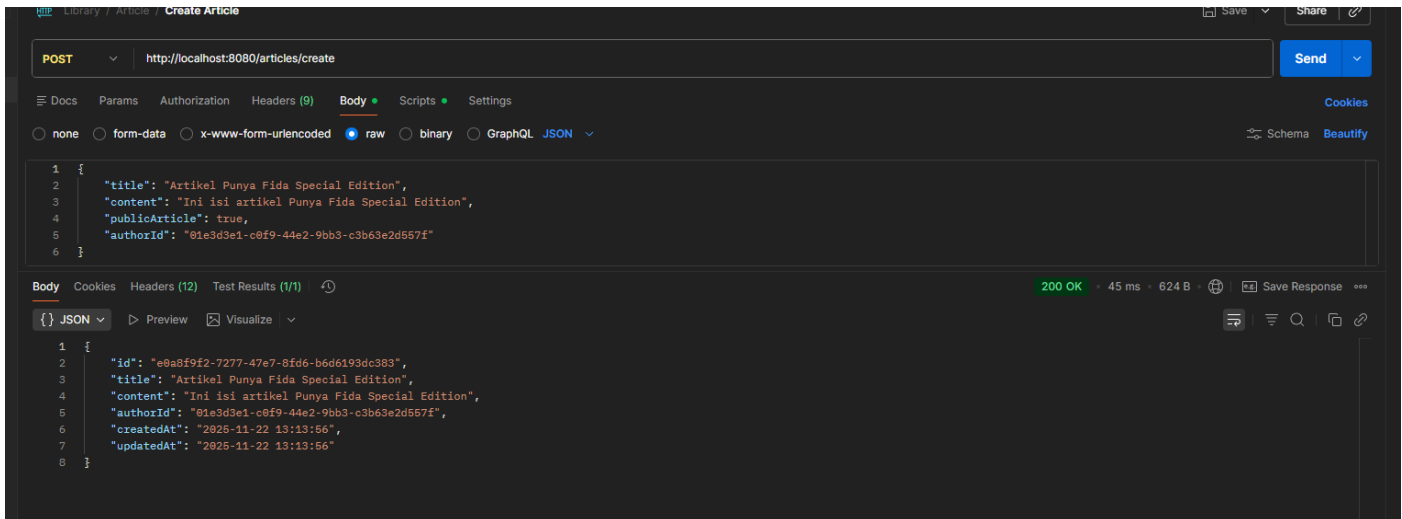
* Library Collection available in project folder with name *Library.postman_collection*. Don't forget to change the token.

All APIs except login and verify OTP need header with format *Authorization:Bearer <token from login>*

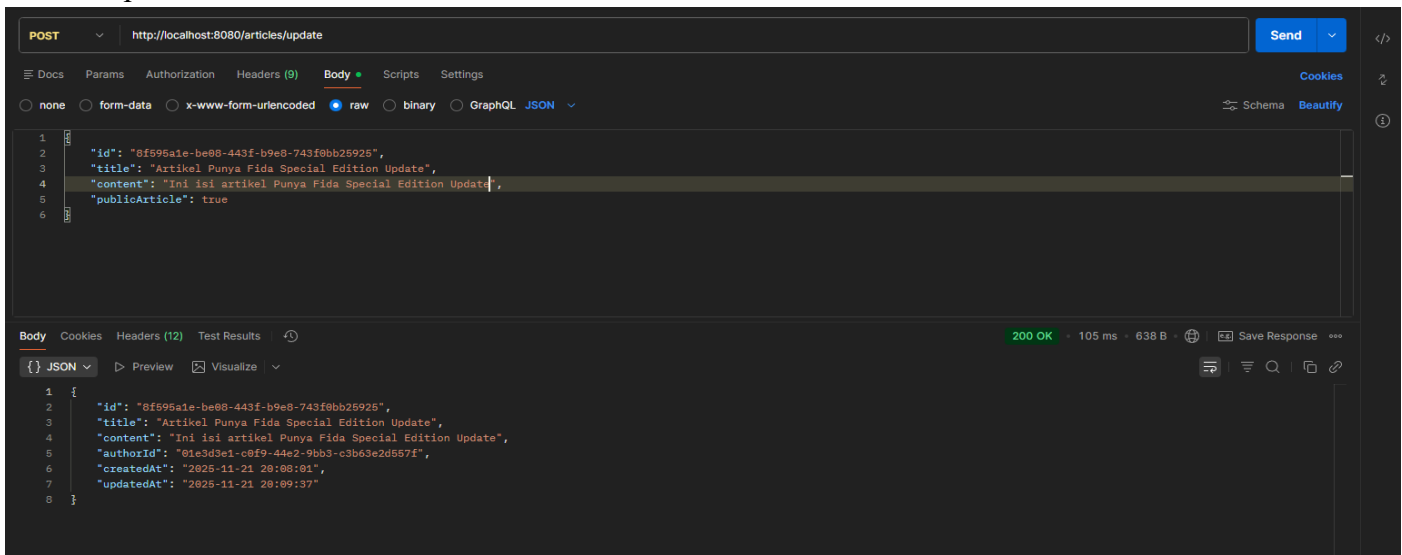


Article APIs

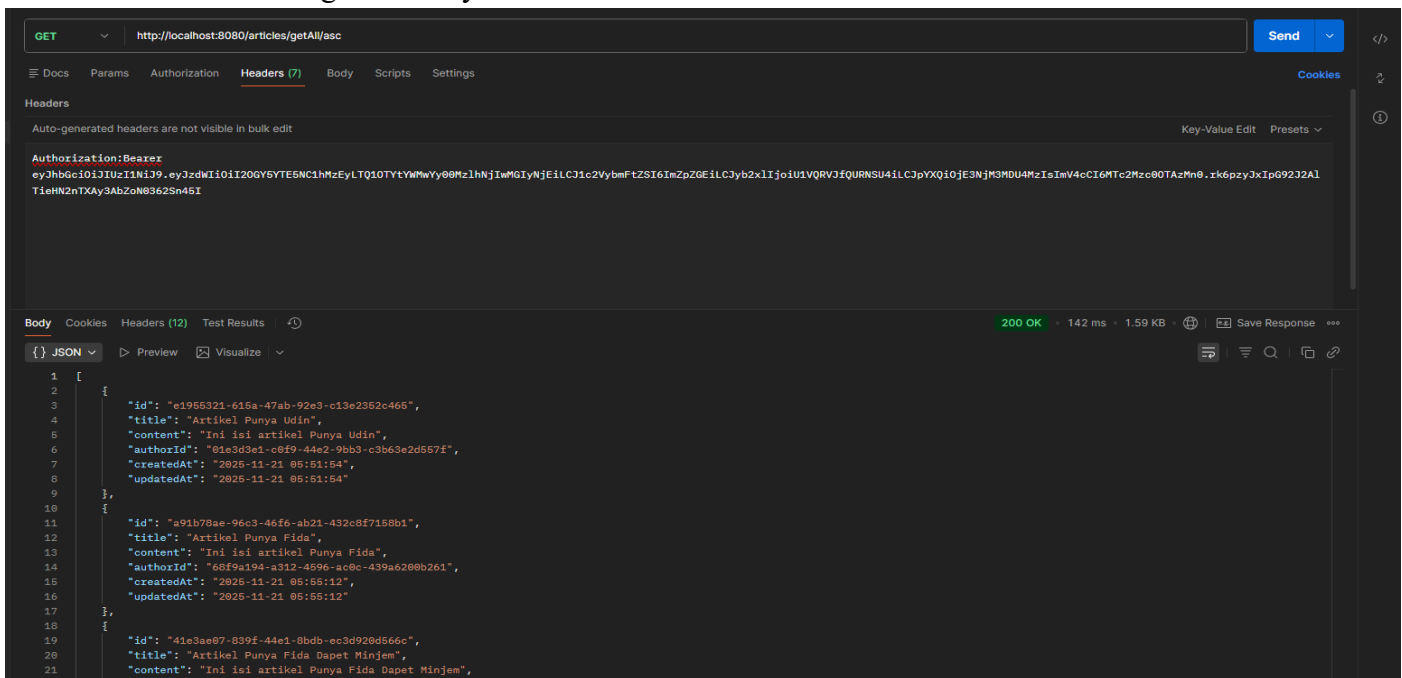
- Create Article



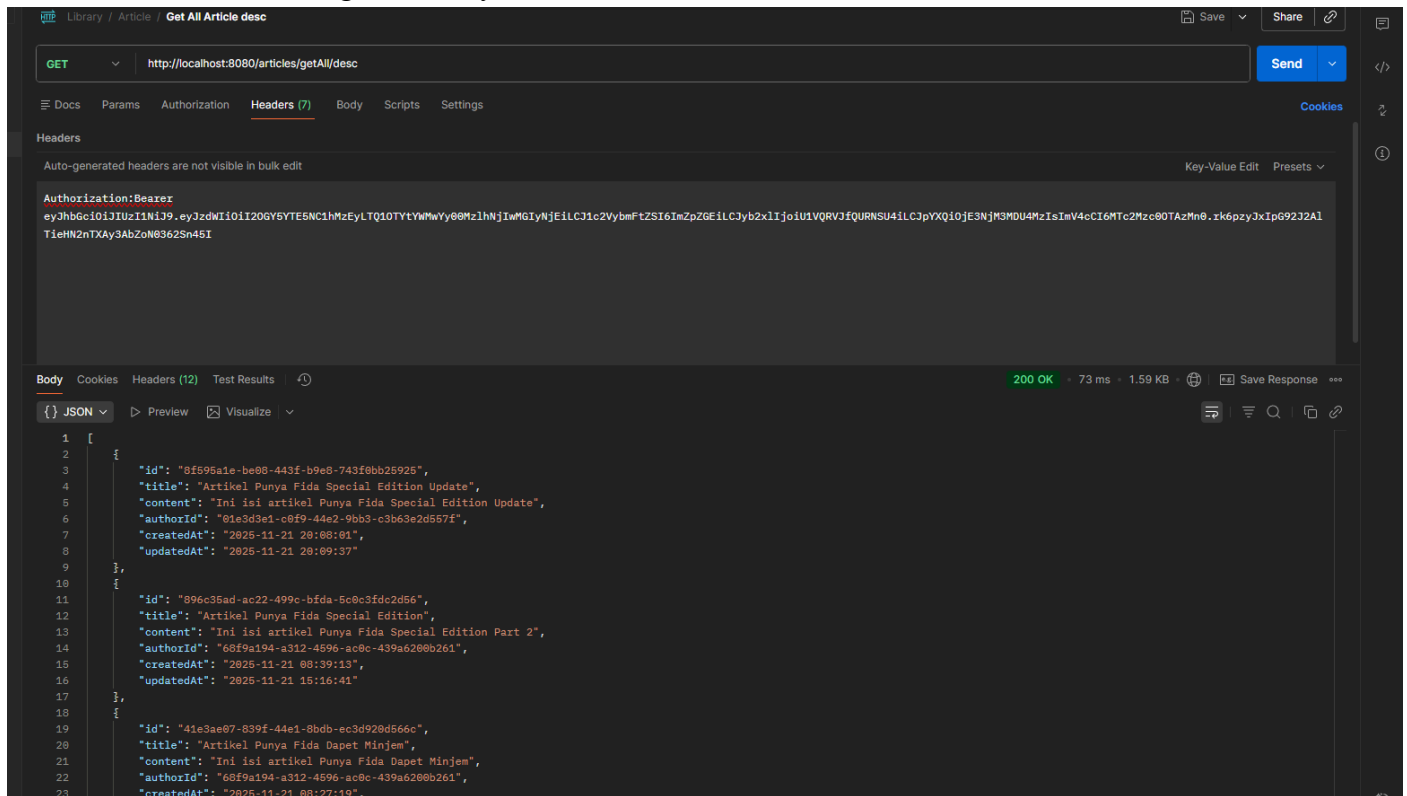
- Update Article



- Get All Ascending Article By Create Date



- Get All Descending Article By Create Date



Library / Article / Get All Article desc

GET <http://localhost:8080/articles/getAll/desc> Send

Docs Params Authorization Headers (7) Body Scripts Settings

Headers

Auto-generated headers are not visible in bulk edit

Key-Value Edit Presets

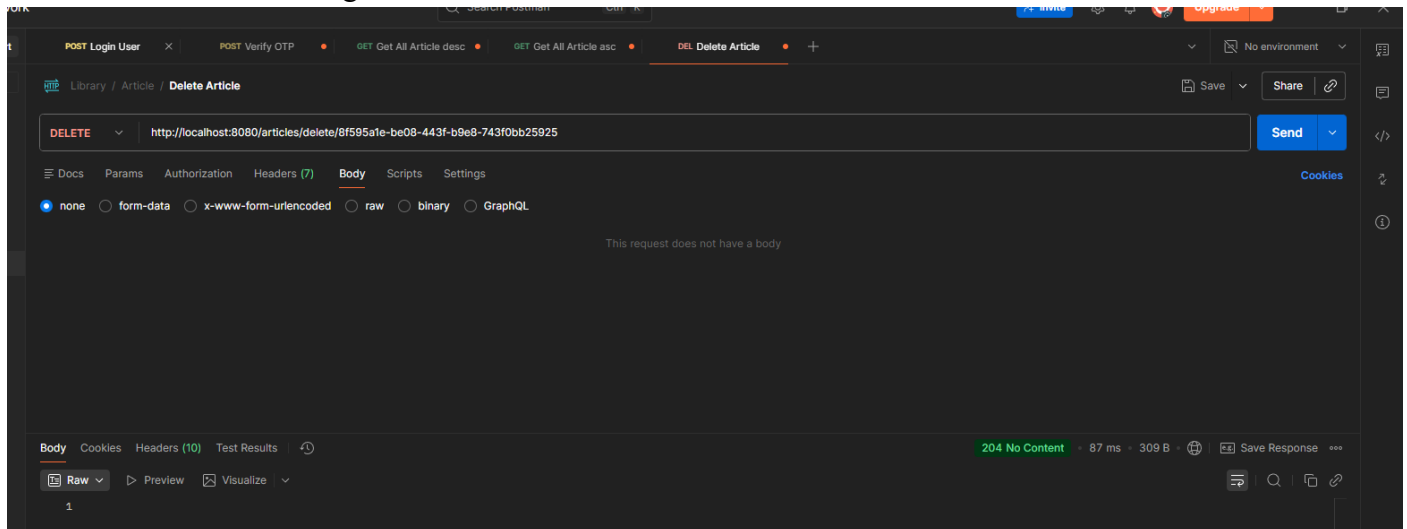
Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IHY9YS50eXBvc2V0bzI0OTYtYm90MzIhbnJlIiwiaWQiOiJlC3Ic2VybWZlZSI6ImZpZGElLCJyb2xlijo1U1VQRVJfQURNSU4iLCJpYXQiOiE3NjM3MDU4MzIsImV4cCI6MTc2Mzc0TAZm8.ik6pzy3xIp69232A1TieHN2nTXay3AbZoN8362Sn4SI

Body Cookies Headers (12) Test Results 200 OK 73 ms 1.59 KB Save Response

JSON Preview Visualize

```
1 [
2   {
3     "id": "8f595afe-be08-443f-b9e8-743f0bb25925",
4     "title": "Artikel Punya Fida Special Edition Update",
5     "content": "Ini isi artikel Punya Fida Special Edition Update",
6     "authorId": "60f9a194-a312-4896-ac8c-439a6208b261",
7     "createdAt": "2025-11-21 20:08:01",
8     "updatedAt": "2025-11-21 20:09:37"
9   },
10  {
11    "id": "896c35ad-ac22-499c-bfda-5c8c3fdc2d56",
12    "title": "Artikel Punya Fida Special Edition",
13    "content": "Ini isi artikel Punya Fida Special Edition Part 2",
14    "authorId": "60f9a194-a312-4896-ac8c-439a6208b261",
15    "createdAt": "2025-11-21 08:39:13",
16    "updatedAt": "2025-11-21 15:16:41"
17  },
18  {
19    "id": "41e3ae07-839f-44e1-8bdb-ec3d920d566c",
20    "title": "Artikel Punya Fida Dapet Minjem",
21    "content": "Ini isi artikel Punya Fida Dapet Minjem",
22    "authorId": "60f9a194-a312-4896-ac8c-439a6208b261",
23    "createdAt": "2025-11-21 08:27:19",
```

- Delete Article using id on url



Library / Article / Delete Article

DELETE <http://localhost:8080/articles/delete/8f595afe-be08-443f-b9e8-743f0bb25925> Send

Docs Params Authorization Headers (7) Body Scripts Settings

none form-data x-www-form-urlencoded raw binary GraphQL

This request does not have a body

Body Cookies Headers (10) Test Results 204 No Content 87 ms 309 B Save Response

Raw Preview Visualize

```
1
```

Users APIs

- Register User

POST http://localhost:8080/users/register Send

Docs Params Authorization Headers (9) **Body** Scripts Settings Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL JSON Schema Beautify

```
1 {
2   "username": "usman",
3   "email": "usman@testmail.com",
4   "password": "P@ssw@rd",
5   "fullName": "usmannnnnn"
6 }
```

Body Cookies Headers (11) Test Results (1/1) 200 OK 292 ms 552 B Save Response

{} JSON Preview Visualize

```
1 {
2   "id": "062d0c76-6a92-45b5-9b63-4ae8f6675256",
3   "username": "usman",
4   "email": "usman@testmail.com",
5   "fullName": "usmannnnnn",
6   "role": "VIEWER",
7   "createdAt": "2025-11-21 29:48:17",
8   "updatedAt": "2025-11-21 29:48:17",
9   "lastLogin": null
10 }
```

- Update User

POST http://localhost:8080/users/update Send

Docs Params Authorization Headers (9) **Body** Scripts Settings Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL JSON Schema Beautify

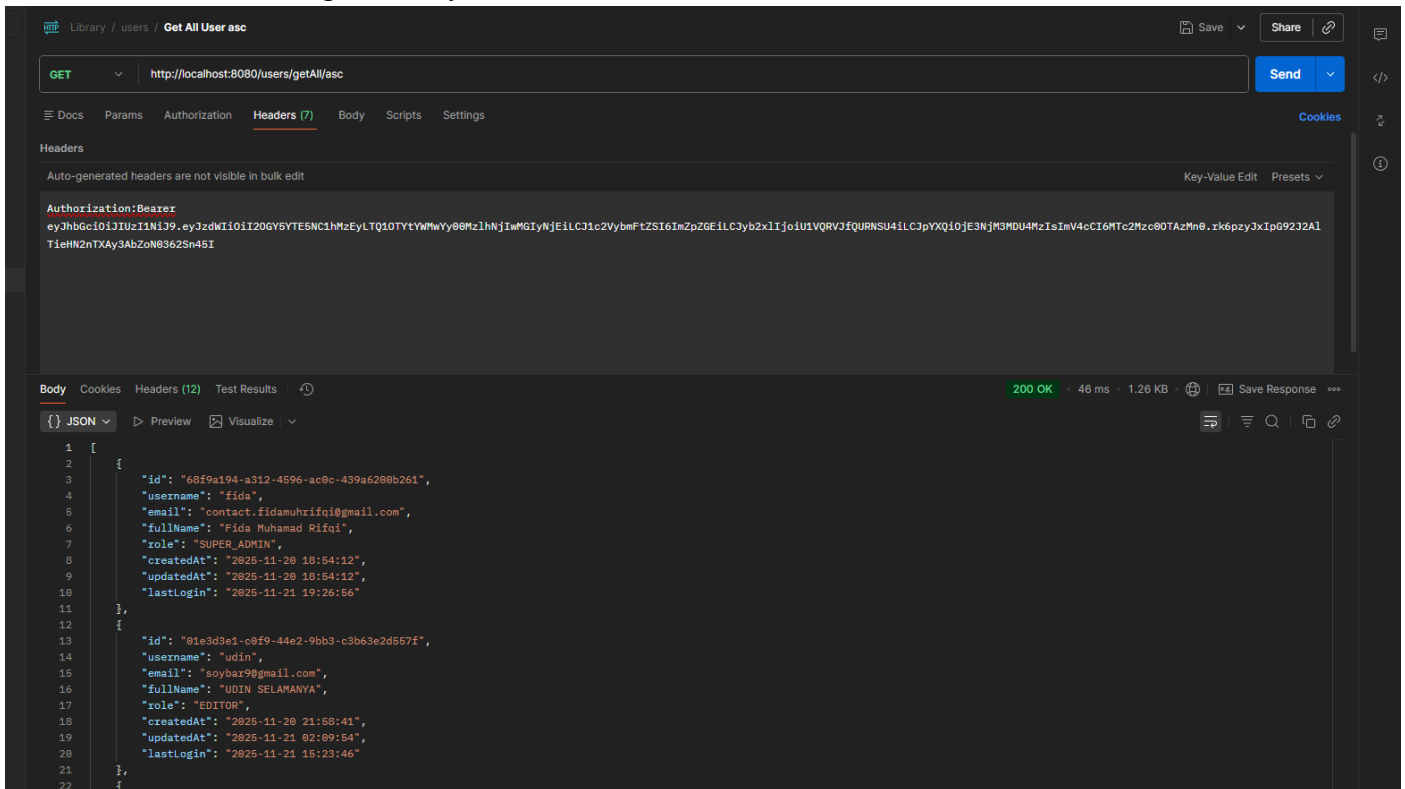
```
1 {
2   "id": "062d0c76-6a92-45b5-9b63-4ae8f6675256",
3   "username": "usman",
4   "email": "usman@test2mail.com",
5   "fullName": "USMAN PANJANG",
6   "role": "CONTRIBUTOR",
7   "password": "P@ssw@rd"
8 }
```

Body Cookies Headers (12) Test Results (1/1) 200 OK 117 ms 588 B Save Response

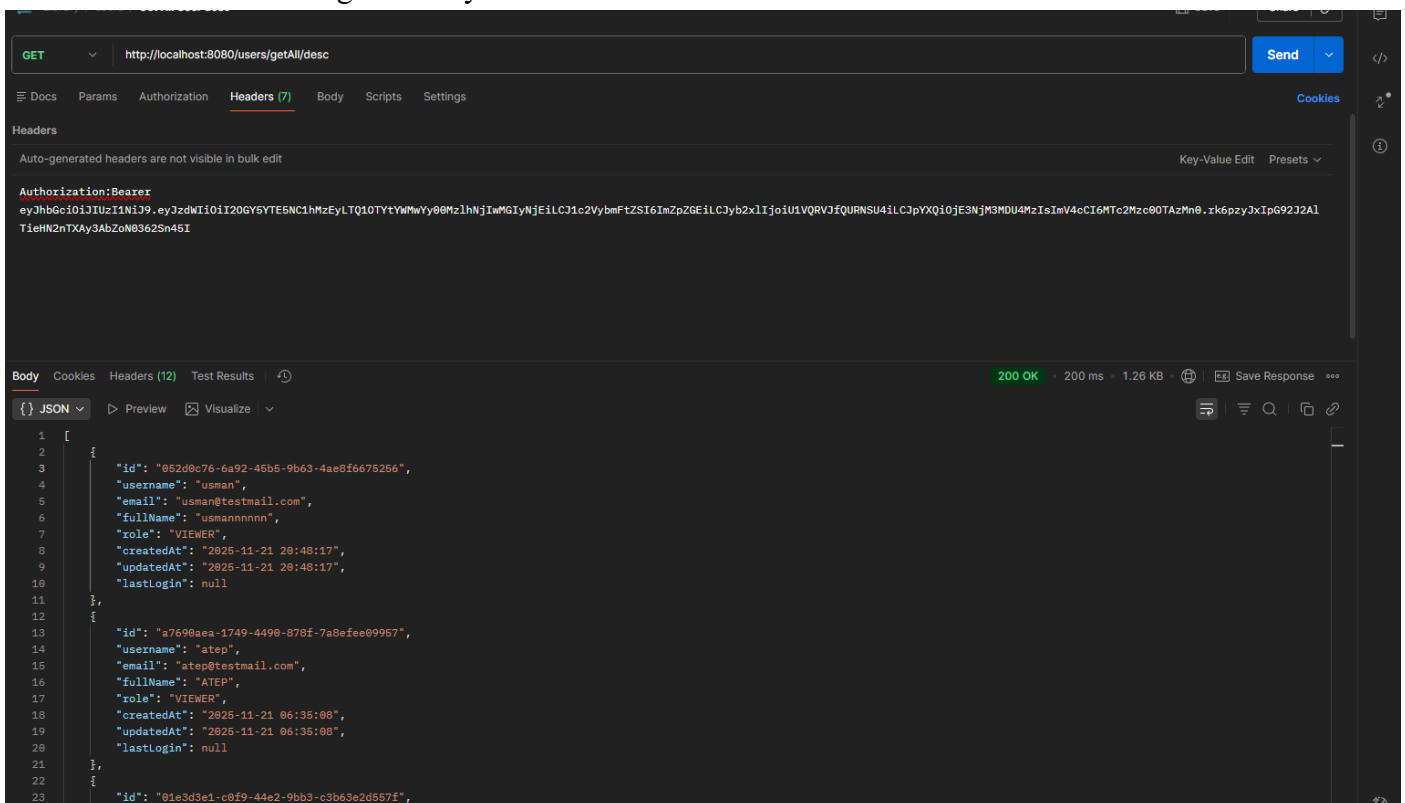
{} JSON Preview Visualize

```
1 {
2   "id": "062d0c76-6a92-45b5-9b63-4ae8f6675256",
3   "username": "usman",
4   "email": "usman@test2mail.com",
5   "fullName": "USMAN PANJANG",
6   "role": "CONTRIBUTOR",
7   "createdAt": "2025-11-21 28:48:17",
8   "updatedAt": "2025-11-21 28:50:45",
9   "lastLogin": null
10 }
```

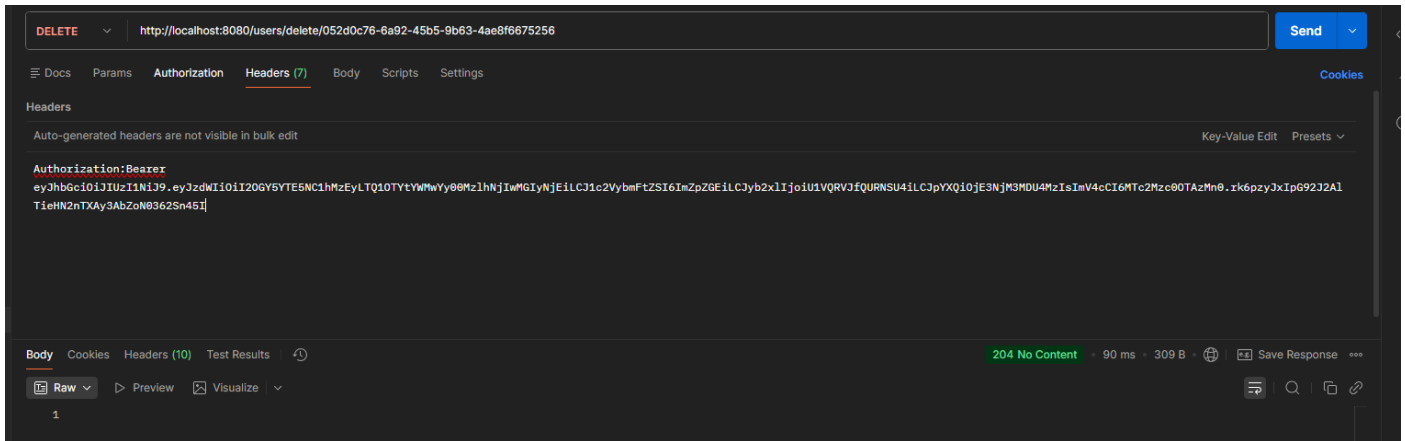
- Get All Ascending Users By Create Date



- Get All Descending Users By Create Date

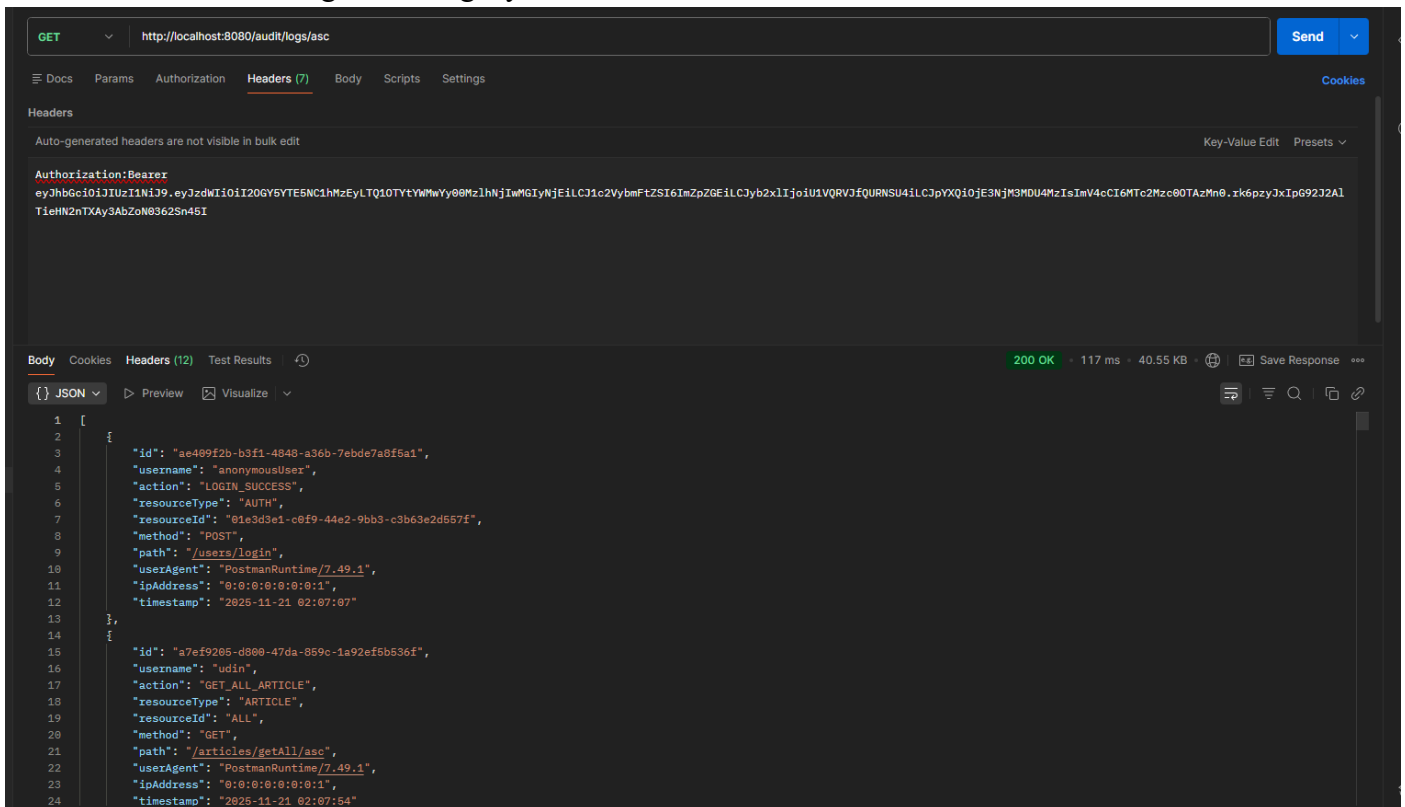


- Delete User using id on url

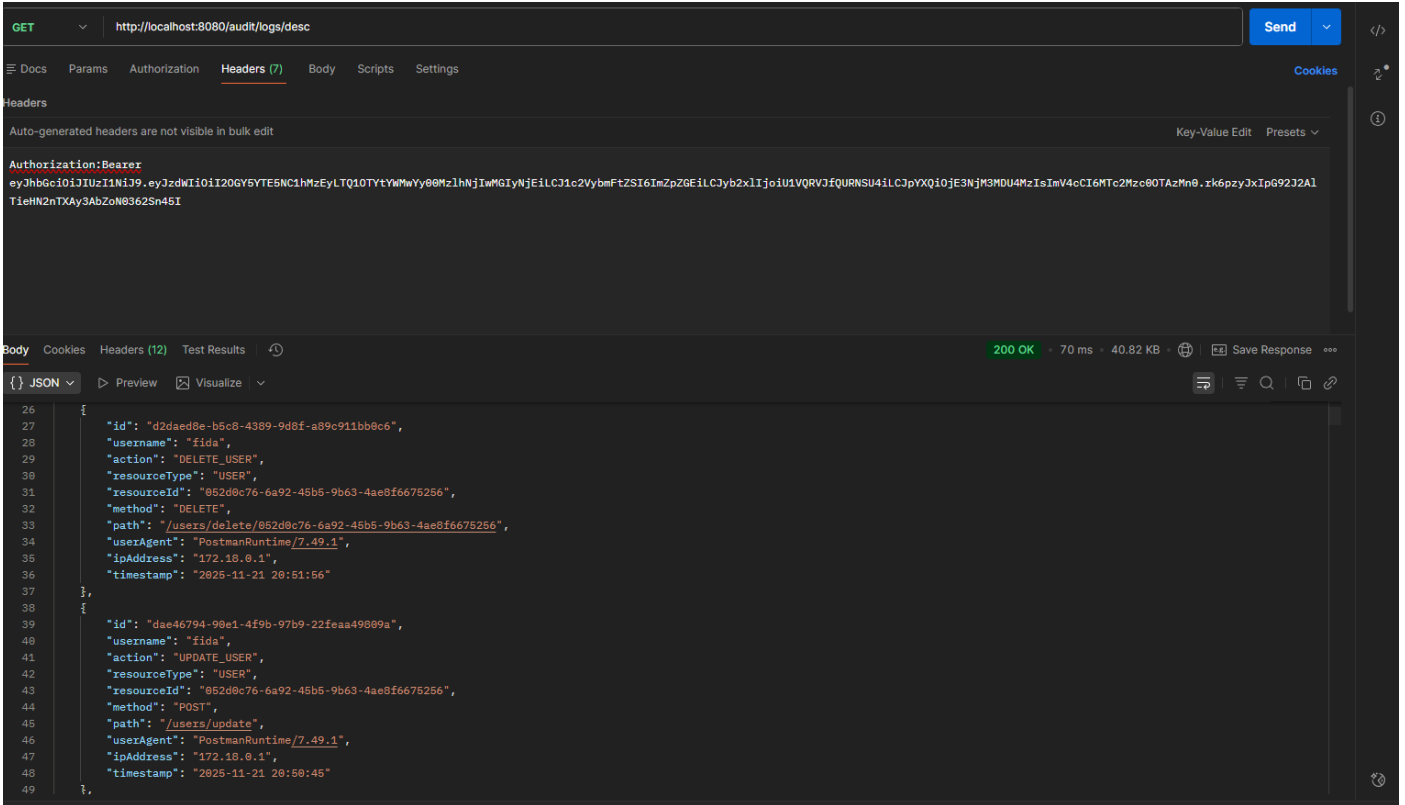


Audit Log APIs

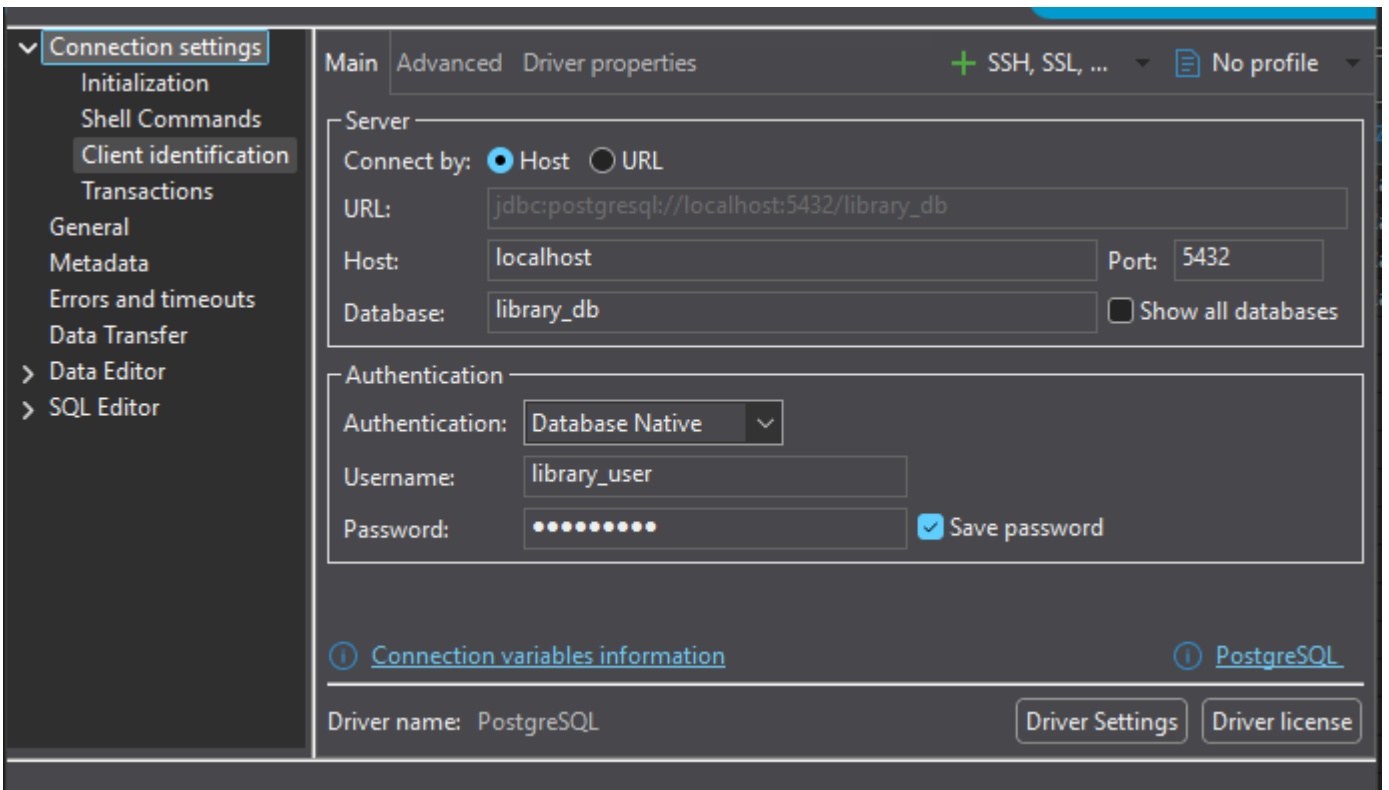
- Get All Ascending Audit Log By Create Date



- Get All Descending Audit Log By Create Date



Database Documentation

Password = FidaAdmin

Article Table

Properties | Data | Diagram

Table Name: Tablespace:

Comment:

☐ Has Row-Level Security ☐ Partitions

Owner: [library_user](#)

Extra Options:

Partition by:

Object ID:

Columns	Column Name	#	Data type	Identity	Collation	Not Null	Default	Comment
<input checked="" type="checkbox"/>	AZ id	1	varchar(255)		default	[v]		
<input checked="" type="checkbox"/>	AZ title	2	varchar(255)		default	[v]		
<input checked="" type="checkbox"/>	AZ content	3	varchar(255)		default	[]		
<input checked="" type="checkbox"/>	AZ author_id	4	varchar(255)		default	[]		
<input checked="" type="checkbox"/>	created_at	5	timestamp			[]		
<input checked="" type="checkbox"/>	updated_at	6	timestamp			[]		
<input checked="" type="checkbox"/>	is_public	7	bool			[]	true	

Constraints

- Foreign Keys
- Indexes
- Dependencies
- References
- Partitions
- Triggers
- Rules
- Policies
- Statistics
- Permissions
- DDL
- Virtual

	AZ id	AZ title	AZ content	AZ author_id	created_at	updated_at	is_public
1	e1955321-615a-47ab-92e3-c13e2352c465	Artikel Punya Udin	Ini isi artikel Punya Udin	01e3d3e1-c0f9-44e2-9bb3-c3b63e2d557f	2025-11-20 22:51:54.107	2025-11-20 22:51:54.107	[]
2	a91b78ae-96c3-46f6-ab21-432c8f7158b1	Artikel Punya Fida	Ini isi artikel Punya Fida	68f9a194-a312-4596-ac0c-439a6200b261	2025-11-20 22:55:12.127	2025-11-20 22:55:12.127	[]
3	41e3ae07-839f-44e1-8bdb-ec3d920d566c	Artikel Punya Fida Dapet Minjem	Ini isi artikel Punya Fida Dapet Minjem	68f9a194-a312-4596-ac0c-439a6200b261	2025-11-21 01:27:19.939	2025-11-21 01:27:19.939	[]
4	896c35ad-ac22-499c-bfda-5cd3fdc2d56	Artikel Punya Fida Special Edition	Ini isi artikel Punya Fida Special Edition Part 2	68f9a194-a312-4596-ac0c-439a6200b261	2025-11-21 01:39:13.356	2025-11-21 08:16:41.974	[v]

User Table

Properties Data Diagram

Table Name: Tablespace: Owner: [library_user](#)

Comment:

☐ Has Row-Level Security ☐ Partitions

Partition by:

Object ID:

Column Name	Data type	Identity	Collation	Not Null	Default	Comment
AZ id	1 varchar(255)		default	[v]		
AZ username	2 varchar(255)		default	[v]		
AZ email	3 varchar(255)		default	[v]		
AZ password	4 varchar(255)		default	[v]		
AZ full_name	5 varchar(255)		default	[]		
AZ role	6 varchar(255)		default	[]		
(created_at	7 timestamp			[]		
(updated_at	8 timestamp			[]		
(last_login	9 timestamp			[]		
(account_lo	10 timestamp(6)			[]		
123 failed_login	11 int4			[]		
(last_failed_l	12 timestamp(6)			[]		
AZ otp_code	13 varchar(255)		default	[]		
(otp_expired	14 timestamp(6)			[]		

Columns

- Constraints
- Foreign Keys
- Indexes
- Dependencies
- References
- Partitions
- Triggers
- Rules
- Policies
- Statistics
- Permissions
- DDL
- Virtual

Enter a SQL expression to filter results (use Ctrl+Space)									
Az id	Az username	Az email	Az password	Az full_name	Az role	created_at			
1	a7690aea-1749-4490-878f-7a8efee09957	atep	atep@testmail.com	\$2a\$10\$diQDNxd7Q9rW/GvCII5Z2OVik6ca.byGOQA19UtlcLyZew3dsELvu	ATEP	VIEWER	2025-11-20 23:35:08.117		
2	01e3d3e1-c0f9-44e2-9bb3-c3b63e2d557f	udin	soybar9@gmail.com	\$2a\$10\$GNxwDgoIN8WTZ/io5Cau3U9g1pf9EoB7OxxKCz3uJ3RCtpZ6.	UDIN SELAMANYA	EDITOR	2025-11-20 14:58:41.207		
3	68f9a194-a312-4596-ac0c-439a6200b261	fida	contact.fidamuhirrfiqi@gmail.com	\$2a\$10\$tpEKFRG6t87YyBl5PhaOF.Cfyfeyb8nibvgm4pu/g2K5Xy0dSZdnxO	Fida Muhamad Rifqi	SUPER_ADMIN	2025-11-20 11:54:12.022		

Audit Log Table

Enter a SQL expression to filter results (use Ctrl+Space)									
Az id	Az username	Az action	Az resource_type	Az resource_id	Az method	Az path	Az user_agent		
1	ae409f2b-b3f1-4848-a36b-7ebde7a8f5a1	anonymousUser	LOGIN_SUCCESS	AUTH	01e3d3e1-c0f9-44e2-9bb3-c3b63e2d557f	/users/login	PostmanRuntime/7.49.1		
2	a7ef9205-d800-47da-859c-1a92ef5b536f	udin	GET_ALL_ARTICLE	ARTICLE	ALL	/articles/getAll/asc	PostmanRuntime/7.49.1		
3	f752d4da-8b1f-45b6-9abe-245d5f7539b6	fida	UPDATE_USER	USER	01e3d3e1-c0f9-44e2-9bb3-c3b63e2d557f	/users/update	PostmanRuntime/7.49.1		
4	f7eb9ff1-218f-4071-870d-6a1e53d160a9	fida	GET_ALL_AUDIT_LOG	AUDIT	ALL	/audit/logs	PostmanRuntime/7.49.1		
5	946f1a27-3601-4e53-8987-513e21557c3d	anonymousUser	LOGIN_SUCCESS	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	/users/login	PostmanRuntime/7.49.1		
6	335c24e3-5b4b-4251-a69b-df23eb1b339f	fida	GET_ALL_AUDIT_LOG	AUDIT	ALL	/audit/logs	PostmanRuntime/7.49.1		
7	fe924f02-2173-4cd8-b8f2-33543b29e964	fida	LOGIN_FAILED	AUTH	[NULL]	/users/login	PostmanRuntime/7.49.1		
8	67973fd0-6952-4e35-90e0-b2574dd313a9	fida	GET_ALL_AUDIT_LOG	AUDIT	ALL	/audit/logs	PostmanRuntime/7.49.1		
9	97909768-c4a3-43a1-873f-6d249c53e733	fida	GET_ALL_AUDIT_LOG	AUDIT	ALL	/audit/logs	PostmanRuntime/7.49.1		
10	4241bb04-3641-419f-a677-4ac08b04c87	fida	LOGIN_FAILED	AUTH	[NULL]	/users/login	PostmanRuntime/7.49.1		
11	d05cd721-4eba-4766-ba0f-ae31211f4749	fida	GET_ALL_AUDIT_LOG	AUDIT	ALL	/audit/logs	PostmanRuntime/7.49.1		
12	92dd6b73-34e4-4f94-88cd-7773dced31ed	fida	LOGIN_FAILED	AUTH	[NULL]	/users/login	PostmanRuntime/7.49.1		
13	abf2c5e8-31d5-408b-9c0e-13374147dd05	anonymousUser	LOGIN_SUCCESS	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	/users/login	PostmanRuntime/7.49.1		
14	fcaba71d-6ea2-4fe0-a4f0-72c8fc9421d5	fida	GET_ALL_AUDIT_LOG	AUDIT	ALL	/audit/logs	PostmanRuntime/7.49.1		
15	b91df29b-8598-4e5b-a75e-a133afdc33fe	anonymousUser	LOGIN_SUCCESS	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	/users/login	PostmanRuntime/7.49.1		
16	4f409912-9dd6-40dd-a0e1-8caf2ed9bc16	fida	GET_ALL_AUDIT_LOG	AUDIT	ALL	/audit/logs/desc	PostmanRuntime/7.49.1		
17	9b0c9b4-1fab-47c1-913f-c1b24bf86c75	anonymousUser	LOGIN_SUCCESS	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	/users/login	PostmanRuntime/7.49.1		
18	2748fac2-60ef-4f43-a408-d87a931c79ed	anonymousUser	LOGIN_SUCCESS	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	/users/login	PostmanRuntime/7.49.1		
19	ec2b35a0-853d-4e63-b57c-rdfbfa898456	fida	GET_ALL_AUDIT_LOG	AUDIT	ALL	/audit/logs/asc	PostmanRuntime/7.49.1		
20	5a5d64ba-14be-4bf7-b737-bb833219cb2b	fida	GET_ALL_AUDIT_LOG	AUDIT	ALL	/audit/logs/desc	PostmanRuntime/7.49.1		
21	9b0c4831-bfd3-4e6d-8ce1-38063f19fb34	anonymousUser	OTP_SENT	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	/users/login	PostmanRuntime/7.49.1		
22	ca962ca7-b3fa-41cd-8a1d-cb7ec38136a3	anonymousUser	LOGIN_OTP_FAILED	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	/users/verify-otp	PostmanRuntime/7.49.1		
23	83a05709-06b1-4d83-8af7-a893b6dfb863	anonymousUser	LOGIN_OTP_FAILED	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	/users/verify-otp	PostmanRuntime/7.49.1		
24	08f4c97-baa6-4d83-a0d8-9f84ce7db3ee	anonymousUser	LOGIN_OTP_FAILED	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	/users/verify-otp	PostmanRuntime/7.49.1		
25	91e5b72a-d9f2-4205-9079-8438a77efc8f	anonymousUser	LOGIN_OTP_FAILED	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	/users/verify-otp	PostmanRuntime/7.49.1		
26	8d0cb7d9-377b-4659-b450-89d9ecb6db1a	anonymousUser	LOGIN_SUCCESS	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	/users/verify-otp	PostmanRuntime/7.49.1		
27	7e9eca64-04af-42ec-9dc5-315f87dfb81a	udin	LOGIN_FAILED	AUTH	[NULL]	/users/login	PostmanRuntime/7.49.1		

Enter a SQL expression to filter results (use Ctrl+Space)									
Az username	Az action	Az resource_type	Az resource_id	Az method	Az path	Az user_agent	Az ip_address	timestamp	
	GET_ALL_USER	USER	ALL	GET	/users/getAll/desc	PostmanRuntime/7.49.1	0:0:0:0:0:0:1	2025-11-20 23:46:07.661	
	GET_ALL_USER	USER	ALL	GET	/users/getAll/desc	PostmanRuntime/7.49.1	0:0:0:0:0:0:1	2025-11-20 23:46:17.768	
	GET_ALL_USER	USER	ALL	GET	/users/getAll/desc	PostmanRuntime/7.49.1	0:0:0:0:0:0:1	2025-11-21 00:22:35.947	
	GET_ALL_USER	USER	ALL	GET	/users/getAll/desc	PostmanRuntime/7.49.1	0:0:0:0:0:0:1	2025-11-21 00:43:56.839	
anonymousUser	OTP_SENT	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	POST	/users/login	Mozilla/5.0 (Windows NT	0:0:0:0:0:0:1	2025-11-21 00:45:53.152	
anonymousUser	LOGIN_SUCCESS	AUTH	68f9a194-a312-4596-ac0c-439a6200b261	POST	/users/verify-otp	Mozilla/5.0 (Windows NT	0:0:0:0:0:0:1	2025-11-21 00:46:31.608	
	GET_ALL_USER	USER	ALL	GET	/users/getAll/asc	PostmanRuntime/7.49.1	0:0:0:0:0:0:1	2025-11-21 00:47:51.815	
	GET_ALL_USER	USER	ALL	GET	/users/getAll/asc	PostmanRuntime/7.49.1	0:0:0:0:0:0:1	2025-11-21 00:49:49.252	
	GET_ALL_USER	USER	ALL	GET	/users/getAll/asc	PostmanRuntime/7.49.1	0:0:0:0:0:0:1	2025-11-21 01:03:22.787	
	GET_ALL_USER	USER	ALL	GET	/users/getAll/asc	Mozilla/5.0 (Windows NT	0:0:0:0:0:0:1	2025-11-21 01:11:43.171	
	CREATE_ARTICLE	ARTICLE	41e3ae07-839f-44e1-8bdb-ec3d920d566c	POST	/articles/create	PostmanRuntime/7.49.1	0:0:0:0:0:0:1	2025-11-21 01:27:19.979	
	CREATE_ARTICLE	ARTICLE	c34a2e67-61e6-4024-9176-c3f92f28931c	POST	/articles/create	PostmanRuntime/7.49.1	0:0:0:0:0:0:1	2025-11-21 01:28:48.586	
	CREATE_ARTICLE	ARTICLE	51c2ab7f-277d-4c6d-9bdf-ae270422878d	POST	/articles/create	PostmanRuntime/7.49.1	0:0:0:0:0:0:1	2025-11-21 01:29:38.723	
	CREATE_ARTICLE	ARTICLE	15265d7b-9b02-4355-ac3c-5184d637cd26	POST	/articles/create	PostmanRuntime/7.49.1	0:0:0:0:0:0:1	2025-11-21 01:31:38.085	

Redis Documentation

Edit Connection

* Host

localhost

* Port

6379

Password

Auth

Username

ACL in Redis >= 6.0

Connection Name

localhost@6379

Separator

:

☐ SSH

☐ SSL

☐ Sentinel ?

☐ Cluster ?

☐ Readonly ?

Redis for Api Limiter

New Connection

localhost@6379

DB0

rate

rate:USER_fida

String

rate:USER_fida

TTL 57

59

Redis for caching APIs GET and destroyed after 5 minutes or data changed by APIs POST/DELETE

New Connection

localhost@6379

DB0

articles

articles:all_asc

rate:USER_fida

String

articles:all_asc

TTL 292

Json

Size: 1.38KB

Collapse All

```
1 package com.library.libraryService.config;
2
3 > import ...
10
11 @Configuration
12 public class CacheConfig {
13
14     @Bean
15     public RedisCacheConfiguration redisCacheConfiguration() {
16         return RedisCacheConfiguration
17             .defaultCacheConfig()
18             .entryTtl(Duration.ofMinutes(5))
19             .serializeKeysWith(
20                 RedisSerializationContext.SerializationPair
21                     .fromSerializer(ong.springframework.data.redis.serializer.StringRedisSerializer.UTF_8))
22             .serializeValuesWith(
23                 RedisSerializationContext.SerializationPair
24                     .fromSerializer(new GenericJackson2JsonRedisSerializer()))
25     };
26 }
27 }
```

Example Reddis Destroyed after create new article

localhost@6379

D80 + New Key

Enter To Search

rate (1)

rate:USER_fida

Server

Redis Version: 7.4.7

OS: Linux6.6.87.2-microsoft-standard-WSL2x86_64

Process ID: 1

Memory

Used Memory: 1.21MB

Used Memory Peak: 1.21MB

Used Memory Lua: 32KB

Stats

Connected Clients: 2

Total Connections: 2

Total Commands: 81

Unit Test Documentation

Project

libraryService C:\Users\505\Desktop\library project\libraryService

.idea

.mvn

src

main

resources

test

target

.gitattributes

.gitignore

docker-compose.yml

Dockerfile

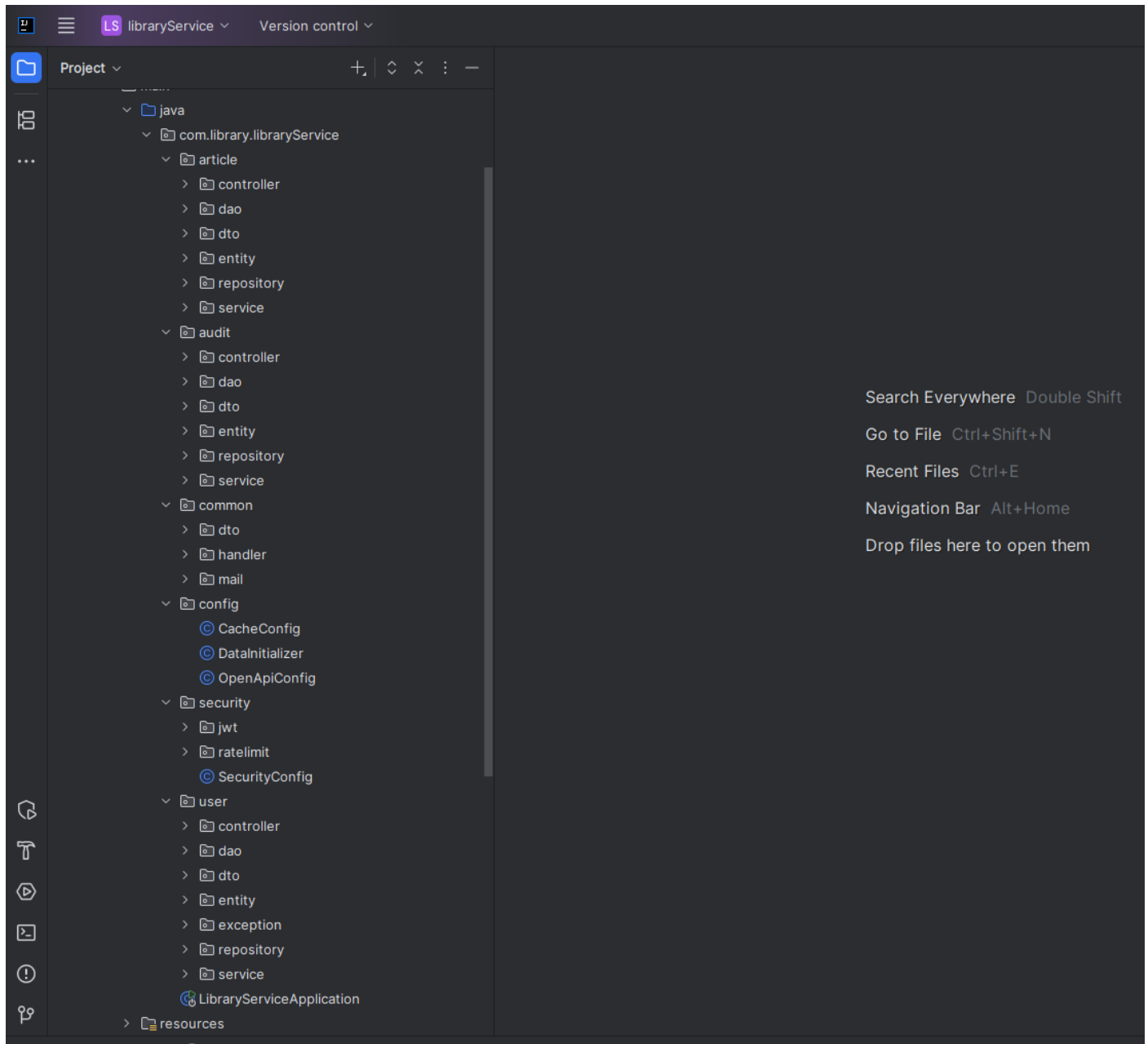
Coverage

libraryService

Element	Class, %	Method, %	Line, %	Branch, %
com.library.libraryService	84% (21/25)	93% (85/91)	95% (491/513)	80% (141/175)
article	100% (3/3)	100% (18/18)	100% (97/97)	81% (40/49)
audit	100% (3/3)	100% (10/10)	98% (72/73)	78% (22/28)
common	100% (3/3)	100% (10/10)	100% (56/56)	100% (2/2)
config	33% (1/3)	50% (1/2)	70% (14/20)	100% (4/4)
security	83% (5/6)	85% (18/21)	87% (91/104)	80% (29/36)
user	100% (6/6)	96% (28/29)	99% (161/162)	78% (44/56)
LibraryServiceApplication	0% (0/1)	0% (0/1)	0% (0/1)	100% (0/0)

Architecture Documentation

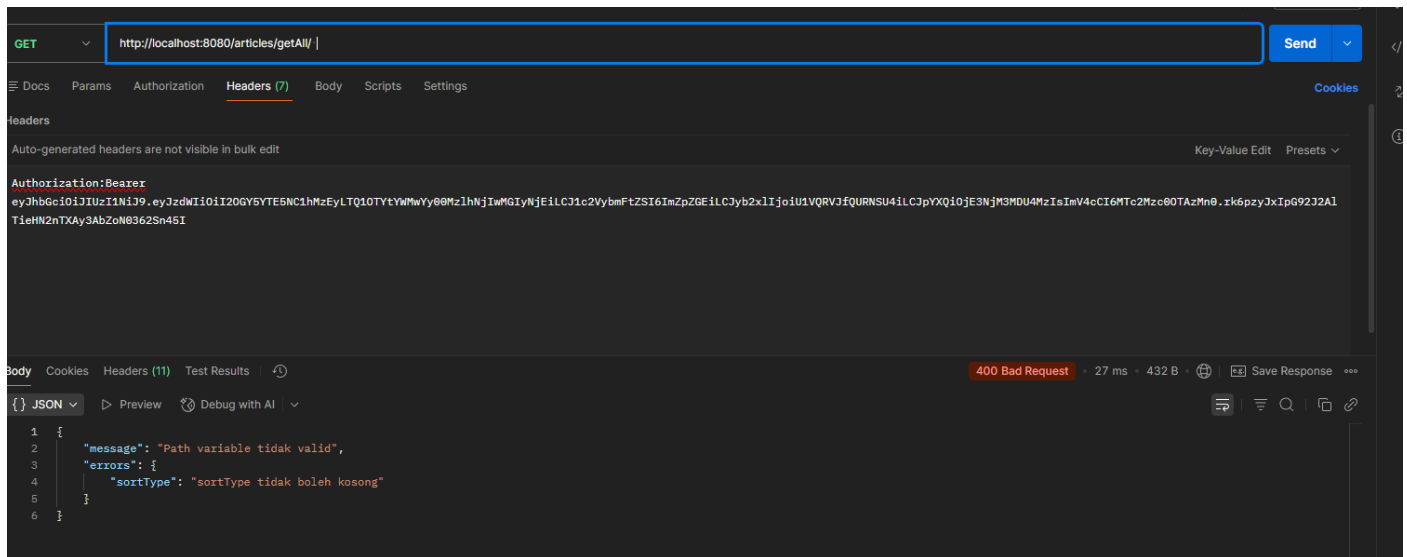
Layered Architecture And Dao + Implementation



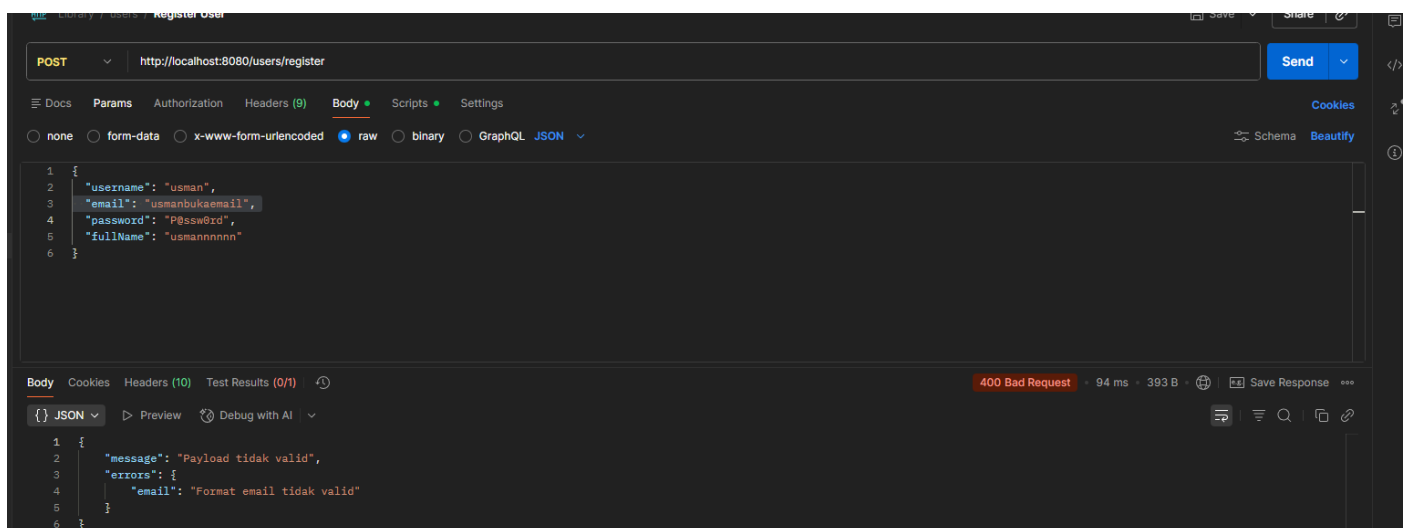
Error Handling Documentation

Parameter validation

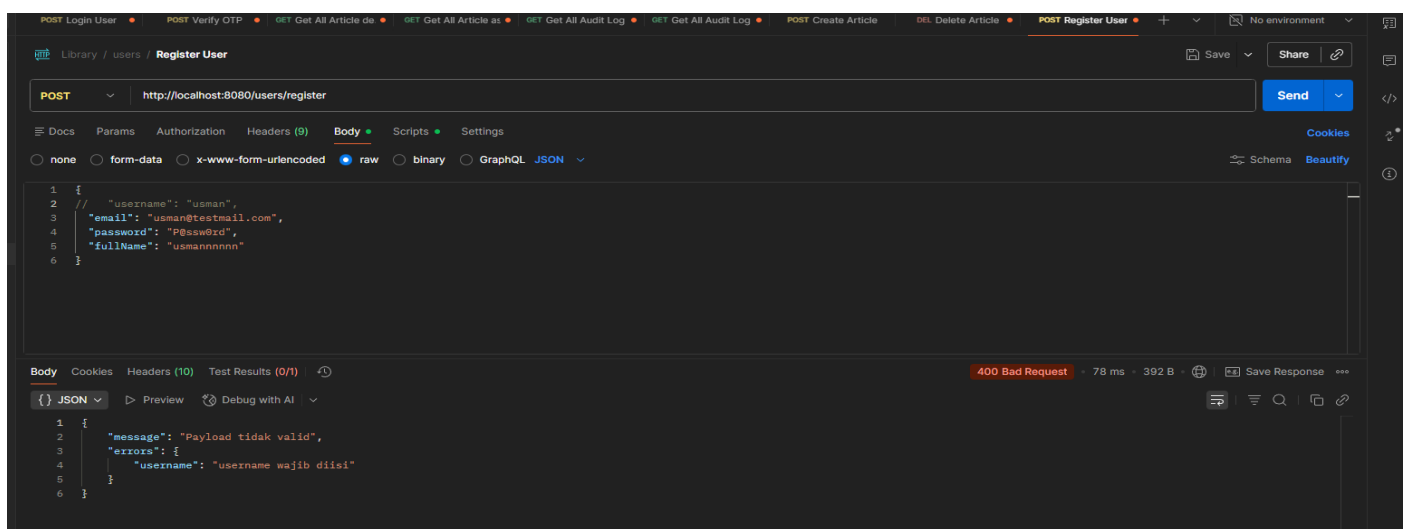
- Path Variable Blank



- Wrong Format Email



- Mandatory Field Null



- Mandatory Field Empty

The screenshot shows a Postman client interface for a POST request to `http://localhost:8080/users/register`. The request body is raw JSON:

```
1 {
2   "username": "",
3   "email": "usman@testmail.com",
4   "password": "P@ssw@rd",
5   "fullName": "usmannnnnn"
6 }
```

The response is a 400 Bad Request with the following JSON body:

```
1 {
2   "message": "Payload tidak valid",
3   "errors": {
4     "username": "username tidak boleh kosong"
5   }
6 }
```

Wrong Password Handling

The screenshot shows a Postman client interface for a POST request to `http://localhost:8080/users/login`. The request body is raw JSON:

```
1 {
2   "username": "udin",
3   "password": "P@ssw@rd"
4 }
```

The response is a 401 Unauthorized with the following JSON body:

```
1 {
2   "status": 401,
3   "error": "INVALID_CREDENTIALS",
4   "message": "password salah",
5   "path": "/users/login",
6   "timestamp": "Fri Nov 21 15:24:09 UTC 2025"
7 }
```

Account Lock Handling

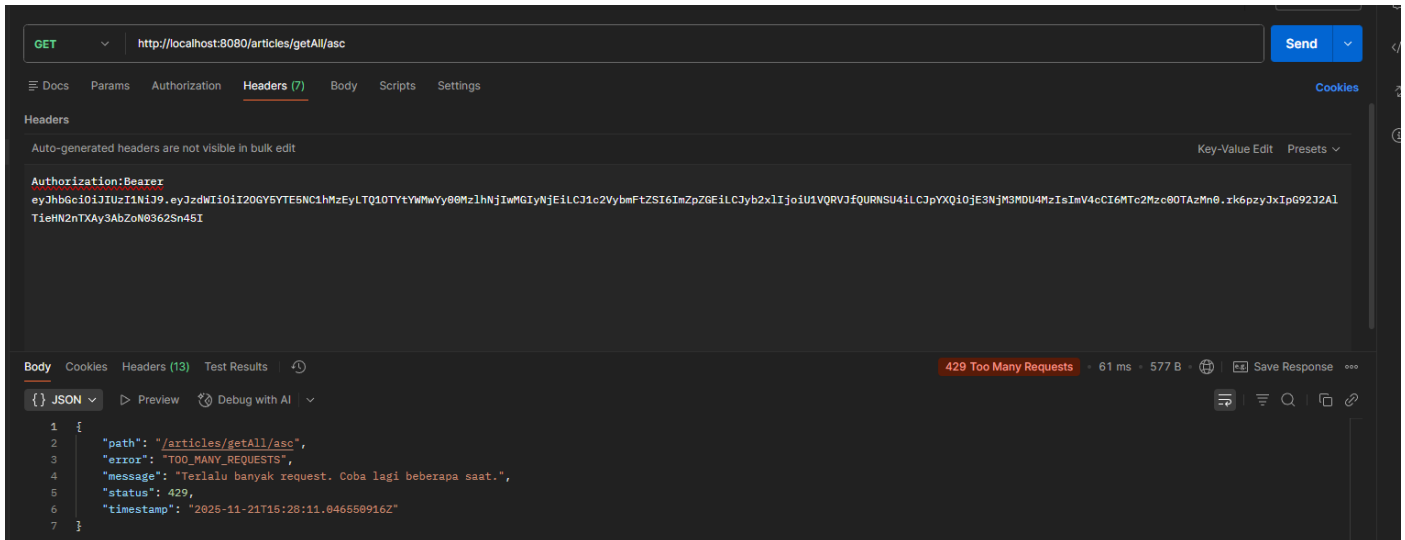
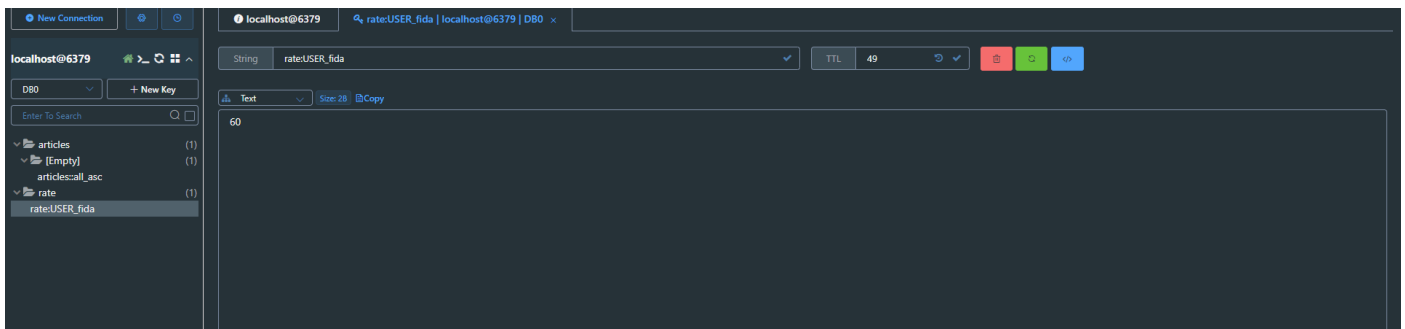
The screenshot shows a Postman client interface for a POST request to `http://localhost:8080/users/login`. The request body is raw JSON:

```
1 {
2   "username": "udin",
3   "password": "P@ssw@rd"
4 }
```

The response is a 423 Locked (WebDAV) (RFC 4918) with the following JSON body:

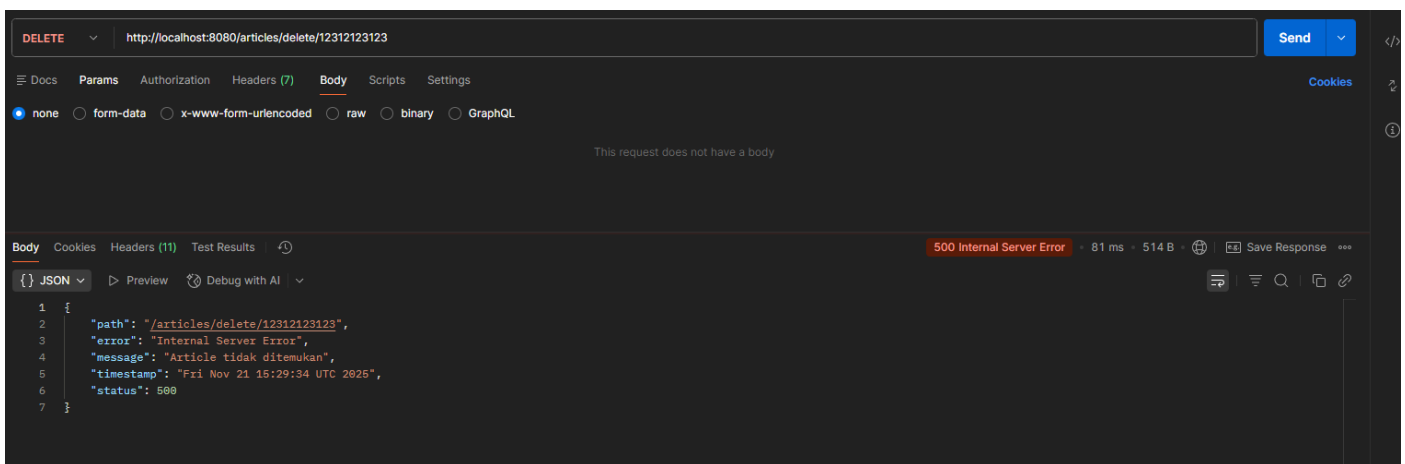
```
1 {
2   "status": 423,
3   "error": "ACCOUNT_LOCKED",
4   "message": "Akun terkunci. Coba lagi dalam 29 menit.",
5   "path": "/users/login",
6   "timestamp": "Fri Nov 21 15:24:29 UTC 2025"
7 }
```

Rate Limiter Error Handling

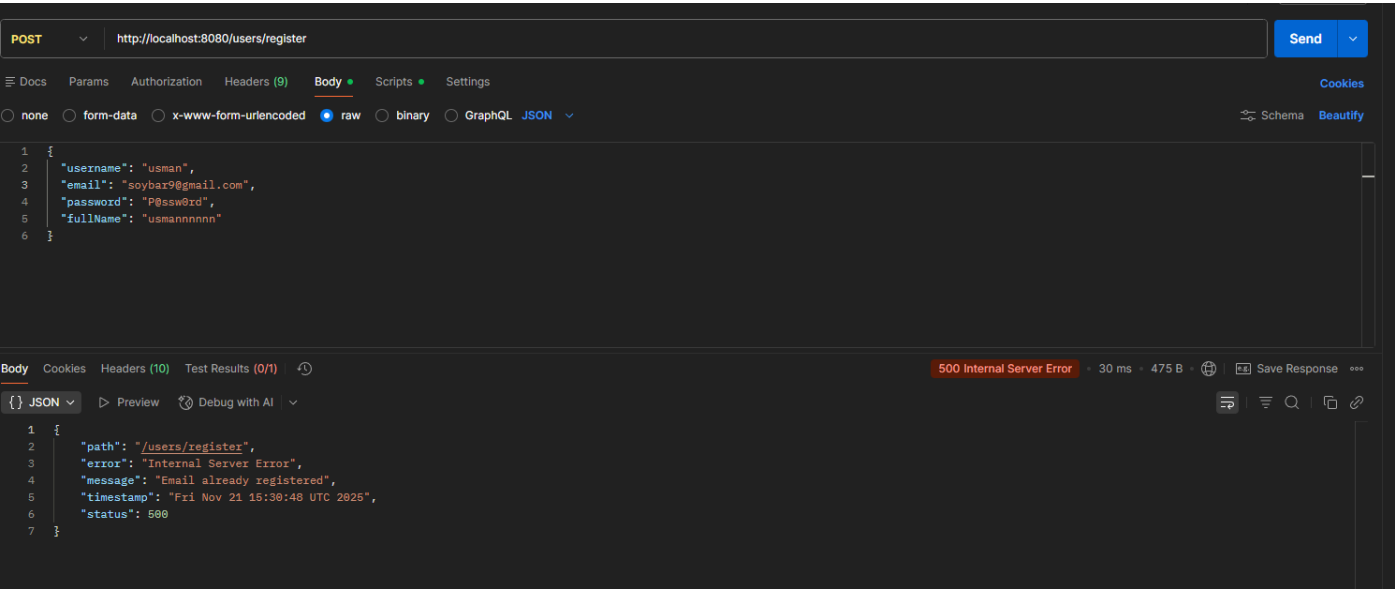
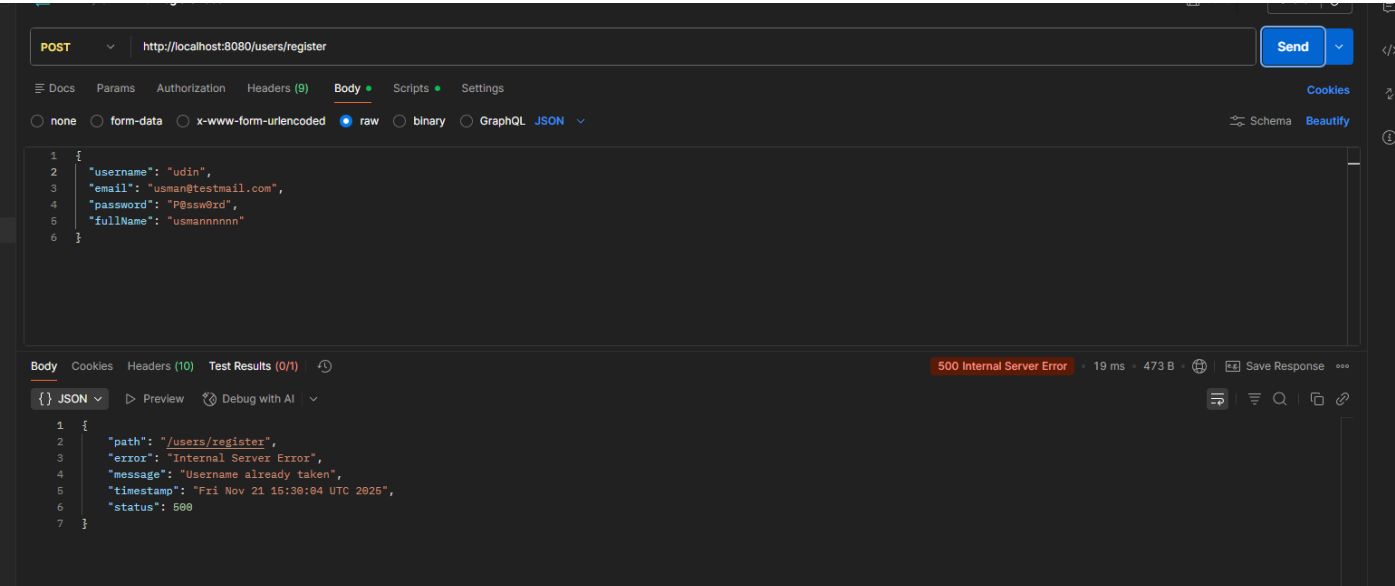


Runtime Error Handling

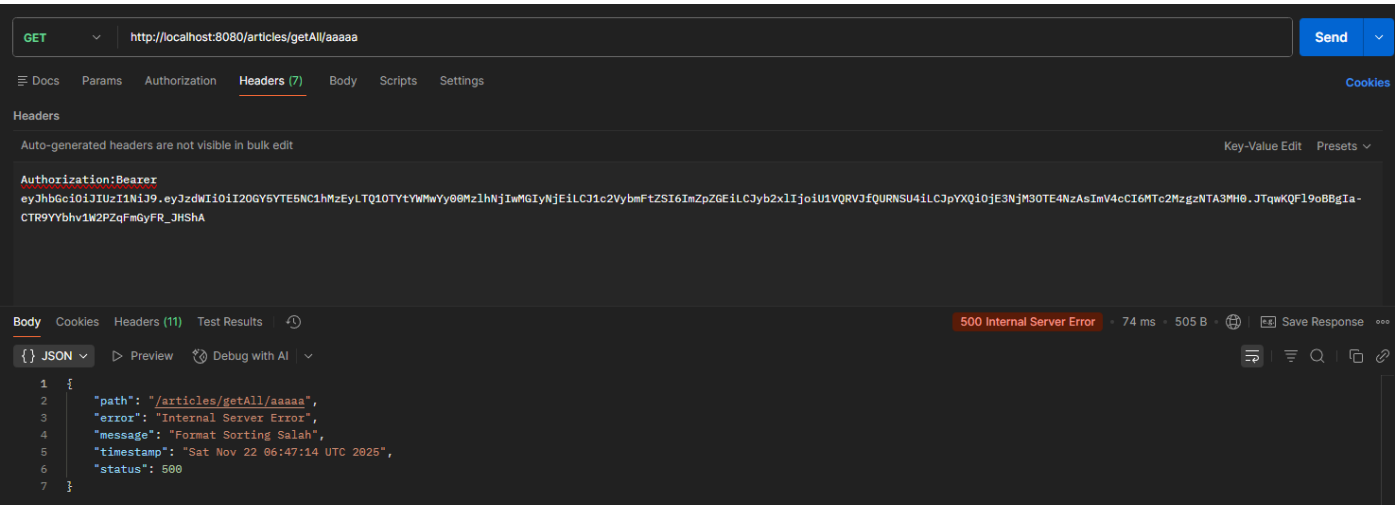
ex : Data Not Found



ex: UserName And Email Already Taken On Registered User



ex: wrong format sorting



ex : udin with Editor role trying to access Audit Log APIs