

JAVA FULL STACK DEVELOPMENT

PHASE 3 PROJECT Screenshots

Project Name: Travel Booking Cab

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GetMapping:

Booking:

This endpoint retrieves all booking records, displaying user information, cab details, and travel dates. Ideal for both users and admins to review travel data.

The screenshot shows a REST client interface with a GET request to `http://localhost:8080/api/admin/bookings`. The response is a JSON object with the following structure:

```
{
  "id": 4,
  "user": {
    "id": 3,
    "username": "abc",
    "password": "abc123",
    "role": "USER",
    "bookings": [
      {
        "id": 1,
        "cab": {
          "id": 1,
          "type": "CAB",
          "status": "AVAILABLE"
        },
        "date": "2023-10-27",
        "time": "10:00",
        "status": "BOOKED"
      }
    ]
  }
}
```

PostMapping:

Users:

Facilitates user registration by securely submitting user data, such as name, email, and password, to the backend for account creation.

The screenshot shows a REST client interface with a POST request to `http://localhost:8080/api/users/users`. The request body is a JSON object: `{ "username": "user1", "password": "user1234", "role": "USER" }`. The response is a 201 status code with a JSON body: `{ "id": 4, "username": "user1", "password": "user1234", "role": "USER", "bookings": null }`.

The screenshot shows a database interface with a table containing user data. The table has columns: `id`, `password`, `role`, and `username`. The data rows are:

	id	password	role	username
1	admin123	ADMIN	admin	
2	user123	USER	User	
3	abc123	USER	abc	
4	user1234	USER	user1	

Below the table, there is a query result for the query: `SELECT * FROM travel_booking booking LIMIT 0, 1000`. The result shows 4 rows returned.

Cabs: Admins can add new cabs to the system, providing essential details like cab type, seating capacity, and pricing.

The image displays two software interfaces used for testing and database management.

Top Interface (REST Client):

- URL:** `http://localhost:8080/api/admin/cabs`
- Method:** `POST`
- Body (JSON):**

```
{  "id": 2,  "source": "Nagpur",  "destination": "Pune",  "type": "SUV",  "kms": 170.0,  "cost": 2.5}
```
- Response (JSON):**

```
{  "id": 2,  "source": "Nagpur",  "destination": "Pune",  "type": "SUV",  "kms": 170.0,  "cost": 2.5,  "bookings": [    {      "id": 4,      "source": "Pune",      "destination": "Nagpur",      "type": "SUV",      "kms": 170.0,      "cost": 2.5    }  ]}
```

Bottom Interface (SQL Client):

- SQL Query:** `SELECT * FROM travel_booking.cab;`
- Result Grid:**

id	cost	destination	kms	source	type	fare
2	2.5	Pune	170	Nagpur	SUV	0
3	0	NULL	0	NULL	NULL	0
4	2.5	Pune	170	Nagpur	SUV	0

- Action Output:**

#	Time	Action	Message	Duration / Fetch
4	09:57:41	SELECT * FROM travel_booking.cab LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

GetMapping:

Cabs:Fetches a complete list of cabs, including their attributes like capacity, pricing, and availability, for users to make informed decisions.

The image displays two screenshots of software interfaces. The top screenshot shows a REST client (likely Postman) with a GET request to `http://localhost:8080/api/admin/cabs` returning a 200 OK status. The response body is a JSON array containing one cab object with details like id, source, destination, type, kms, cost, and bookings.

The bottom screenshot shows a database interface (likely DBeaver) with a SQL query `SELECT * FROM travel_booking.cab;` executed. The result grid shows two rows of data for cabs with IDs 2 and 3, including columns for id, cost, destination, kms, source, type, and fare.

REST Client Details:

- Method: GET
- URL: `http://localhost:8080/api/admin/cabs`
- Status: 200 OK
- Response Time: 25 ms
- Response Size: 29.21 KB

JSON Response Body:

```
[{"id": 2, "source": "Nagpur", "destination": "Pune", "type": "SUV", "kms": 170.0, "cost": 2.5, "bookings": []}]
```

Database Query Details:

- Query: `SELECT * FROM travel_booking.cab;`
- Result Grid Columns: id, cost, destination, kms, source, type, fare

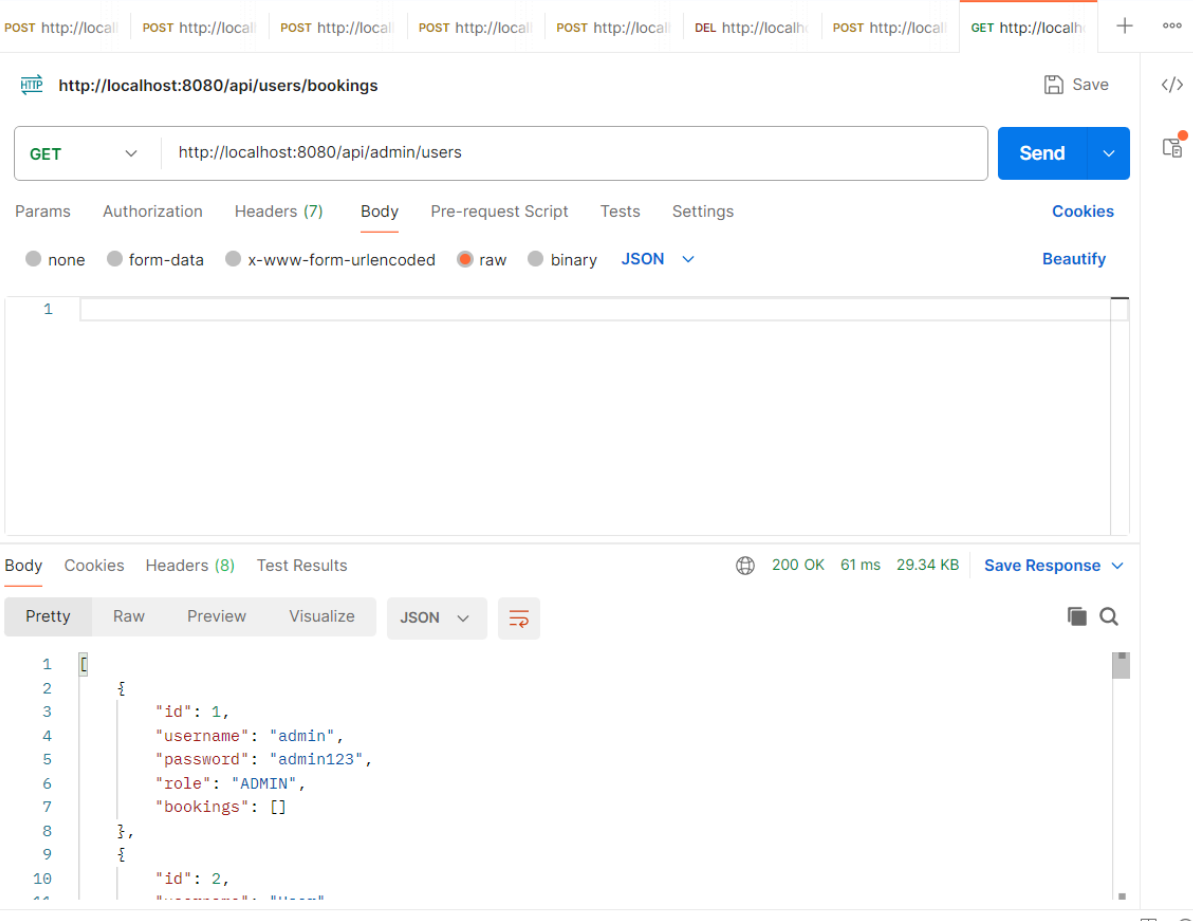
#	id	cost	destination	kms	source	type	fare
2	2.5	Pune	170	Nagpur	SUV	0	
3	0	NA	0	NA	NA	0	

Action Output:

#	Time	Action	Message	Duration / Fetch
4	09:57:41	SELECT * FROM travel_booking.cab LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

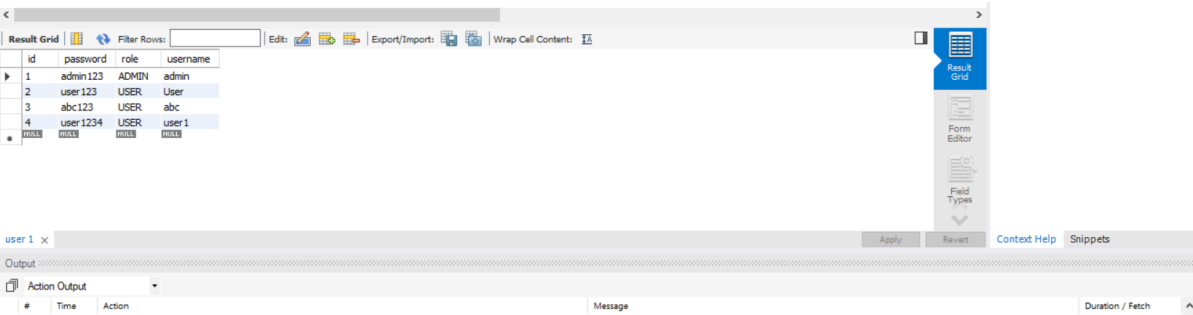
GetMapping :

Users: Admins can access the entire list of registered users, helping them monitor the application's user activity and database health



The screenshot shows a REST client interface with a GET request to `http://localhost:8080/api/admin/users`. The response is a JSON array of user objects. The first user is an admin with the username "admin" and role "ADMIN". The other users are regular users with roles "USER".

```
[{"id": 1, "username": "admin", "password": "admin123", "role": "ADMIN", "bookings": []}, {"id": 2, "username": "user123", "password": "user123", "role": "USER", "bookings": []}, {"id": 3, "username": "abc123", "password": "abc123", "role": "USER", "bookings": []}, {"id": 4, "username": "user1234", "password": "user1234", "role": "USER", "bookings": []}]
```



The screenshot shows a database client interface with a query result grid. The query is `SELECT * FROM travel_booking.booking LIMIT 0, 1000`. The results show 4 rows of user data.

#	Time	Action	Message	Duration / Fetch
5	10:50:49	SELECT * FROM travel_booking.booking LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

Put Mapping:

Bookings: Enables updates to existing bookings, allowing users to change trip details or resolve any errors.

POST http://local...

POST http://local...

POST http://local...

POST http://local...

POST http://local...

DEL http://localh...

POST http://local...

PUT http://localh...

+

...

HTTP

http://localhost:8080/api/users/bookings

Save

</>

PUT

http://localhost:8080/api/admin/bookings/7

Send

▼

Params

Authorization

Headers (9)

Body

Pre-request Script

Tests

Settings

Cookies

● none

● form-data

● x-www-form-urlencoded

● raw

● binary

JSON

▼

Beautify

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Cabs: Allows admins to modify cab records for changes in availability, pricing, or maintenance schedules.

The screenshot shows a REST client interface with a PUT request to `http://localhost:8080/api/admin/cabs/2`. The request body is a JSON object:

```
{
  "id": 2,
  "source": "Nagpur",
  "destination": "Akola",
  "type": "SUV",
  "kms": 170.0,
  "cost": 2.5
}
```

The response status is 200 OK, with a response time of 61 ms and a size of 29.28 KB. The response body is shown in the 'Pretty' view:

```
{
  "id": 2,
  "source": "Nagpur",
  "destination": "Akola",
  "type": "SUV",
  "kms": 170.0,
  "cost": 2.5,
  "bookings": [
    {
      "id": 4,
      "source": "Nagpur",
      "destination": "Akola",
      "type": "SUV",
      "kms": 170.0,
      "cost": 2.5
    }
  ]
}
```

The screenshot shows a database client interface. The 'Result Grid' displays a table of cab records:

id	cost	destination	kms	source	type	fare
2	2.5	Akola	170	Nagpur	SUV	0
3	0	Nagpur	0	Nagpur	Nagpur	0

The 'Action Output' log shows the following actions:

#	Time	Action	Message	Duration / Fetch
4	09:57:41	SELECT * FROM travel_booking.cab LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
5	10:50:49	SELECT * FROM travel_booking.booking LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

DeleteMapping:

Bookings: Removes selected booking records from the database, either due to cancellations or administrative cleanup.

POST http://localhost:8080/api/users/bookings

DELETE http://localhost:8080/api/admin/bookings/4

Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies Beautify

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

```
1 {
2   "id": 2,
3   "source": "Nagpur",
4   "destination": "Akola",
5   "type": "SUV",
6   "kms": 170.0,
7   "cost": 2.5
8 }
```

Body Cookies Headers (6) Test Results 204 No Content 80 ms 201 B Save Response

Pretty Raw Preview Visualize Text

1

	id	cab_id	date_time	status	user_id	dropoff_location	fare	pickup_location
▶	5	2	2024-12-13T10:00:00	BOOKED	3	Buldhana	0	Akola
	6	2	2024-12-13T10:00:00	BOOKED	3	Buldhana	175	Akola
	7	2	2024-12-13T10:00:00	BOOKED	3	Buldhana	0	Akola
*	8	2	2024-12-13T10:00:00	CANCELLED	3	Buldhana	0	Akola

booking 1 x

Output

Action Output

Time Action Message Duration / Fetch

DeleteMappings:

Cabs:Deletes cab entries that are no longer in service, ensuring the database reflects only active resources.

The screenshot shows a REST client interface with a DELETE request to `http://localhost:8080/api/admin/cabs/3`. The request body is a JSON object representing a cab entry. The response is a 204 No Content status.

Request:

```
DELETE http://localhost:8080/api/admin/cabs/3
```

Body:

```
{  "id": 2,  "source": "Nagpur",  "destination": "Akola",  "type": "SUV",  "kms": 170.0,  "cost": 2.5}
```

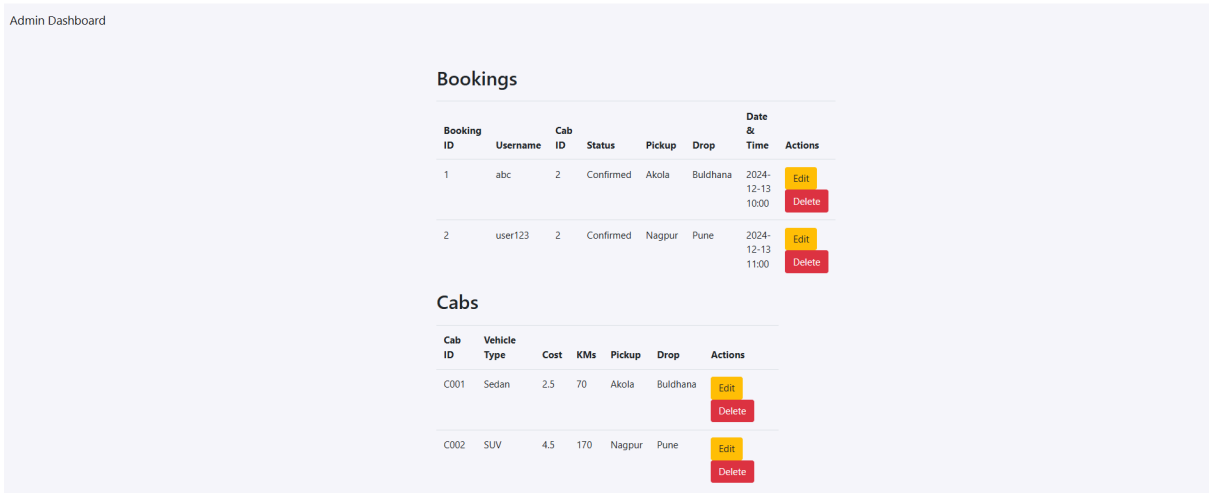
Response: 204 No Content

Result Grid:

	id	cost	destination	kms	source	type	fare
▶	2	2.5	Akola	170	Nagpur	SUV	0
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Frontend

Admin Dashboard:A centralized control panel for administrators to manage the app's resources, including users, bookings, and cab details. It provides options to create, update, delete, or retrieve information quickly.



Edit Booking:Provides users and admins with the flexibility to modify the details of an existing booking, such as changing dates, destinations, or selected cabs.

Admin Dashboard

Edit Booking Details

Booking ID

Username

Cab ID

Booking Status

Confirmed

Pickup Location

Drop Location

Date & Time

dd-mm-yyyy --:--

Save Changes

Cancel

Delete Bookings

A straightforward option to delete old or invalid bookings, helping maintain the application's database integrity.

Admin Dashboard

Bookings

Booking ID	Username	Cab ID	Status	Pickup	Drop	Date & Time	Actions
1	abc	2	Confirmed	Akola	Buldhana	2024-12-13 10:00	<div>EditDelete</div>

Edit Cab:Admins can update cab details such as pricing, capacity, and availability through an intuitive interface to keep the system up-to-date.

Admin Dashboard

Edit Cab Details

Cab ID

Vehicle Type

Cost

Kilometers

Pickup Location

Drop Location

Save Changes

Cancel

Delete Cabs:Discontinued or inactive cabs can be removed from the database to streamline operations and improve user experience.

Cabs

Cab ID	Vehicle Type	Cost	KMs	Pickup	Drop	Actions
C001	Sedan	2.5	70	Akola	Buldhana	<div>Edit</div> <div>Delete</div>

Login Page:This secure login interface allows users and administrators to enter their credentials and access their respective dashboards. Users are directed to their booking dashboard, while admins can manage the entire portal.

Cab Booking Home User Login

Welcome to Cab Booking System

Please login as an admin or user to continue.

[Admin Login](#)

Username:

Password:

[User Login](#)

User Dashboard to book Cab: Designed with simplicity in mind, this dashboard allows customers to search for available cabs and book them for their desired travel dates and locations.

User Dashboard

Search for a Cab

Pickup Location

Drop Location

[Search](#)

Cab Booking: A dedicated section that enables users to input trip details, view available options, and confirm their bookings with ease.

127.0.0.1:5500/user.html

Your Orders Arrays Introduction... is responsible Project File

User Dashboard

127.0.0.1:5500 says
Cab with ID 1 has been booked!

[OK](#)

Pickup Location

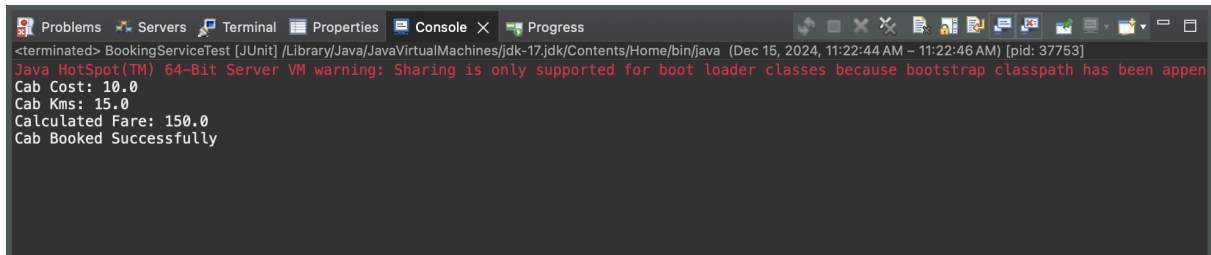
Drop Location

[Search](#)

Sedan
Fare: Rs475

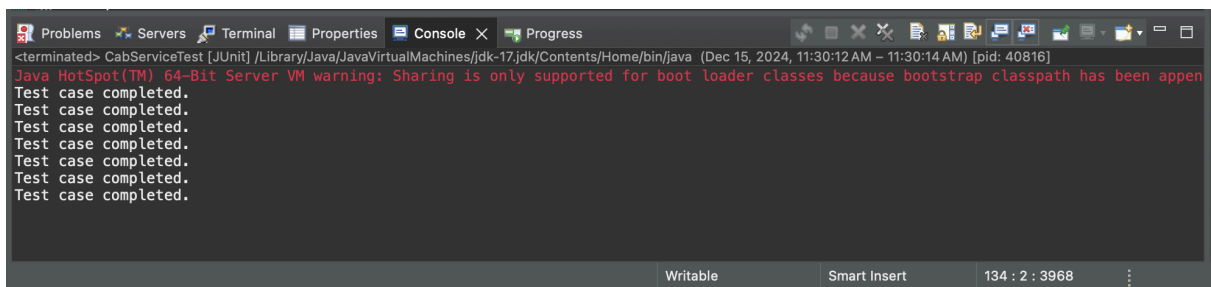
[Book Cab](#)

BookingService Junit:Comprehensive test cases ensure that all booking operations, including creation, updates, and deletions, function as expected without errors.



```
<terminated> BookingServiceTest [JUnit] /Library/Java/JavaVirtualMachines/jdk-17.jdk/Contents/Home/bin/java (Dec 15, 2024, 11:22:44 AM ~ 11:22:46 AM) [pid: 37753]
Java HotSpot(TM) 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appen
Cab Cost: 10.0
Cab Kms: 15.0
Calculated Fare: 150.0
Cab Booked Successfully
```

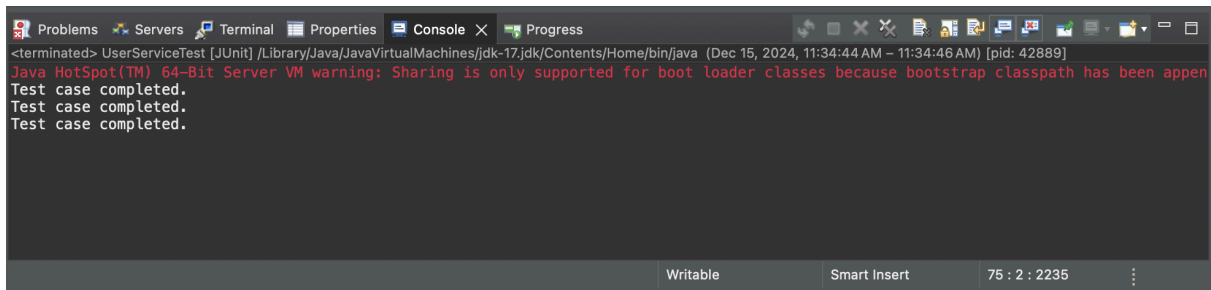
CabService Junit:Verifies the functionality of cab management, such as adding, editing, and deleting cab details. This ensures the accuracy and reliability of cab-related features.



```
<terminated> CabServiceTest [JUnit] /Library/Java/JavaVirtualMachines/jdk-17.jdk/Contents/Home/bin/java (Dec 15, 2024, 11:30:12 AM ~ 11:30:14 AM) [pid: 40816]
Java HotSpot(TM) 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appen
Test case completed.
Test case completed.
Test case completed.
Test case completed.
Test case completed.
Test case completed.
Test case completed.
```

UserService Junit:

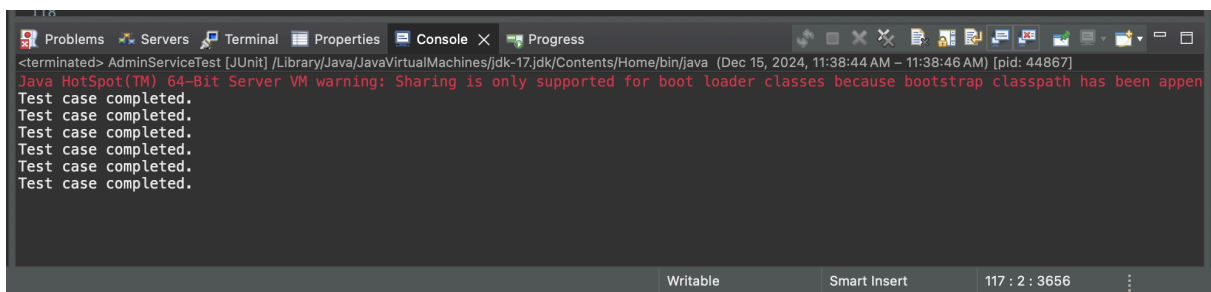
Focuses on testing user operations, including account registration, updates, and login functionality, to provide a seamless user experience.



```
<terminated> UserServiceTest [JUnit] /Library/Java/JavaVirtualMachines/jdk-17.jdk/Contents/Home/bin/java (Dec 15, 2024, 11:34:44 AM – 11:34:46 AM) [pid: 42889]
Java HotSpot(TM) 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appended
Test case completed.
Test case completed.
Test case completed.
```

AdminService Junit:

Ensures that admin-specific actions, such as managing users, cabs, and bookings, are error-free and align with the system’s requirements.



```
<terminated> AdminServiceTest [JUnit] /Library/Java/JavaVirtualMachines/jdk-17.jdk/Contents/Home/bin/java (Dec 15, 2024, 11:38:44 AM – 11:38:46 AM) [pid: 44867]
Java HotSpot(TM) 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appended
Test case completed.
Test case completed.
Test case completed.
Test case completed.
Test case completed.
Test case completed.
```

Flow Chart of the project:

