Chubb Assignment 3 Report

Newman report (HTML report of the same can be found in the “newman_report” folder)

```
vishnu  fedora  ../newman  newman run Chubb.postman_collection.json
newman

Chubb

❏ Flight Service
↳ Add flight schedule
  POST http://localhost:9000/flightservice/api/flight/airline/inventory [201 Created, 484B, 37ms]

↳ Search Flight
  POST http://localhost:9000/flightservice/api/flight/search [200 OK, 2.66kB, 8ms]

❏ Booking Service
↳ Search by pnr
  GET http://localhost:9000/bookingservice/api/flight/ticket/PNR17645920003131 [200 OK, 515B, 10ms]

↳ Cancel a ticket
  DELETE http://localhost:9000/bookingservice/api/flight/booking/cancel/PNR17645214757551 [204 No Content, 64B, 21ms]

↳ Get details using email
  GET http://localhost:9000/bookingservice/api/flight/booking/history/vishnuvaradhankr@gmail.com [200 OK, 13.52kB, 13ms]

↳ Book ticket
  POST http://localhost:9000/bookingservice/api/flight/booking/3 [201 Created, 518B, 25ms]
```

	executed	failed
iterations	1	0
requests	6	0
test-scripts	0	0
prerequest-scripts	0	0
assertions	0	0
total run duration: 174ms		
total data received: 17.06kB (approx)		
average response time: 19ms [min: 8ms, max: 37ms, s.d.: 10ms]		

Jmeter Report

Jmeter test using cli Test plan and Full report available on “Jmeter” folder

```
vishnu  fedora  ../Jmeter  jmeter -n -t "/home/vishnu/Documents/Chubb Assignments/FlightBookingMicroservice/Jmeter/TestPlan.jmx" -l "/home/vishnu/Documents/Chubb Assignments/FlightBookingMicroservice/Jmeter/results.jtl"
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 /home/vishnu/Documents/Chubb Assignments/FlightBookingMicroservice/Jmeter/TestPlan.jmx
Starting standalone test @ 2025 Dec 1 21:08:20 IST (1764603500402)
Waiting for possible Shutdown/StopTestNow/HeapDump/ThreadDump message on port 4445
summary =    120 in 00:00:01 =  114.3/s Avg:    27 Min:     7 Max:   122 Err:    36 (30.00%)
Tidying up ...    @ 2025 Dec 1 21:08:21 IST (1764603501515)
... end of run
```

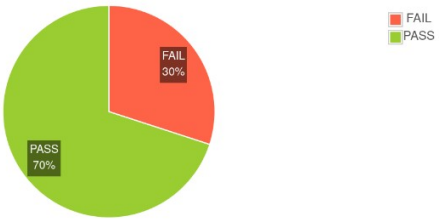
Test and Report information

Source file	"results.jtl"
Start Time	"12/1/25, 9:08 PM"
End Time	"12/1/25, 9:08 PM"
Filter for display	""

APDEX (Application Performance Index)

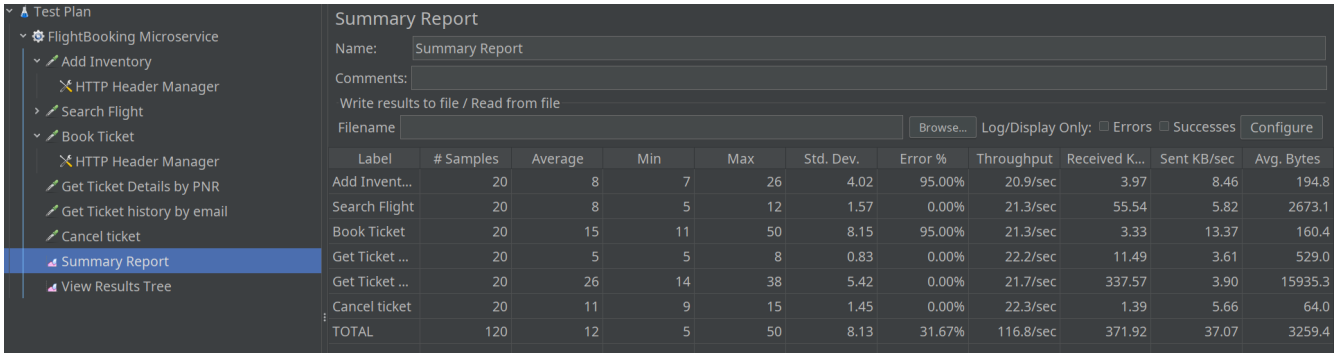
Apdex	T (Toleration threshold)	F (Frustration threshold)	Label
0.700	**500 ms**	**1 sec 500 ms**	**Total**
0.050	500 ms	1 sec 500 ms	Add Inventory
0.150	500 ms	1 sec 500 ms	Book Ticket
1.000	500 ms	1 sec 500 ms	Search Flight
1.000	500 ms	1 sec 500 ms	Cancel ticket
1.000	500 ms	1 sec 500 ms	Get Ticket history by email
1.000	500 ms	1 sec 500 ms	Get Ticket Details by PNR

Requests Summary



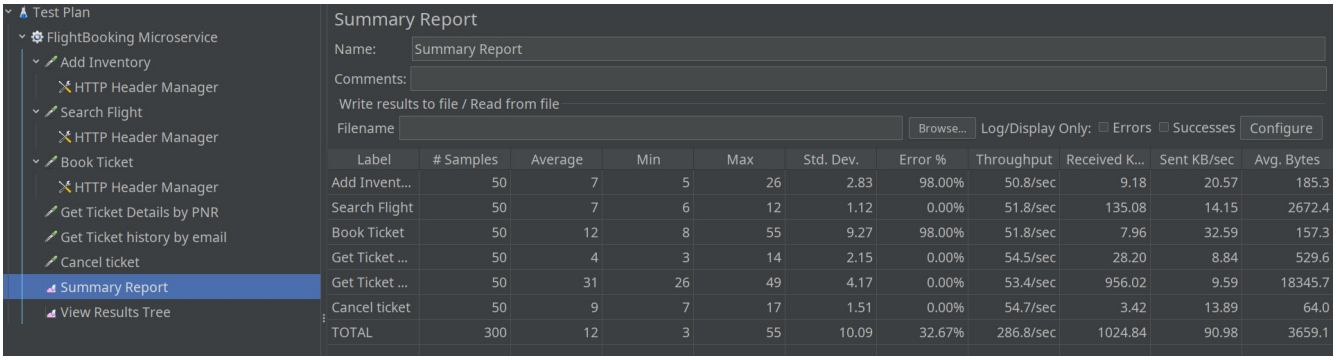
Jmeter test using GUI

20 Threads



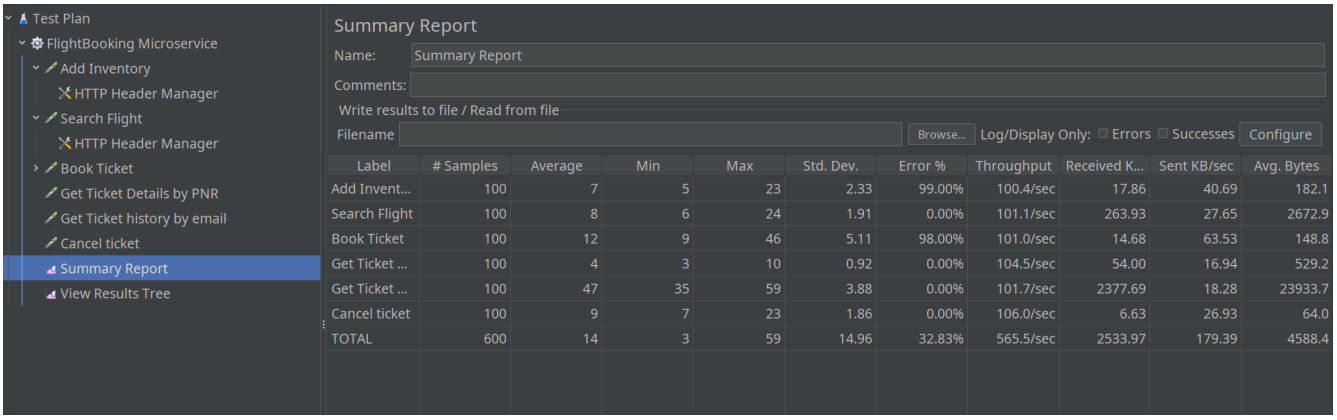
Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received K...	Sent KB/sec	Avg. Bytes
Add Invent...	20	8	7	26	4.02	95.00%	20.9/sec	3.97	8.46	194.8
Search Flight	20	8	5	12	1.57	0.00%	21.3/sec	55.54	5.82	2673.1
Book Ticket	20	15	11	50	8.15	95.00%	21.3/sec	3.33	13.37	160.4
Get Ticket ...	20	5	5	8	0.83	0.00%	22.2/sec	11.49	3.61	529.0
Get Ticket ...	20	26	14	38	5.42	0.00%	21.7/sec	337.57	3.90	15935.3
Cancel ticket	20	11	9	15	1.45	0.00%	22.3/sec	1.39	5.66	64.0
TOTAL	120	12	5	50	8.13	31.67%	116.8/sec	371.92	37.07	3259.4

50 Threads



Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received K...	Sent KB/sec	Avg. Bytes
Add Invent...	50	7	5	26	2.83	98.00%	50.8/sec	9.18	20.57	185.3
Search Flight	50	7	6	12	1.12	0.00%	51.8/sec	135.08	14.15	2672.4
Book Ticket	50	12	8	55	9.27	98.00%	51.8/sec	7.96	32.59	157.3
Get Ticket ...	50	4	3	14	2.15	0.00%	54.5/sec	28.20	8.84	529.6
Get Ticket ...	50	31	26	49	4.17	0.00%	53.4/sec	956.02	9.59	18345.7
Cancel ticket	50	9	7	17	1.51	0.00%	54.7/sec	3.42	13.89	64.0
TOTAL	300	12	3	55	10.09	32.67%	286.8/sec	1024.84	90.98	3659.1

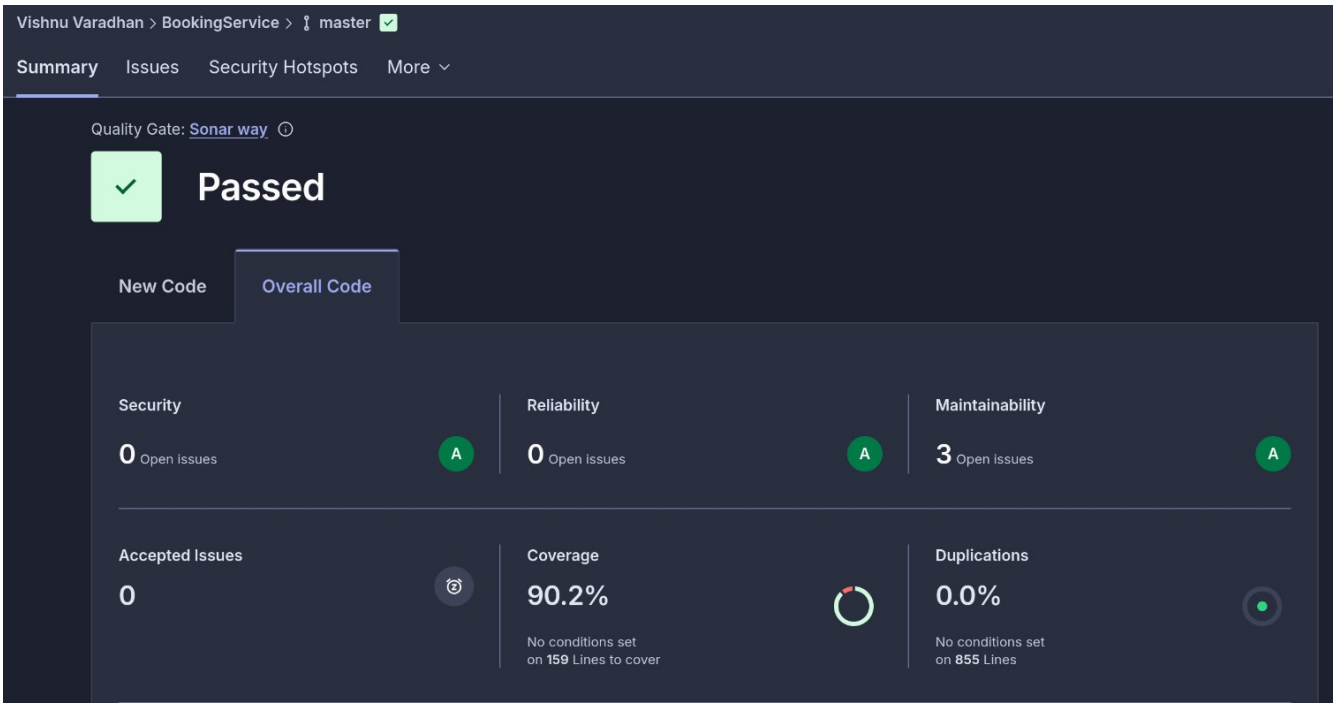
100 Threads



Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received K...	Sent KB/sec	Avg. Bytes
Add Invent...	100	7	5	23	2.33	99.00%	100.4/sec	17.86	40.69	182.1
Search Flight	100	8	6	24	1.91	0.00%	101.1/sec	263.93	27.65	2672.9
Book Ticket	100	12	9	46	5.11	98.00%	101.0/sec	14.68	63.53	148.8
Get Ticket ...	100	4	3	10	0.92	0.00%	104.5/sec	54.00	16.94	529.2
Get Ticket ...	100	47	35	59	3.88	0.00%	101.7/sec	2377.69	18.28	23933.7
Cancel ticket	100	9	7	23	1.86	0.00%	106.0/sec	6.63	26.93	64.0
TOTAL	600	14	3	59	14.96	32.83%	565.5/sec	2533.97	179.39	4588.4

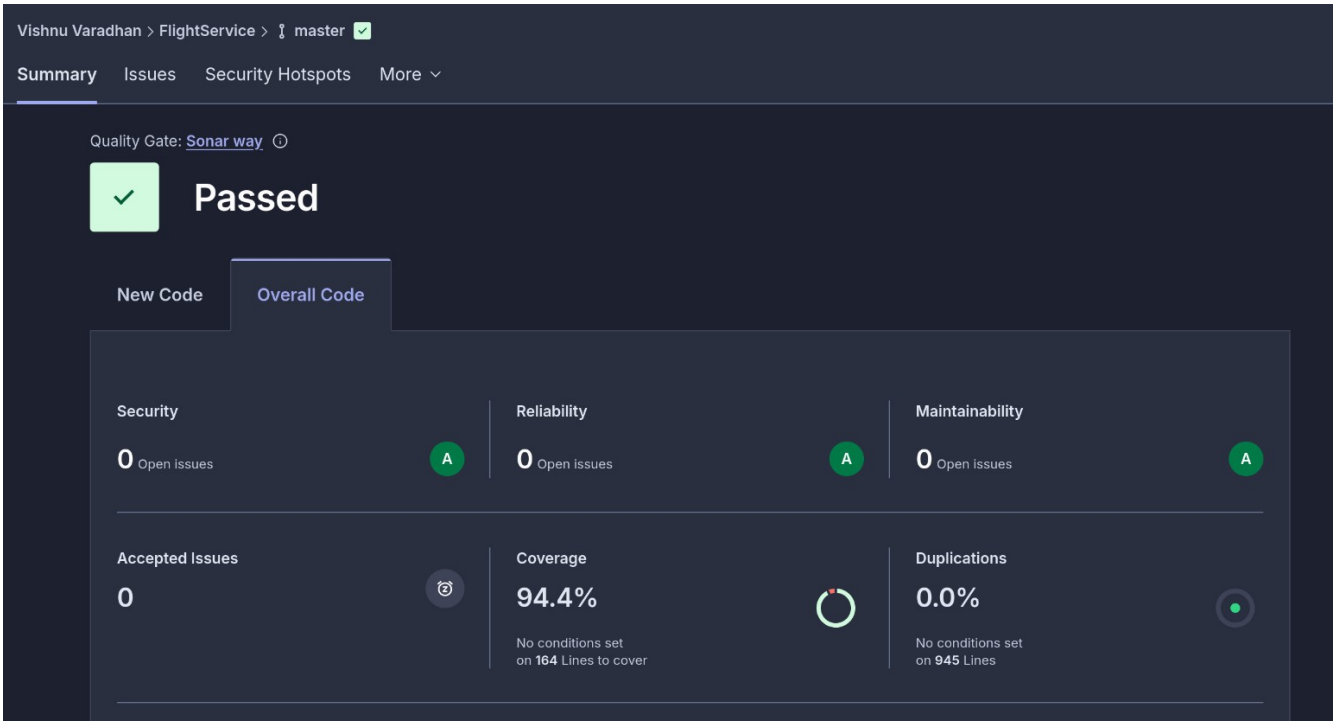
SonarQube Report

Booking Service Report:



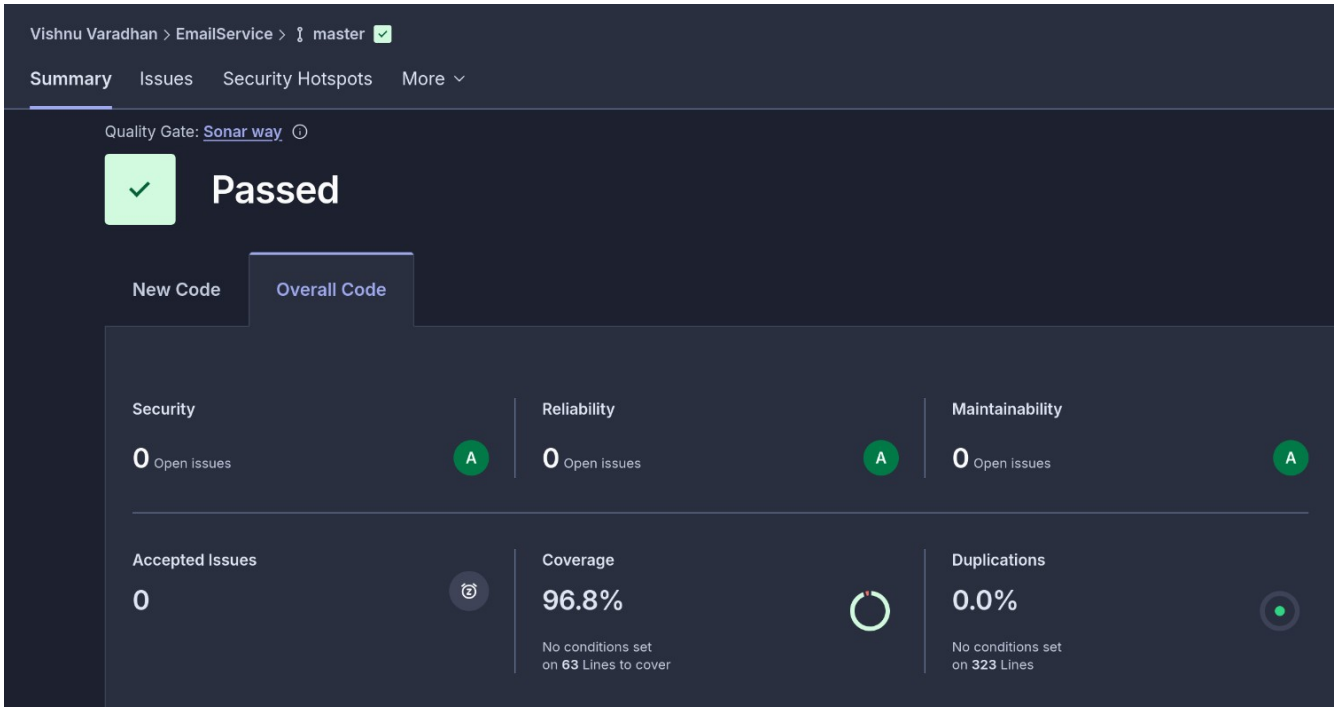
Link: https://sonarcloud.io/summary/overall?id=vi2hnu-1_bookingservice&branch=master

Flight Service Report:



Link: https://sonarcloud.io/summary/overall?id=vi2hnu-1_flightservice&branch=master

Email Service Report:



Link: https://sonarcloud.io/summary/overall?id=vi2hnu-1_emailservice&branch=master

Jacoco Report:

FlightService

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
org.example.flightservice.controller		82%		n/a	2	11	3	19	2	11	0	3
org.example.flightservice.exception		92%		50%	1	15	2	29	0	14	0	6
org.example.flightservice		37%		n/a	1	2	2	3	1	2	0	1
org.example.flightservice.service.implementation		99%		87%	3	29	0	89	0	17	0	3
org.example.flightservice.dto		100%		100%	0	8	0	15	0	5	0	4
org.example.flightservice.model.enums		100%		n/a	0	2	0	4	0	2	0	2
org.example.flightservice.model.entity		100%		n/a	0	2	0	5	0	2	0	1
Total	26 of 726	96%	4 of 32	87%	7	69	7	164	3	53	0	20

BookingService

BookingService

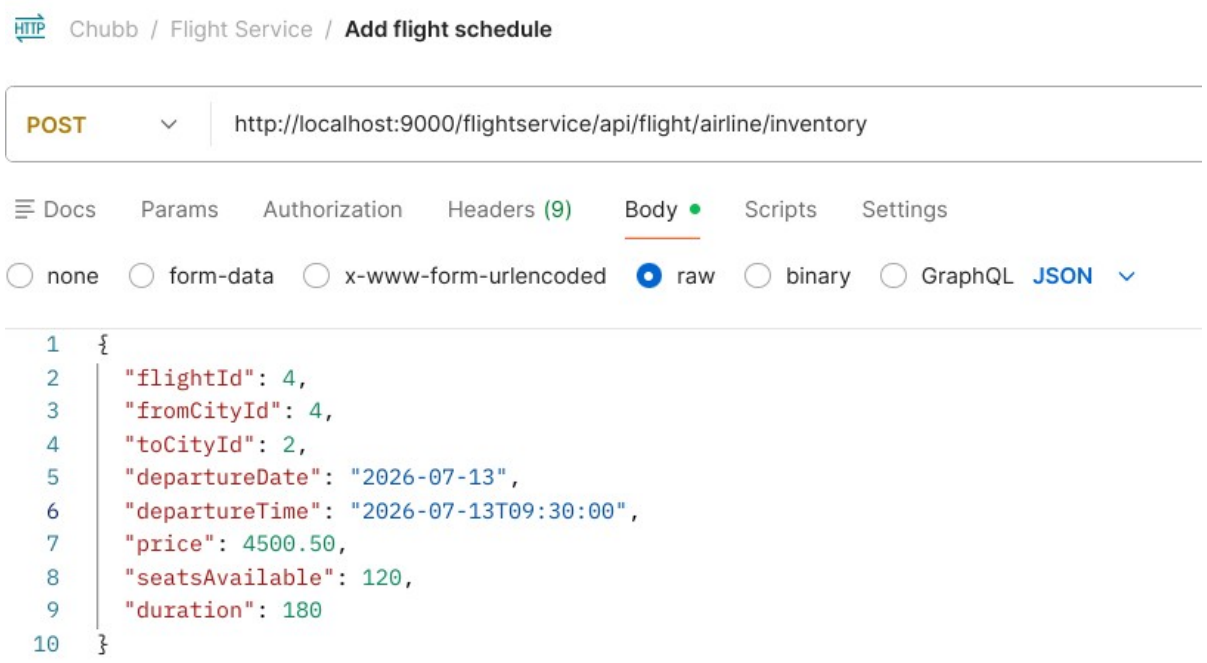
Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
org.example.bookingservice.exception		55%		0%	3	13	12	26	2	12	0	5
org.example.bookingservice.service.implmentation		98%		95%	1	24	1	98	0	13	0	2
org.example.bookingservice		37%		n/a	1	2	2	3	1	2	0	1
org.example.bookingservice.dto		100%		n/a	0	6	0	11	0	6	0	5
org.example.bookingservice.controller		100%		n/a	0	7	0	15	0	7	0	2
org.example.bookingservice.model.enums		100%		n/a	0	3	0	6	0	3	0	3
Total	55 of 722	92%	3 of 24	87%	5	55	15	159	3	43	0	18

EmailService

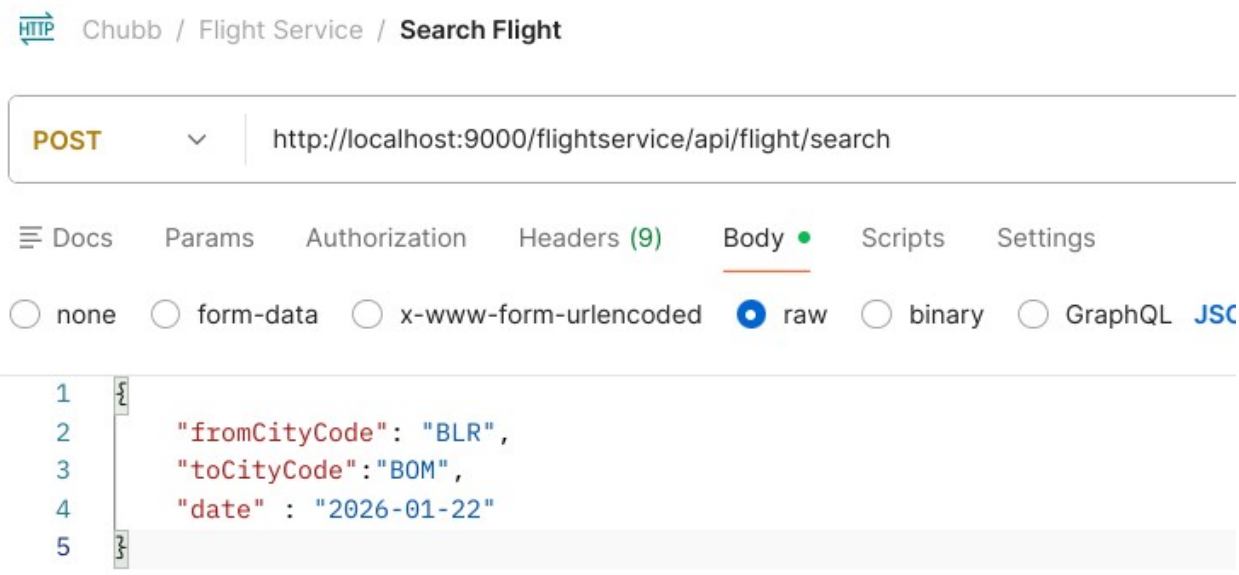
Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
org.example.emailservice		37%		n/a	1	2	2	3	1	2	0	1
org.example.emailservice.service.implementation		100%		n/a	0	5	0	44	0	5	0	1
org.example.emailservice.dto		100%		n/a	0	3	0	3	0	3	0	3
org.example.emailservice.model.enums		100%		n/a	0	2	0	4	0	2	0	2
org.example.emailservice.kafka		100%		n/a	0	4	0	9	0	4	0	1
Total	5 of 270	98%	0 of 0	n/a	1	16	2	63	1	16	0	8

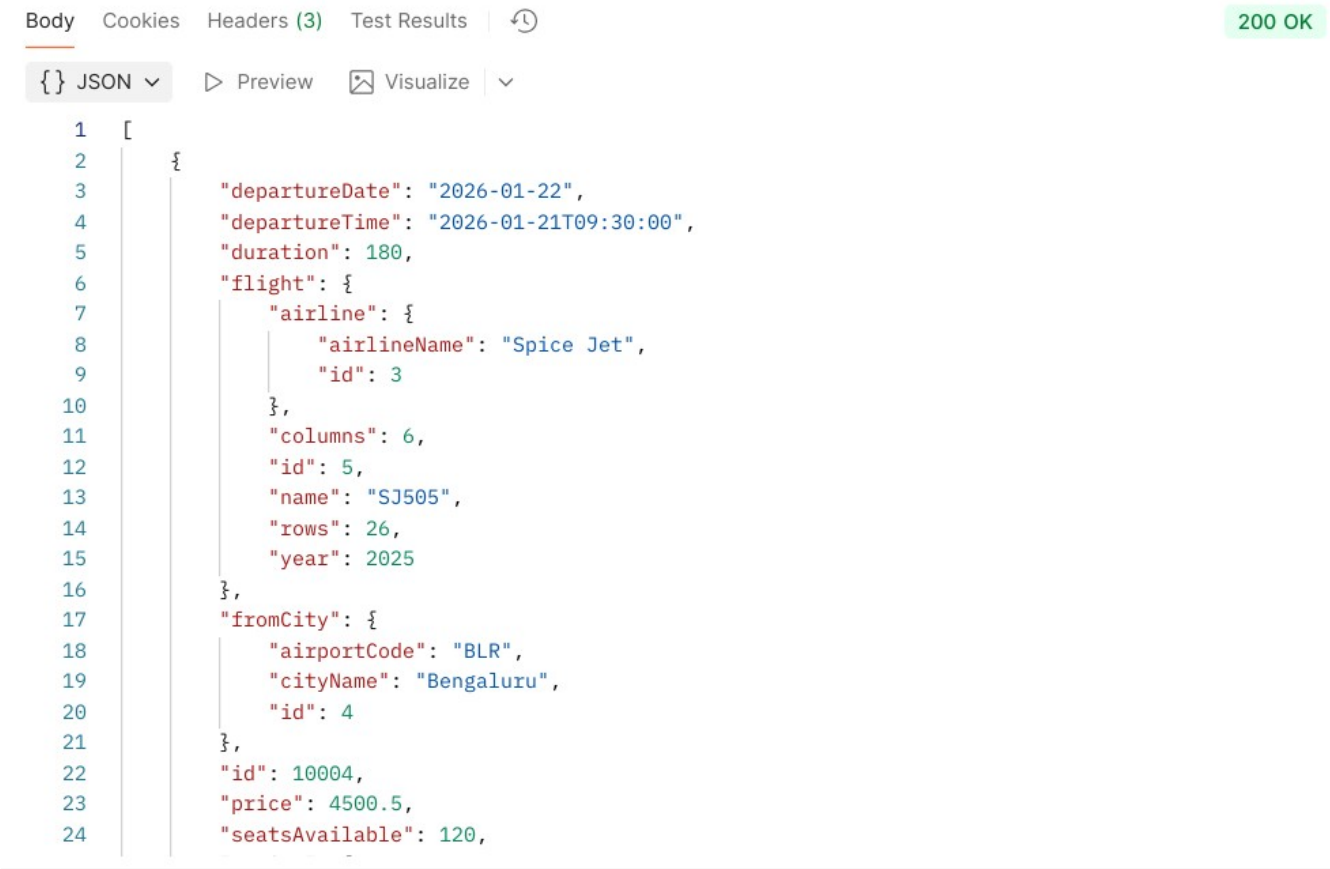
Postman (Check full request body and response data at the end of this document)

1) http://localhost:9000/flightservice/api/flight/airline/inventory

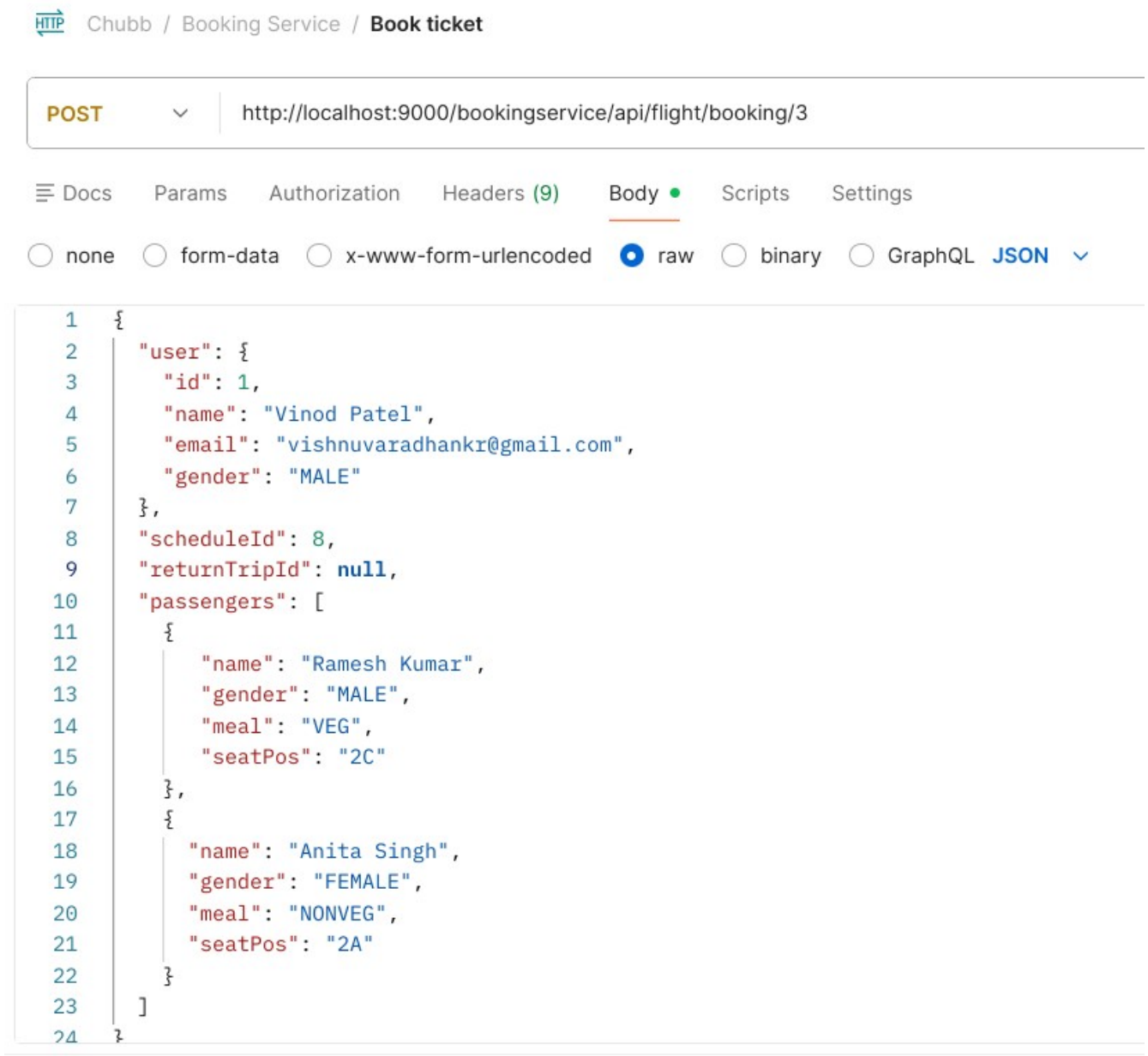


2) http://localhost:9000/flightservice/api/flight/search





3) http://localhost:9000/bookingservice/api/flight/booking/3

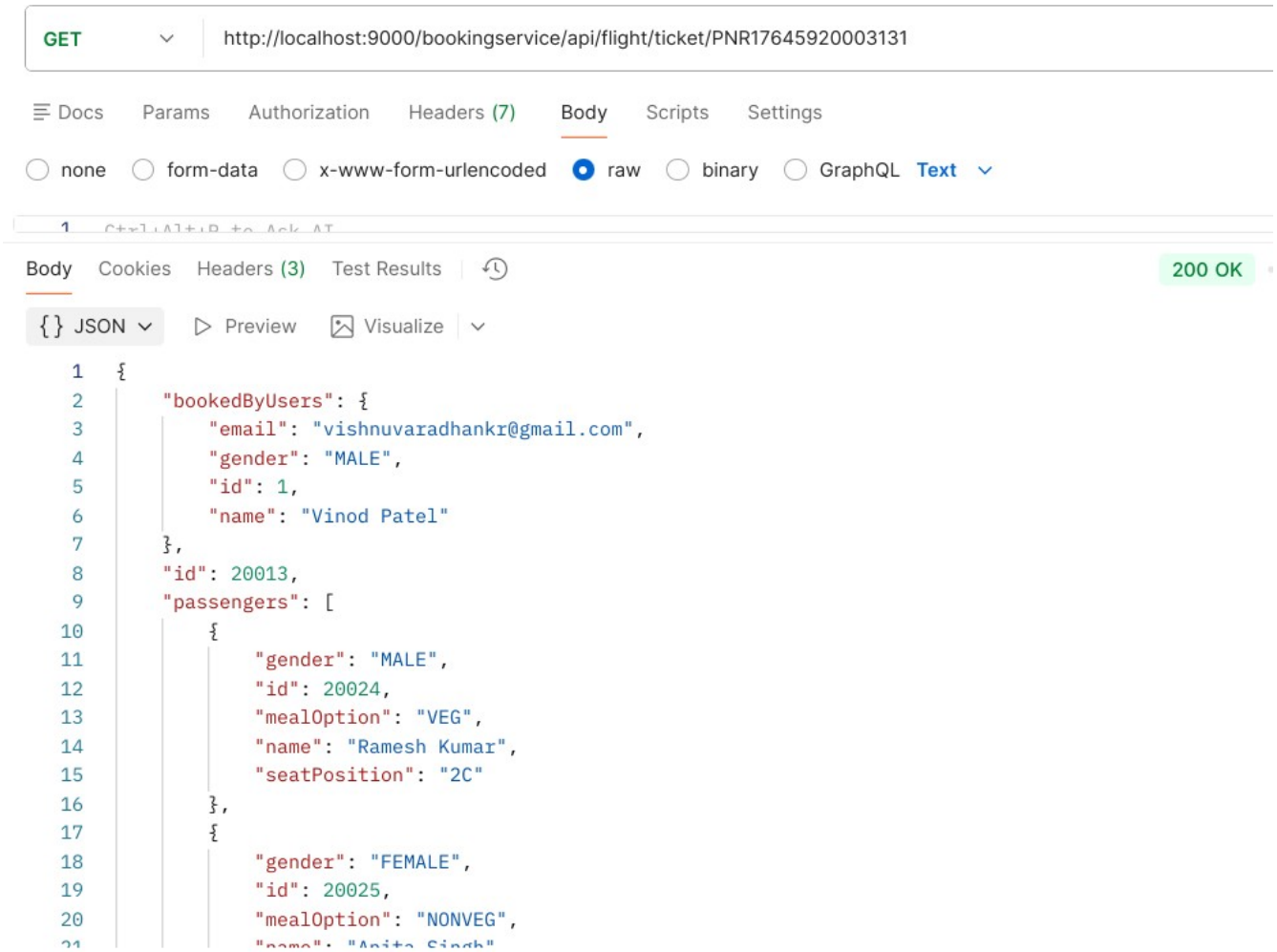


Body Cookies Headers (3) Test Results 201 Created

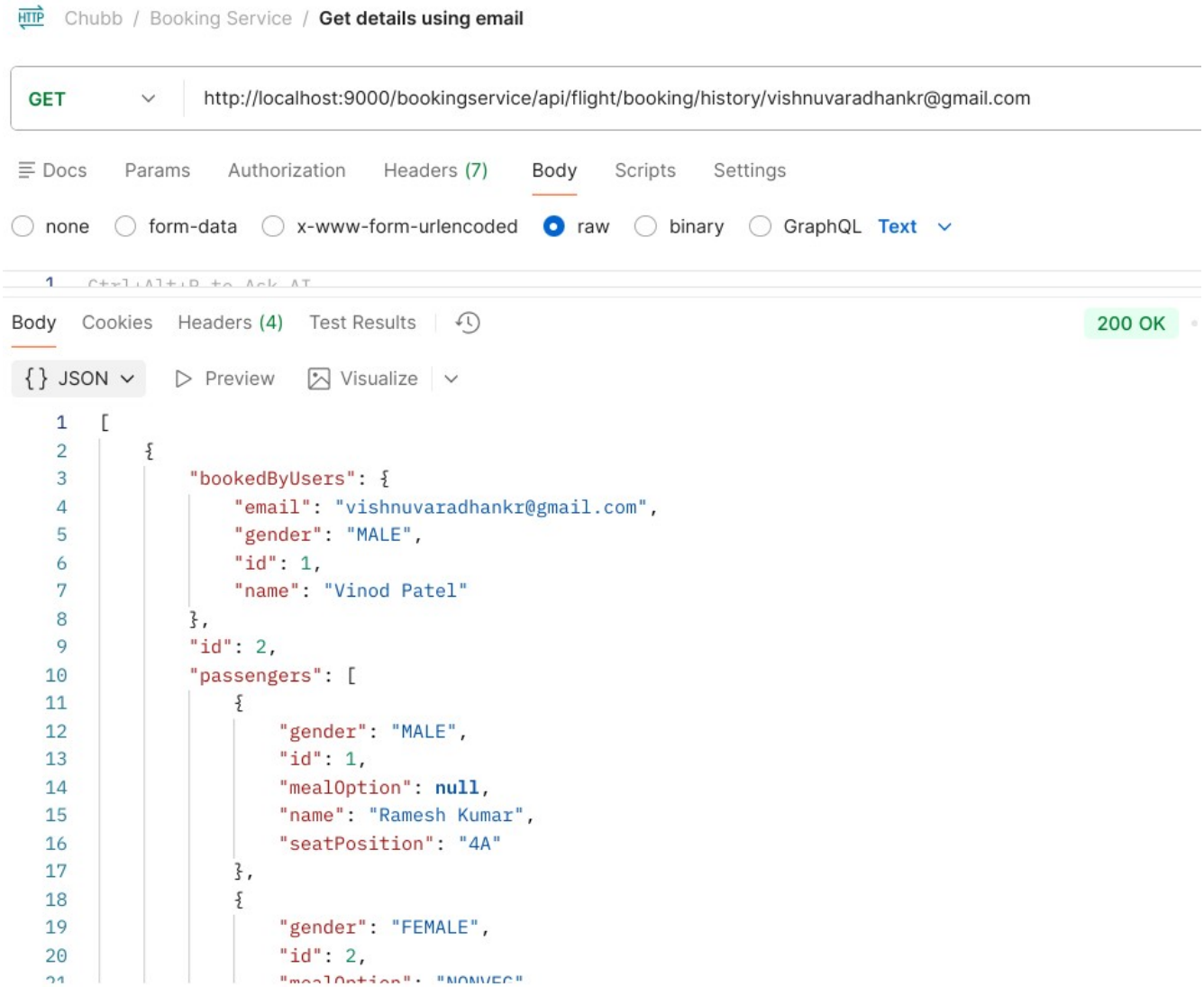
{ } JSON Preview Visualize


```
"bookedByUsers": {
    "email": "vishnuvaradhankr@gmail.com",
    "gender": "MALE",
    "id": 1,
    "name": "Vinod Patel"
},
"id": 20017,
"passengers": [
    {
        "gender": "MALE",
        "id": 20032,
        "mealOption": "VEG",
        "name": "Ramesh Kumar",
        "seatPosition": "2C"
    },
    {
        "gender": "FEMALE",
        "id": 20033,
        "mealOption": "NONVEG",
        "name": "Anita Singh",
        "seatPosition": "2A"
    }
],
"pnr": "PNR17645937139851",
```

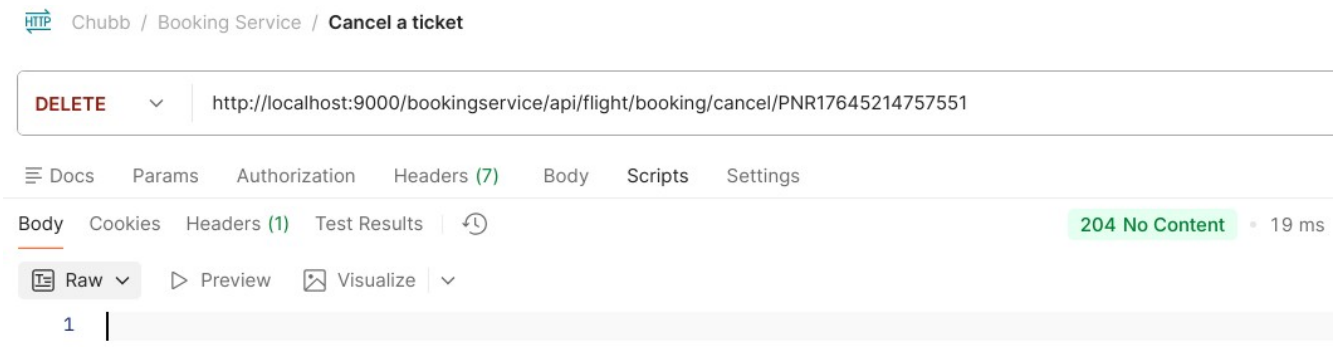
4) http://localhost:9000/bookingservice/api/flight/ticket/PNR17645920003131



5) http://localhost:9000/bookingservice/api/flight/booking/history/vishnuvaradhankr@gmail.com



6) http://localhost:9000/bookingservice/api/flight/booking/cancel/PNR17645214757551



API Request body and example response:

1) http://localhost:9000/flightservice/api/flight/airline/inventory (add flight)

Request:


```
{
"flightId": 5,
"fromCityId": 4,
"toCityId": 2,
"departureDate": "2026-07-18",
"departureTime": "2026-07-18T09:30:00",
"price": 4500.50,
"seatsAvailable": 120,
"duration": 180
}
```


Response:


```
{
"departureDate": "2026-07-19",
"departureTime": "2026-07-19T09:30:00",
"duration": 180,
"flight": {
"airline": {
"airlineName": "Spice Jet",
"id": 3
},
"columns": 6,
"id": 5,
"name": "SJ505",
"rows": 26,
"year": 2025
},
"fromCity": {
"airportCode": "BLR",
"cityName": "Bengaluru",
"id": 4
},
"id": 70015,
"price": 4500.5,
"seatsAvailable": 156,
"toCity": {
"airportCode": "BOM",
"cityName": "Mumbai",
"id": 2
}
}
```

2) http://localhost:9000/flightservice/api/flight/search (Search for flight)

Request:


```
{
"fromCityCode": "BLR",
"toCityCode":"BOM",
"date" : "2026-01-22"
}
```


Response:


```
[
{
"departureDate": "2026-01-22",
"departureTime": "2026-01-21T09:30:00",
"duration": 180,
"flight": {
"airline": {
"airlineName": "Spice Jet",
"id": 3
},
"columns": 6,
"id": 5,
"name": "SJ505",
"rows": 26,
"year": 2025
},
"fromCity": {
"airportCode": "BLR",
"cityName": "Bengaluru",
"id": 4
},
"id": 10004,
"price": 4500.5,
"seatsAvailable": 120,
"toCity": {
"airportCode": "BOM",
"cityName": "Mumbai",
"id": 2
}
}
]
```

3) http://localhost:9000/bookingservice/api/flight/booking/3 (book ticket)

Request:


```
{
"user": {
"id": 1,
"name": "Vinod Patel",
"email": "vishnuvaradhankr@gmail.com",
"gender": "MALE"
},
"scheduleId": 10,
"returnTripId": null,
"passengers": [
{
"name": "Ramesh Kumar",
"gender": "MALE",
"meal": "VEG",
"seatPos": "13C"
}
]
}
```


Response:


```
{
"bookedByUsers": {
"email": "vishnuvaradhankr@gmail.com",
"gender": "MALE",
"id": 1,
"name": "Vinod Patel"
},
"id": 30023,
"passengers": [
{
"gender": "MALE",
"id": 30004,
"mealOption": "VEG",
"name": "Ramesh Kumar",
"seatPosition": "13C"
}
],
"pnr": "PNR17646382318681",
"returnTripScheduleId": null,
"scheduleId": 10,
"status": "BOOKED"
}
```

4) http://localhost:9000/bookingservice/api/flight/ticket/PNR17645920003131 (search using pnr)

Response:


```
{
"bookedByUsers": {
"email": "vishnuvaradhankr@gmail.com",
"gender": "MALE",
"id": 1,
"name": "Vinod Patel"
},
"id": 30023,
"passengers": [
{
"gender": "MALE",
"id": 30004,
"mealOption": "VEG",
"name": "Ramesh Kumar",
"seatPosition": "13C"
}
],
"pnr": "PNR17646382318681",
"returnTripScheduleId": null,
"scheduleId": 10,
"status": "BOOKED"
}
```

5)
http://localhost:9000/bookingservice/api/flight/booking/history/vishnuvaradhankr@gmail.com
(Search history using email)

Response:


```
[{
"bookedByUsers": {
"email": "vishnuvaradhankr@gmail.com",
"gender": "MALE",
"id": 1,
"name": "Vinod Patel"},
"id": 2,
"passengers": [
{"gender": "FEMALE",
"id": 2,
"mealOption": "NONVEG",
"name": "Anita Singh",
"seatPosition": "5B"
}
],
"pnr": "PNR17643280656201",
"returnTripScheduleId": null,
"scheduleId": 1,
"status": "CANCELED"
},
{
"bookedByUsers": {
"email": "vishnuvaradhankr@gmail.com",
"gender": "MALE",
"id": 1,
"name": "Vinod Patel"
},
"id": 4,
"passengers": [
{
"gender": "MALE",
"id": 3,
"mealOption": null,
"name": "Ramesh Kumar",
"seatPosition": null
}],
"pnr": "PNR17643286947351",
"returnTripScheduleId": null,
"scheduleId": 2,
"status": "BOOKED"
}
]
```

6) http://localhost:9000/bookingservice/api/flight/booking/cancel/PNR17646373940441 (cancellation of ticket)

Response: 204 No content