

MICROSERVICES WITH SECURITY IN API AND DOCKERIZE

KUNAL GARG

1) Newman

Flight Service

```
C:\Users\kunal>newman run "C:\Users\kunal\OneDrive\Desktop\Flight_service_MicroService.postman_collection.json"
newman

Flight_service_MicroService

→ add flight
  POST http://localhost:9999/api/flight/airline/inventory [201 Created, 368B, 3.4s]

→ search flight
  POST http://localhost:9999/api/flight/search [201 Created, 1.02kB, 702ms]
```

	executed	failed
iterations	1	0
requests	2	0
test-scripts	0	0
prerequisite-scripts	0	0
assertions	0	0
total run duration: 4.2s		
total data received: 1.23kB (approx)		
average response time: 2s [min: 702ms, max: 3.4s, s.d.: 1352ms]		

Booking Service

```
C:\Users\kunal>newman run "C:\Users\kunal\OneDrive\Desktop\Booking_service_MicroService.postman_collection.json"
newman

Booking_Service_MicroService

→ book flight
  POST http://localhost:9998/api/flight/booking/692c45f86a221baaf8ad3055 [201 Created, 510B, 1629ms]

→ get by email
  GET http://localhost:9998/api/flight/booking/history/amankumar@gmail [200 OK, 924B, 201ms]

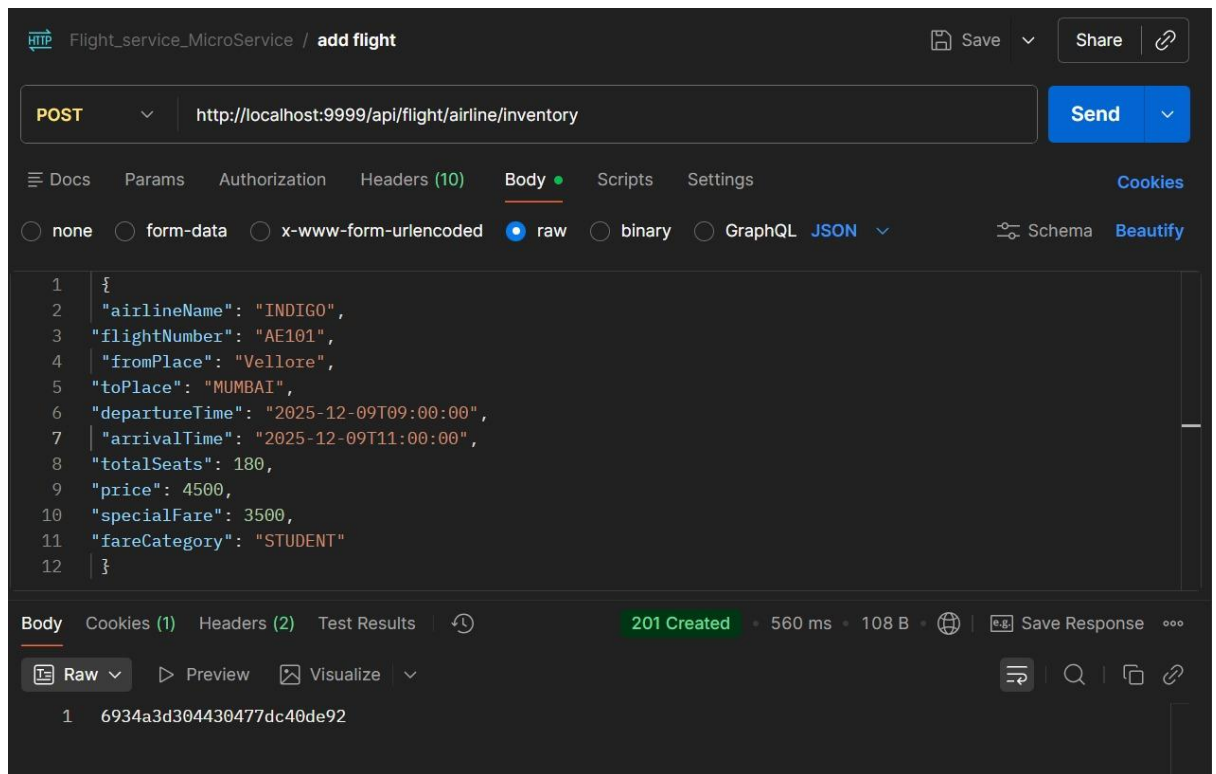
→ get by pnr
  GET http://localhost:9998/api/flight/ticket/BIKZG4 [404 Not Found, 219B, 119ms]

→ delete by pnr
  DELETE http://localhost:9998/api/flight/booking/cancel/BIKZG4 [404 Not Found, 224B, 56ms]
```

	executed	failed
iterations	1	0
requests	4	0
test-scripts	0	0
prerequisite-scripts	0	0
assertions	0	0
total run duration: 2.3s		
total data received: 1.56kB (approx)		
average response time: 501ms [min: 56ms, max: 1629ms, s.d.: 653ms]		

POSTMAN

1) Add Flight



The screenshot shows the Postman interface for a REST client. The top bar indicates the collection 'Flight_service_MicroService' and the endpoint 'add flight'. The request method is 'POST' and the URL is 'http://localhost:9999/api/flight/airline/inventory'. The 'Body' tab is selected, showing a raw JSON payload. The status bar at the bottom indicates a successful response: '201 Created' with a response time of 560 ms and a body size of 108 B.

Request:

```
POST http://localhost:9999/api/flight/airline/inventory
```

Body (raw):

```
{
  "airlineName": "INDIGO",
  "flightNumber": "AE101",
  "fromPlace": "Vellore",
  "toPlace": "MUMBAI",
  "departureTime": "2025-12-09T09:00:00",
  "arrivalTime": "2025-12-09T11:00:00",
  "totalSeats": 180,
  "price": 4500,
  "specialFare": 3500,
  "fareCategory": "STUDENT"
}
```

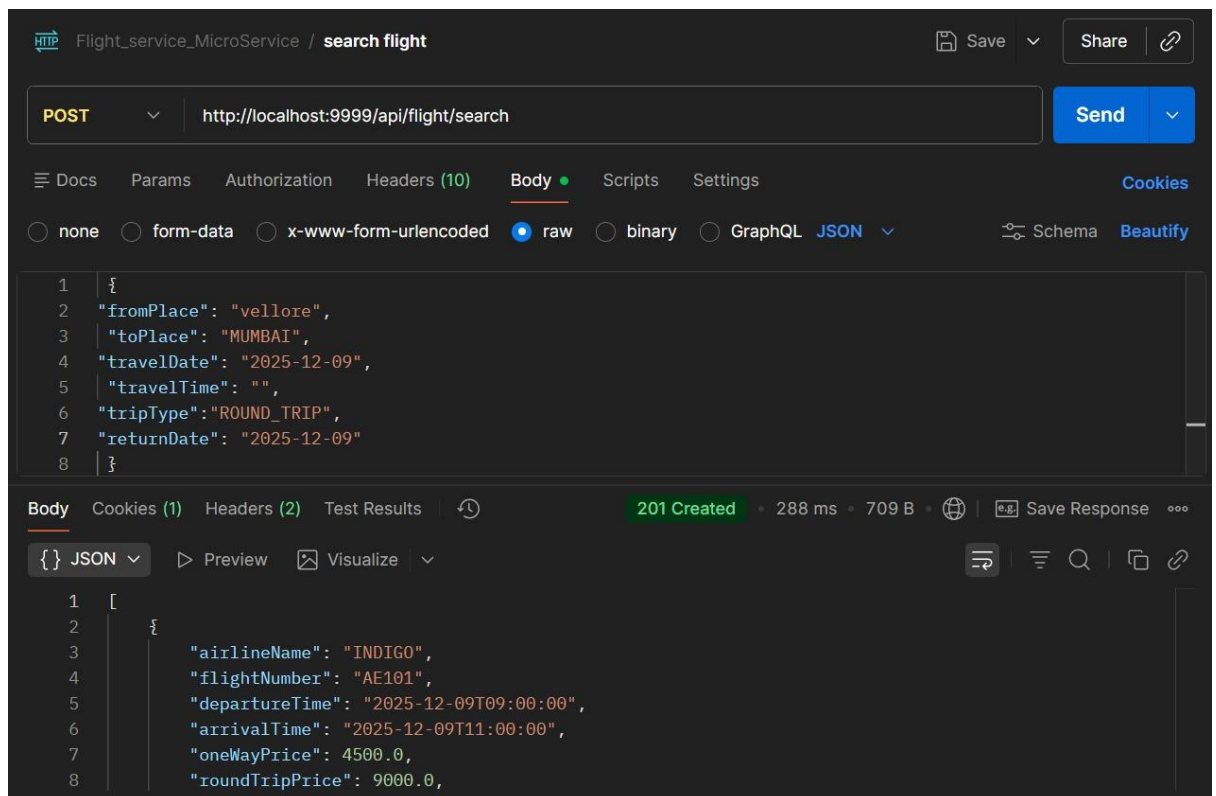
Response:

```
201 Created • 560 ms • 108 B
```

Body (raw):

```
6934a3d304430477dc40de92
```

2) Search Flight



The screenshot shows the Postman interface for a REST client. The top bar indicates the collection 'Flight_service_MicroService' and the endpoint 'search flight'. The request method is 'POST' and the URL is 'http://localhost:9999/api/flight/search'. The 'Body' tab is selected, showing a raw JSON payload. The status bar at the bottom indicates a successful response: '201 Created' with a response time of 288 ms and a body size of 709 B.

Request:

```
POST http://localhost:9999/api/flight/search
```

Body (raw):

```
{
  "fromPlace": "vellore",
  "toPlace": "MUMBAI",
  "travelDate": "2025-12-09",
  "travelTime": "",
  "tripType": "ROUND_TRIP",
  "returnDate": "2025-12-09"
}
```

Response:

```
201 Created • 288 ms • 709 B
```

Body (JSON):

```
[
  {
    "airlineName": "INDIGO",
    "flightNumber": "AE101",
    "departureTime": "2025-12-09T09:00:00",
    "arrivalTime": "2025-12-09T11:00:00",
    "oneWayPrice": 4500.0,
    "roundTripPrice": 9000.0,
  }
]
```

Docker for booking service (kafka) working fine

```
C:\Users\kunal\Documents\workspace-spring-tools-for-eclipse-4.32.2.RELEASE\booking-service-micro-assignment-1>docker-compose up -d
time="2025-12-07T03:30:02+05:30" level=warning msg="C:\\Users\\kunal\\Documents\\workspace-spring-tools-for-eclipse-4.32.2.RELEASE\\booking-service-micro-assignment-1\\docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Running 3/3
  ✓ Container booking-service-micro-assignment-1-mailhog-1      Started      1.5s
  ✓ Container booking-service-micro-assignment-1-zookeeper-1    Started      1.5s
  ✓ Container booking-service-micro-assignment-1-kafka-1         Started      0.5s

C:\Users\kunal\Documents\workspace-spring-tools-for-eclipse-4.32.2.RELEASE\booking-service-micro-assignment-1>docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED NAMES	STATUS	PORTS
55c4f7fa4793	spring-boot-login-app	"/usr/local/bin/mvn-..."	11 hours ago	Up 5 minutes	0.0.0.0:6868->8080/tcp, [::]:6868->8080/tcp
d1b518b6ald8	postgres	"docker-entrypoint.s..."	12 hours ago	Up 5 minutes	0.0.0.0:5433->5432/tcp, [::]:5433->5432/tcp
6aeb81e0dfa8	wurstmeister/kafka	"start-kafka.sh"	5 days ago	Up 7 seconds	0.0.0.0:9092->9092/tcp, [::]:9092->9092/tcp
a05ff055e9a4	wurstmeister/zookeeper	"/bin/sh -c '/usr/sb..."	5 days ago	Up 9 seconds	0.0.0.0:2181->2181/tcp, [::]:2181->2181/tcp
4451a4629abd	mailhog/mailhog	"MailHog"	5 days ago	Up 9 seconds	0.0.0.0:1025->1025/tcp, [::]:1025->1025/tcp

```
C:\Users\kunal\Documents\workspace-spring-tools-for-eclipse-4.32.2.RELEASE\booking-service-micro-assignment-1>docker exec -it booking-service-micro-assignment-1-kafka-1 bash
root@6aeb81e0dfa8:/# kafka-topics.sh \
--create \
--topic booking-confirmed \
--bootstrap-server localhost:9092 \
--replication-factor 1 \
--partitions 1
Error while executing topic command : Topic 'booking-confirmed' already exists.
[2025-12-06 22:06:57,491] ERROR org.apache.kafka.common.errors.TopicExistsException: Topic 'booking-confirmed' already exists.
(kafka.admin.TopicCommand$)
root@6aeb81e0dfa8:/# ^C
root@6aeb81e0dfa8:/# ^C
root@6aeb81e0dfa8:/# kafka-topics.sh --list --bootstrap-server localhost:9092
__consumer_offsets
booking-confirmed
root@6aeb81e0dfa8:/#
```

Logs

```
2025-12-07T03:39:54.274+05:30 INFO 24456 --- [booking-service-micro-assignment] [ad
2025-12-07T03:39:54.290+05:30 INFO 24456 --- [booking-service-micro-assignment] [ad
📅 Booking Event Published to Kafka for PNR: 5DSK27
2025-12-07T03:39:54.308+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [ntl
2025-12-07T03:39:54.308+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [ntl
2025-12-07T03:39:54.320+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [nid
2025-12-07T03:39:54.322+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [nid
2025-12-07T03:39:54.330+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [nid
2025-12-07T03:39:54.330+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [nid
2025-12-07T03:39:54.345+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [nid
2025-12-07T03:39:54.426+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [bea
2025-12-07T03:39:54.427+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [bea
2025-12-07T03:39:54.430+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [res
2025-12-07T03:39:54.431+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [res
2025-12-07T03:39:54.431+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [bea
2025-12-07T03:39:54.435+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [res
2025-12-07T03:39:54.436+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [res
Received Booking Event for PNR: 5DSK27
Email successfully sent to amankumar@gmail
2025-12-07T03:40:01.869+05:30 DEBUG 24456 --- [booking-service-micro-assignment] [loc
```

POSTMAN(BOOKING SERVICE)

1) Book flight

The screenshot shows a Postman interface for a POST request to the endpoint `http://localhost:9998/api/flight/booking/6934a3d304430477dc40de92`. The request is successful, returning a 201 Created status. The response body is a JSON object containing booking details.

```
{
  "pnr": "5DSK27",
  "email": "amankumar@gmail",
  "numberOfSeats": 2,
  "totalPrice": 9000.0,
  "bookingTime": "2025-12-06T22:09:53.869495300Z",
  "message": "Booking successful",
  "passengers": [
    {
      "name": "aman",
      "seatNumber": 101,
      "gender": "MALE",
      "age": 31,
      "meal": "VEG",
      "fareCategory": null
    }
  ]
}
```

2) Get by email

The screenshot shows a Postman interface for a GET request to the endpoint `http://localhost:9998/api/flight/booking/history/amankumar@gmail`. The request is successful, returning a 200 OK status. The response body is a JSON array containing one booking object.

```
[
  {
    "pnr": "5DSK27",
    "email": "amankumar@gmail",
    "numberOfSeats": 2,
    "totalPrice": 9000.0,
    "bookingTime": "2025-12-06T22:09:53.869Z",
    "message": "History item",
    "passengers": [
      {
        "name": "aman",
        "seatNumber": 101,
        "gender": "MALE",
        "age": 31,
        "meal": "VEG",
        "fareCategory": null
      }
    ]
  }
]
```


3) Get by PNR

The screenshot shows a REST client interface for a service named "Booking_Service_MicroService". The selected endpoint is "get by pnr" with a GET method. The URL is `http://localhost:9998/api/flight/ticket/F36UXH`. The response status is "200 OK" with a response time of 63 ms and a body size of 590 B. The response body is displayed in JSON format:

```
1  {
2    "pnr": "F36UXH",
3    "email": "amankumar@gmail",
4    "numberOfSeats": 2,
5    "totalPrice": 9000.0,
6    "bookingTime": "2025-11-30T19:17:50.043Z",
7    "message": "Ticket retrieved",
8    "passengers": [
9      {
10       "name": "aman",
11       "seatNumber": 105,
12       "gender": "MALE",
13       "age": 31,
14       "meal": "VEG",
15       "fareCategory": null,
16       "fareApplied": 4500.0,
17       "fareMessage": null
18     },
19     {}
20   ]
21 }
```

4) Delete By PNR

The screenshot shows a REST client interface for the same service. The selected endpoint is `http://localhost:9998/api/flight/booking/cancel/F36UXH` with a DELETE method. The response status is "200 OK". The response body is displayed in Raw format:

```
1  Ticket with PNR F36UXH has been cancelled successfully.
```

SCHEMAS

flight_inventory +

webfluxdb > flight-Service > flight_inventory

Documents 7 Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#) Explain

+ ↕ ↗ 🗑️ 75 1 - 7 of 7

```
price : 4500
special_fare : 3500
fare_category : "STUDENT"
_class : "com.flight_service.Model.FlightInventory"
```

```
_id: ObjectId('6934a3d304430477dc40de92')
airline_name : "INDIGO"
flight_number : "AE101"
from_place : "Vellore"
to_place : "MUMBAI"
departure_time : 2025-12-09T03:30:00.000+00:00
arrival_time : 2025-12-09T05:30:00.000+00:00
total_seats : 180
available_seats : 180
price : 4500
special_fare : 3500
fare_category : "STUDENT"
_class : "com.flight_service.Model.FlightInventory"
```

webfluxdb > test > booking_ticket

Documents 9 Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#)

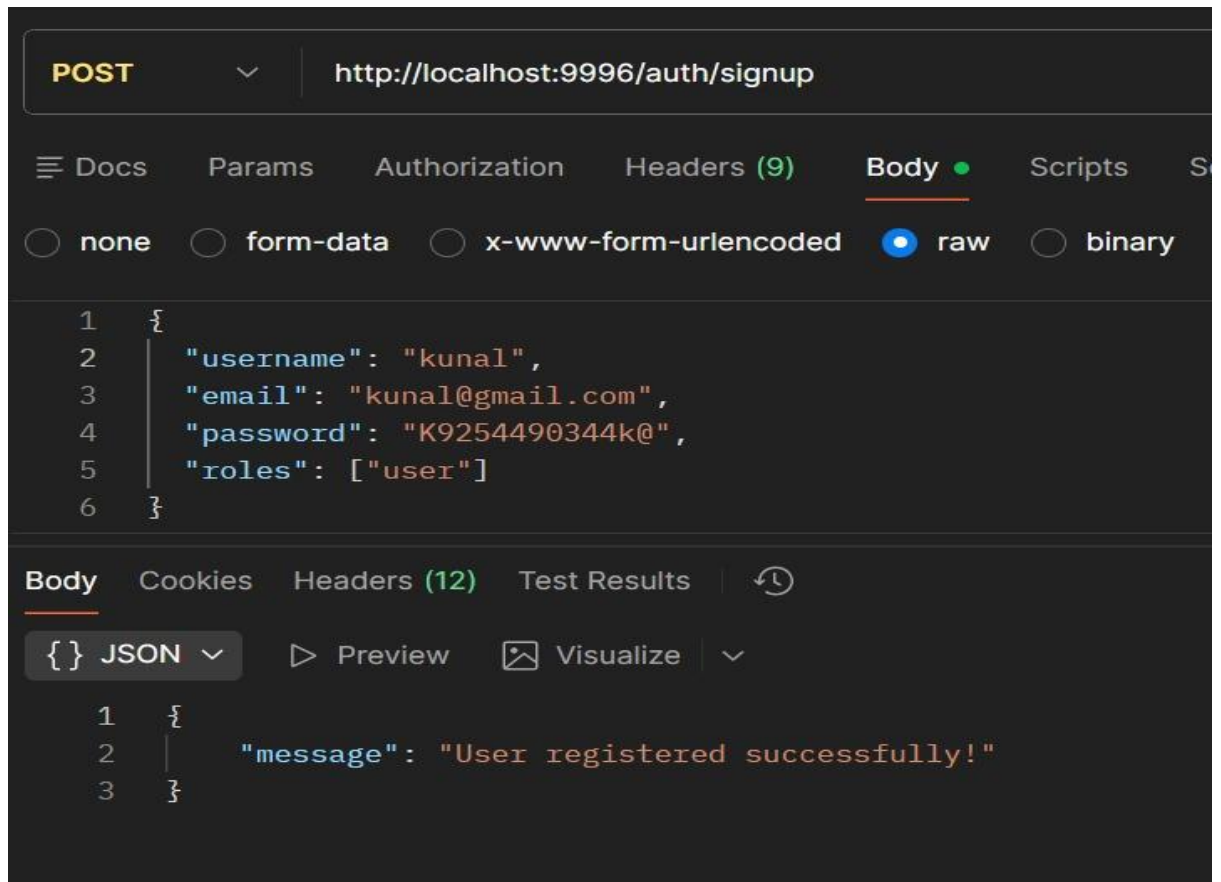
+ ↕ ↗ 🗑️ 75

```
number_of_seats : 2
total_price : 9000
status : "BOOKED"
cancelled : false
▸ passengers : Array (empty)
_class : "com.booking_service.Model.BookingTicket"
```

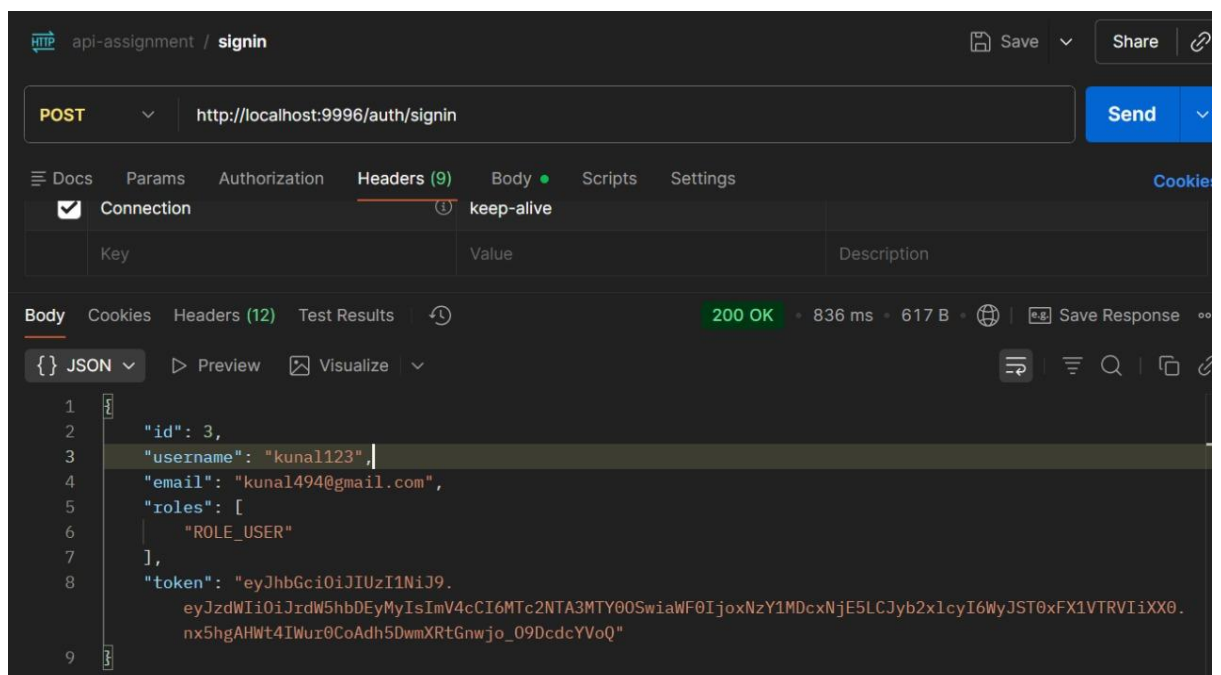
```
_id: ObjectId('6934a9b16b97294023200f13')
pnr : "5DSK27"
email : "amankumar@gmail"
flight_id : "6934a3d304430477dc40de92"
booking_time : 2025-12-06T22:09:53.869+00:00
number_of_seats : 2
total_price : 9000
status : "BOOKED"
cancelled : false
▸ passengers : Array (empty)
_class : "com.booking_service.Model.BookingTicket"
```

API GATEWAY (AUTHENTICATION)

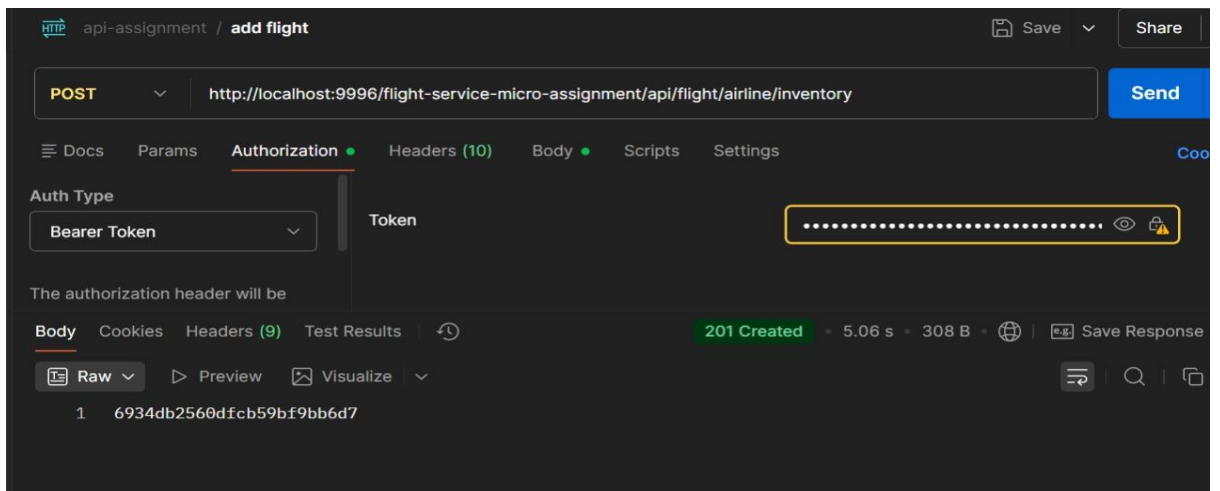
1) signup



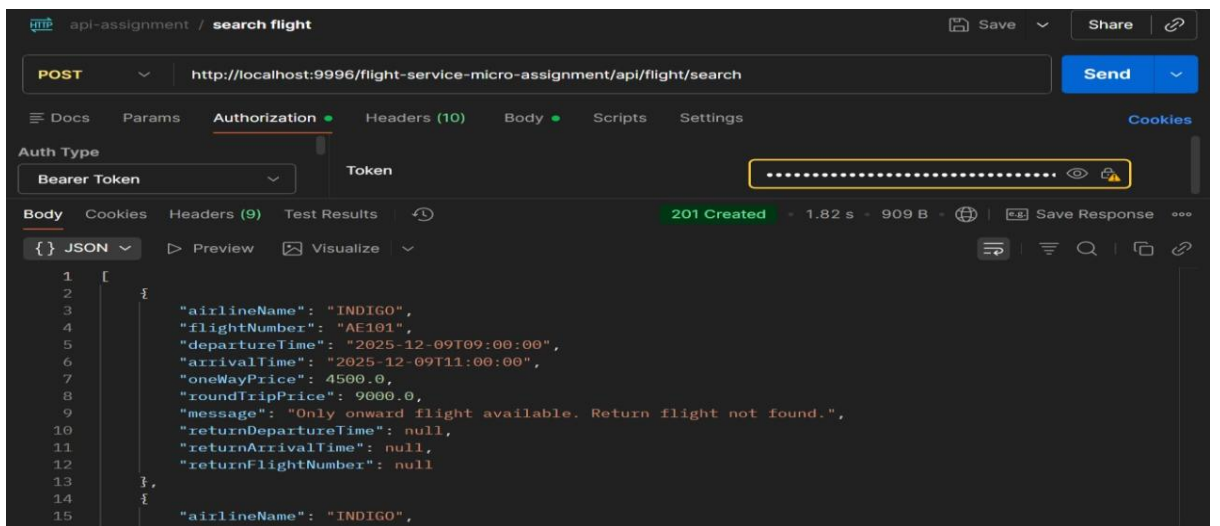
2) Signin



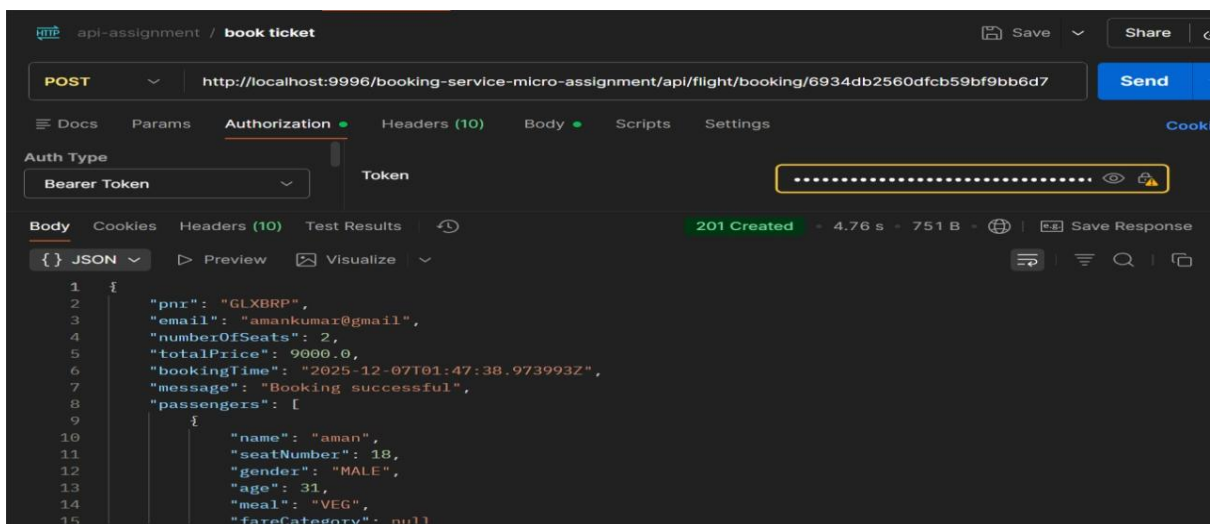
3) Add flight



4) Search Flight



5) Book Ticket



6) Get By email

The screenshot shows a Postman interface for a GET request. The URL is `http://localhost:9996/booking-service-micro-assignment/api/flight/booking/history/amankumar@gmail`. The Authorization tab is selected, showing a Bearer Token. The response body is displayed in JSON format, showing a successful 200 OK status with a response time of 747 ms and a size of 4.44 KB. The JSON data includes flight details for PNR GLXBRP, email amankumar@gmail, 2 seats, a total price of 9000.0, a booking time of 2025-12-07T01:47:38.973Z, a message "History item", and an empty passengers array.

```
{
  "pnr": "GLXBRP",
  "email": "amankumar@gmail",
  "numberOfSeats": 2,
  "totalPrice": 9000.0,
  "bookingTime": "2025-12-07T01:47:38.973Z",
  "message": "History item",
  "passengers": [
  ]
}
```

7) Get By PNR

The screenshot shows a Postman interface for a GET request. The URL is `http://localhost:9996/booking-service-micro-assignment/api/flight/ticket/GLXBRP`. The Authorization tab is selected, showing a Bearer Token. The response body is displayed in JSON format, showing a successful 200 OK status with a response time of 122 ms and a size of 741 B. The JSON data includes flight details for PNR GLXBRP, email amankumar@gmail, 2 seats, a total price of 9000.0, a booking time of 2025-12-07T01:47:38.973Z, a message "Ticket retrieved", and a single passenger named aman.

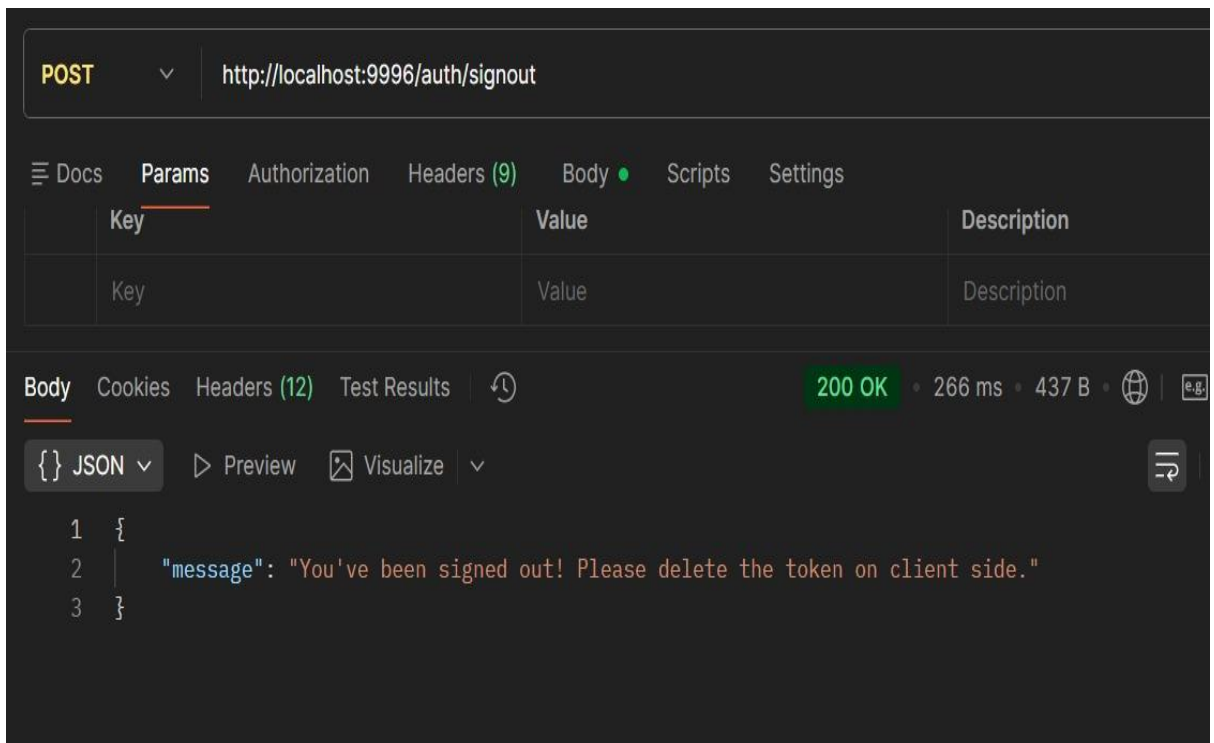
```
{
  "pnr": "GLXBRP",
  "email": "amankumar@gmail",
  "numberOfSeats": 2,
  "totalPrice": 9000.0,
  "bookingTime": "2025-12-07T01:47:38.973Z",
  "message": "Ticket retrieved",
  "passengers": [
    {
      "name": "aman",
    }
  ]
}
```

8) Delete by PNR

The screenshot shows a Postman interface for a DELETE request. The URL is `http://localhost:9996/booking-service-micro-assignment/api/flight/booking/cancel/GLXBRP`. The Authorization tab is selected, showing a Bearer Token. The response body is displayed in Raw format, showing a successful 200 OK status with a response time of 1.53 s and a size of 371 B. The response text is "Ticket with PNR GLXBRP has been cancelled successfully."

```
1 Ticket with PNR GLXBRP has been cancelled successfully.
```



9) SignOut



POST ▼ http://localhost:9996/auth/signout

Docs Params Authorization Headers (9) Body ● Scripts Settings

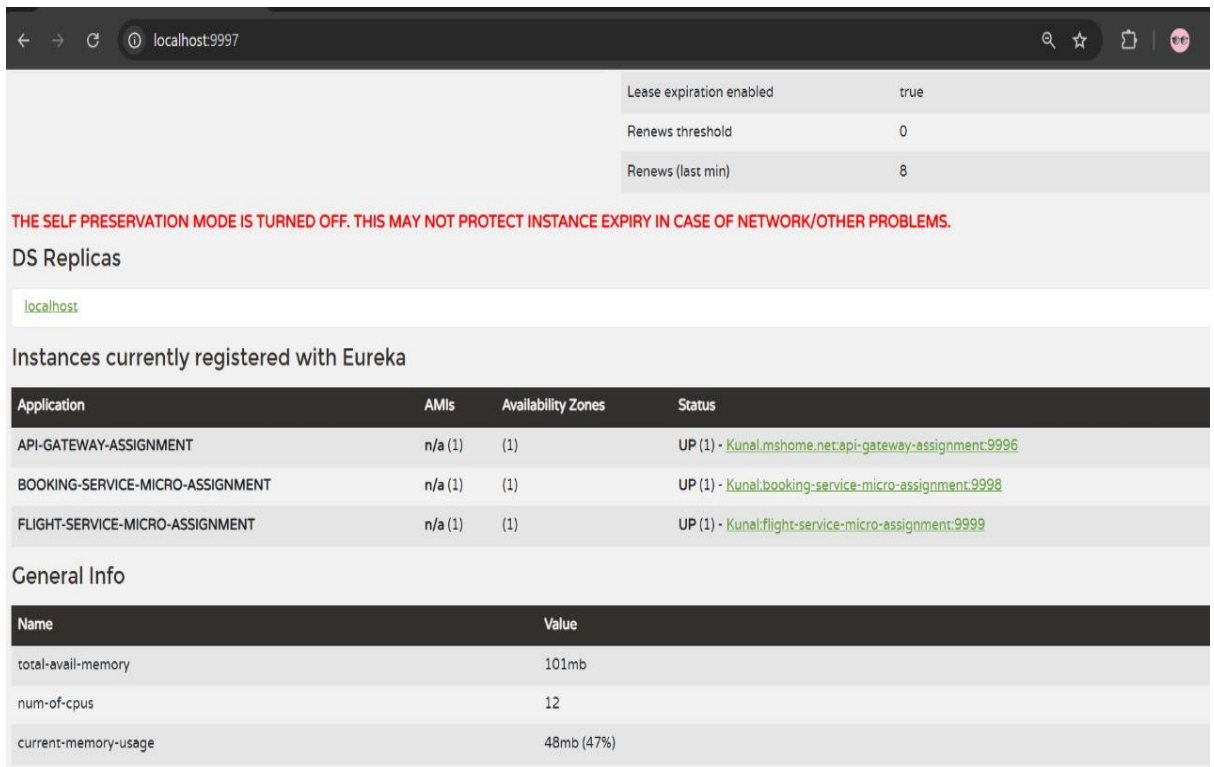
Key	Value	Description
Key	Value	Description






Body Cookies Headers (12) Test Results ↺ **200 OK** • 266 ms • 437 B •  

{} JSON ▼ ▶ Preview 🖼️ Visualize ▼ ↺

```
1 {
2   "message": "You've been signed out! Please delete the token on client side."
3 }
```

EUREKA SERVER WORKING PERFECTLY :



← → ↻  localhost:9997    

Lease expiration enabled	true
Renews threshold	0
Renews (last min)	8

THE SELF PRESERVATION MODE IS TURNED OFF. THIS MAY NOT PROTECT INSTANCE EXPIRY IN CASE OF NETWORK/OTHER PROBLEMS.

DS Replicas

localhost

Instances currently registered with Eureka

Application	AMIs	Availability Zones	Status
API-GATEWAY-ASSIGNMENT	n/a (1)	(1)	UP (1) • Kunal.mshome.net:api-gateway-assignment:9996
BOOKING-SERVICE-MICRO-ASSIGNMENT	n/a (1)	(1)	UP (1) • Kunal.booking-service-micro-assignment:9998
FLIGHT-SERVICE-MICRO-ASSIGNMENT	n/a (1)	(1)	UP (1) • Kunal.flight-service-micro-assignment:9999

General Info

Name	Value
total-avail-memory	101mb
num-of-cpus	12
current-memory-usage	48mb (47%)

Jacoco (Flight Service)

flight-service-micro-assignment

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
com.flight_service.Controller	<div></div>	100%	<div></div>	n/a	0	8	0	12	0	8	0	3
com.flight_service	<div></div>	77%	<div></div>	n/a	1	3	2	6	1	3	0	1
com.flight_service.ServiceImplementation	<div></div>	100%	<div></div>	100%	0	16	0	69	0	11	0	1
com.flight_service.exception	<div></div>	98%	<div></div>	50%	6	32	1	94	1	27	0	3
Total	12 of 714	98%	5 of 20	75%	7	59	3	181	2	49	0	8

Created with JaCoCo 0.8.11.202310140853

Jacoco (Booking Service)

booking-service-micro-assignment-1

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
com.booking_service.DTO	<div></div>	89%	<div></div>	59%	83	207	0	40	0	91	0	6
com.booking_service.Model	<div></div>	92%	<div></div>	71%	38	120	0	26	0	51	0	3
com.booking_service.exception	<div></div>	91%	<div></div>	50%	12	32	12	94	7	27	0	3
com.booking_service.service.implementation	<div></div>	98%	<div></div>	93%	2	33	1	111	1	25	0	1
com.booking_service.Controller	<div></div>	100%	<div></div>	n/a	0	6	0	7	0	6	0	2
com.booking_service.Feign	<div></div>	100%	<div></div>	n/a	0	4	0	10	0	4	0	1
com.booking_service	<div></div>	100%	<div></div>	n/a	0	2	0	3	0	2	0	1
Total	243 of 3,071	92%	140 of 386	64%	135	404	13	291	8	206	0	17

Created with JaCoCo 0.8.10.202304240956

SonarQube(Flight Service)

Kunalgarg92 > flight-service-micro-assignment > main

Summary Issues Security Hotspots More

Quality Gate: Sonar way

Passed

New Code Overall Code

Security0 Open Issues

Reliability4 Open Issues

Maintainability33 Open Issues

Accepted Issues0

Coverage45.4%

No conditions set on 224 Lines to cover

Duplications0.0%

No conditions set on 911 Lines

Security Hotspots2

Booking Service

Kunalgarg92 > booking-service-micro-assignment-1 > master

Summary Issues Security Hotspots More

Your status was not able to find your new code to deployable in that.

Define New Code

Security0 Open Issues

Reliability5 Open Issues

Maintainability76 Open Issues

Accepted Issues0

Coverage77.7%

No conditions set on 291 Lines to cover

Duplications0.0%

No conditions set on 1k Lines

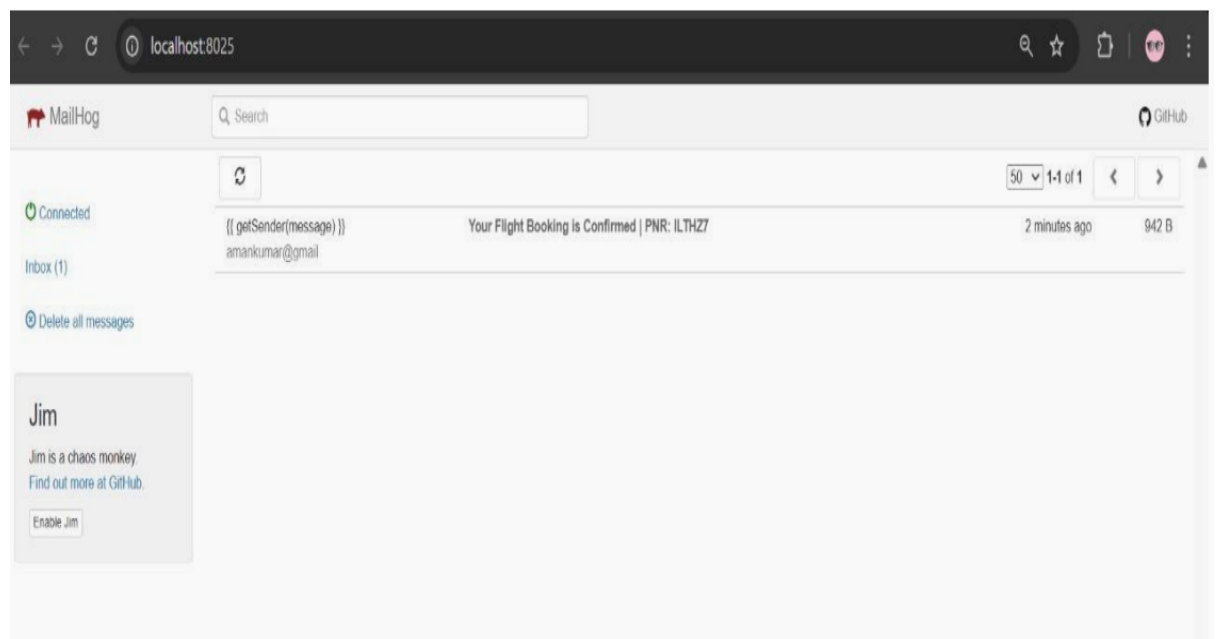
Security Hotspots3

Jmeter Testing (in CLI)

```
C:\Users\kunal>"C:\Users\kunal\Downloads\apache-jmeter-5.6.3\apache-jmeter-5.6.3\bin\jmeter.bat" -n -t "C:\Users\kunal\OneDrive\Desktop\microassignment.jmx" -l results.jtl -e -o report
WARN StatusConsoleListener The use of package scanning to locate plugins is deprecated and will be removed in a future release
WARN StatusConsoleListener The use of package scanning to locate plugins is deprecated and will be removed in a future release
WARN StatusConsoleListener The use of package scanning to locate plugins is deprecated and will be removed in a future release
WARN StatusConsoleListener The use of package scanning to locate plugins is deprecated and will be removed in a future release
Creating summariser <summary>
Created the tree successfully using C:\Users\kunal\OneDrive\Desktop\microassignment.jmx
Starting standalone test @ 2025 Dec 1 22:45:40 IST (1764609340122)
Waiting for possible Shutdown/StopTestNow/HeapDump/ThreadDump message on port 4445
Warning: Nashorn engine is planned to be removed from a future JDK release
summary =      20 in 00:00:02 =   10.5/s Avg: 1308 Min:  881 Max: 1583 Err:    0 (0.00%)
Tidying up ...   @ 2025 Dec 1 22:45:42 IST (1764609342662)
... end of run
```

Message-Broker

```
2025-12-02T02:47:48.046+05:30 INFO 2652 --- [booking-service-micro-assignment] [main] o.a.k.clients.consumer
    allow.auto.create.topics = true
    auto.commit.interval.ms = 5000
    auto.include.jmx.reporter = true
    auto.offset.reset = latest
    bootstrap.servers = [localhost:9092]
    check.crcs = true
    client.dns.lookup = use_all_dns_ips
    client.id = consumer-booking-service-group-1
    client.rack =
    connections.max.idle.ms = 540000
    default.api.timeout.ms = 60000
    enable.auto.commit = false
    exclude.internal.topics = true
    fetch.max.bytes = 52428800
    fetch.max.wait.ms = 500
    fetch.min.bytes = 1
    group.id = booking-service-group
    group.instance.id = null
    heartbeat.interval.ms = 3000
    interceptor.classes = []
    internal.leave.group.on.close = true
    internal.throw.on.fetch.stable.offset.unsupported = false
    isolation.level = read_uncommitted
    key.deserializer = class org.apache.kafka.common.serialization.StringDeserializer
```



DOCKERIZE ALL THE MICROSERVICES (SUCCESSFULLY RUNNING)

```

microservices - 2.89%
=> [eureka-server] exporting to image 0.3s
=> => exporting layers 0.3s
=> => writing image sha256:b107db36df33f9f759328cebc4589988dcf6463af5b36e80e7eae11133135a00 0.0s
=> => naming to docker.io/library/microservices-eureka-server 0.0s
=> [eureka-server] resolving provenance for metadata file 0.0s
=> [booking-service builder 5/6] COPY src ./src 0.1s
=> [booking-service builder 6/6] RUN mvn clean package -DskipTests 20.1s
=> [booking-service stage-1 3/3] COPY --from=builder /app/target/*.jar app.jar 0.1s
=> [booking-service] exporting to image 0.1s
=> => exporting layers 0.0s
=> => writing image sha256:869314750fbaf0b4b0f42007986de0616e277acb16eca602637886644b59fc54 0.0s
=> => naming to docker.io/library/microservices-booking-service 0.0s
=> [booking-service] resolving provenance for metadata file 0.0s
[+] Running 10/10
✔microservices-eureka-server Built 0.0s
✔microservices-booking-service Built 0.0s
✔microservices-flight-service Built 0.0s
✔microservices-api-gateway Built 0.0s
✔Network microservices_micro-net Created 0.2s
✔Container eureka-server Created 0.4s
✔Container mysql Created 0.4s
✔Container flight-service Created 0.2s
✔Container api-gateway Created 0.2s
✔Container booking-service Created 0.2s
Attaching to api-gateway, booking-service, eureka-server, flight-service, mysql
eureka-server
eureka-server
eureka-server
eureka-server

```

Logs :

```

C:\Users\kunal>docker logs api-gateway

:: Spring Boot :: (v3.4.0)

2025-12-07T10:37:12.750Z INFO 1 --- [api-gateway-assignment] [
piGatewayAssignmentApplication v0.0.1-SNAPSHOT using Java 21.0.9 with PID 1 (/app/app.jar started by root in /app)
2025-12-07T10:37:12.755Z INFO 1 --- [api-gateway-assignment] [
main] c.a.ApiGatewayAssignmentApplication : No active
2025-12-07T10:37:12.755Z INFO 1 --- [api-gateway-assignment] [
main] c.a.ApiGatewayAssignmentApplication : No active
2025-12-07T10:37:14.872Z INFO 1 --- [api-gateway-assignment] [
main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapp
ing Spring Data JPA repositories in DEFAULT mode.
2025-12-07T10:37:15.171Z INFO 1 --- [api-gateway-assignment] [
main] .s.d.r.c.RepositoryConfigurationDelegate : Finished S
pring Data repository scanning in 272 ms. Found 2 JPA repository interfaces.
2025-12-07T10:37:15.912Z INFO 1 --- [api-gateway-assignment] [
main] o.s.cloud.context.scope.GenericScope : BeanFactor
y id=e20502cd-f8cb-3732-9ef2-4830bad30e0b
2025-12-07T10:37:17.386Z INFO 1 --- [api-gateway-assignment] [
main] o.hibernate.jpa.internal.util.LogHelper : HHH000204:
Processing PersistenceUnitInfo [name: default]
2025-12-07T10:37:17.881Z INFO 1 --- [api-gateway-assignment] [
main] org.hibernate.Version : HHH000412:
Hibernate ORM core version 6.6.2.Final
2025-12-07T10:37:18.005Z INFO 1 --- [api-gateway-assignment] [
main] o.h.c.internal.RegionFactoryInitiator : HHH000026:
Second-level cache disabled
2025-12-07T10:37:18.859Z INFO 1 --- [api-gateway-assignment] [
main] o.s.o.j.p.SpringPersistenceUnitInfo : No LoadTim
eWeaver setup: ignoring JPA class transformer
2025-12-07T10:37:18.935Z INFO 1 --- [api-gateway-assignment] [
main] com.zaxxer.hikari.HikariDataSource : HikariPool
-1 - Starting...
2025-12-07T10:37:19.467Z INFO 1 --- [api-gateway-assignment] [
main] com.zaxxer.hikari.pool.HikariPool : HikariPool

```

```

Client initialized at timestamp 1765103847978 with initial instances count: 0
2025-12-07T10:37:27.987Z INFO 1 --- [api-gateway-assignment] [          main] o.s.c.n.e.s.EurekaServiceRegistry      : Registerin
g application API-GATEWAY-ASSIGNMENT with eureka with status UP
2025-12-07T10:37:27.988Z INFO 1 --- [api-gateway-assignment] [          main] com.netflix.discovery.DiscoveryClient  : Saw local
status change event StatusChangeEvent [timestamp=1765103847988, current=UP, previous=STARTING]
2025-12-07T10:37:27.993Z INFO 1 --- [api-gateway-assignment] [foReplicator-%d] com.netflix.discovery.DiscoveryClient  : DiscoveryC
lient_API-GATEWAY-ASSIGNMENT/e443bdb2be:api-gateway-assignment:9996: registering service...
2025-12-07T10:37:28.457Z INFO 1 --- [api-gateway-assignment] [          main] o.s.b.web.embedded.netty.NettyWebServer  : Netty star
ted on port 9996 (http)
2025-12-07T10:37:28.460Z INFO 1 --- [api-gateway-assignment] [          main] .s.c.n.e.s.EurekaAutoServiceRegistration : Updating p
ort to 9996
2025-12-07T10:37:28.536Z INFO 1 --- [api-gateway-assignment] [          main] c.a.ApiGatewayAssignmentApplication    : Started Ap
iGatewayAssignmentApplication in 16.726 seconds (process running for 19.926)
2025-12-07T10:37:28.610Z INFO 1 --- [api-gateway-assignment] [foReplicator-%d] com.netflix.discovery.DiscoveryClient  : DiscoveryC
lient_API-GATEWAY-ASSIGNMENT/e443bdb2be:api-gateway-assignment:9996 - registration status: 204
2025-12-07T10:37:57.964Z INFO 1 --- [api-gateway-assignment] [reshExecutor-%d] com.netflix.discovery.DiscoveryClient  : Disable de
lta property : false
2025-12-07T10:37:57.964Z INFO 1 --- [api-gateway-assignment] [reshExecutor-%d] com.netflix.discovery.DiscoveryClient  : Single vip
registry refresh property : null
2025-12-07T10:37:57.964Z INFO 1 --- [api-gateway-assignment] [reshExecutor-%d] com.netflix.discovery.DiscoveryClient  : Force full
registry fetch : false
2025-12-07T10:37:57.964Z INFO 1 --- [api-gateway-assignment] [reshExecutor-%d] com.netflix.discovery.DiscoveryClient  : Applicatio
n is null : false
2025-12-07T10:37:57.964Z INFO 1 --- [api-gateway-assignment] [reshExecutor-%d] com.netflix.discovery.DiscoveryClient  : Registered
Applications size is zero : true
2025-12-07T10:37:57.964Z INFO 1 --- [api-gateway-assignment] [reshExecutor-%d] com.netflix.discovery.DiscoveryClient  : Applicatio
n version is -1: false
2025-12-07T10:37:57.964Z INFO 1 --- [api-gateway-assignment] [reshExecutor-%d] com.netflix.discovery.DiscoveryClient  : Getting al
l instance registry info from the eureka server
2025-12-07T10:37:58.025Z INFO 1 --- [api-gateway-assignment] [reshExecutor-%d] com.netflix.discovery.DiscoveryClient  : The respon
se status is 200
C:\Users\kunal>

```

```

C:\Users\kunal>docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS
7f8a8d441f5e   microservices-flight-service        "java -jar app.jar"     About a minute Up About a minute 0.0.0.0:99
99->9999/tcp, [::]:9999->9999/tcp
729cbbalde3    microservices-booking-service       "java -jar app.jar"     About a minute Up About a minute 0.0.0.0:99
98->9998/tcp, [::]:9998->9998/tcp
e443bdb2be     microservices-api-gateway           "java -jar app.jar"     22 minutes ago Up About a minute 0.0.0.0:99
96->9996/tcp, [::]:9996->9996/tcp
109d3eeb7487   microservices-eureka-server         "java -jar app.jar"     22 minutes ago Up About a minute 0.0.0.0:99
97->9997/tcp, [::]:9997->9997/tcp
73648b1fd969   mysql:8.0                           "docker-entrypoint.s..." 22 minutes ago Up About a minute (healthy) 0.0.0.0:33
07->3306/tcp, [::]:3307->3306/tcp

```

```

C:\Users\kunal>docker images
IMAGE                                ID                                DISK USAGE  CONTENT SIZE  EXTRA
mailhog/mailhog:latest               4de68494cd0d                    392MB       0B           U
microservices-api-gateway:latest     aa7279772a53                    372MB       0B           U
microservices-booking-service:latest 646afde58a8c                    342MB       0B           U
microservices-eureka-server:latest   ae58eb214801                    342MB       0B           U
microservices-flight-service:latest   93c5d846a63c                    321MB       0B           U
mysql:8.0                             95f1309164f3                    781MB       0B           U
postgres:latest                      80c0891f5de9                    456MB       0B           U
spring-boot-login-app:latest          60384964b36d                    1.06GB      0B           U
wurstmeister/kafka:latest             a692873757c0                    468MB       0B           U
wurstmeister/zookeeper:latest         3f43f72cb283                    510MB       0B           U

```

WORKING -FINE (tested)

System Status

Environment

test

Current time

2025-12-07T11:11:01 +0000

Data center

default

Uptime

00:03

Lease expiration enabled

true

Renews threshold

6

Renews (last min)

12

THE SELF PRESERVATION MODE IS TURNED OFF. THIS MAY NOT PROTECT INSTANCE EXPIRY IN CASE OF NETWORK/OTHER PROBLEMS.

DS Replicas

localhost

Instances currently registered with Eureka

Application	AMIs	Availability Zones	Status
API-GATEWAY-ASSIGNMENT	n/a (1)	(1)	UP (1) - e443bdb2be:api-gateway-assignment:9996
BOOKING-SERVICE-MICRO-ASSIGNMENT	n/a (1)	(1)	UP (1) - 2067b1396c72:booking-service-micro-assignment:9998
FLIGHT-SERVICE-MICRO-ASSIGNMENT	n/a (1)	(1)	UP (1) - 278aaf7de168:flight-service-micro-assignment:9999

General Info

Config-link : https://github.com/Kunalgarg92/config_dockerized_services