

Bus Booking System API Documentation

Middleware Usage

This API uses middleware to verify users and admins:

- Only Admins can add and update buses.
- Users can update their own profile.
- Authentication tokens are stored in cookies.
- Data is stored in MongoDB.

Containerization

```
ubuntu@ip-172-31-13-219:~/Bus_Booking_API/backend$ docker run -it shanjithv/node-backend npm start
> backend@1.0.0 start
> node server.js

(node:19) [MONGODB DRIVER] Warning: useUrlParser is a deprecated option: useUrlParser has no effect since Node.js Driver version 4.0.0 and will be removed in the next major version
(Use 'node --trace-warnings ...' to show where the warning was created)
(node:19) [MONGODB DRIVER] Warning: useUnifiedTopology is a deprecated option: useUnifiedTopology has no effect since Node.js Driver version 4.0.0 and will be removed in the next major version
The server is running on port 4000
Database connected
```

Deployment Platform:

```
ubuntu@ip-172-31-13-219:~$ ls
Bus_Booking_API
ubuntu@ip-172-31-13-219:~$ cd Bus_Booking_API/
ubuntu@ip-172-31-13-219:~/Bus_Booking_API$ ls
backend
ubuntu@ip-172-31-13-219:~/Bus_Booking_API$ cd backend/
ubuntu@ip-172-31-13-219:~/Bus_Booking_API/backend$ ls
Dockerfile  config  controllers  middleware  models  node_modules  package-lock.json  package.json  routes  server.js
ubuntu@ip-172-31-13-219:~/Bus_Booking_API/backend$
```

IP ADDRESS

<http://13.203.79.126:4000>

1. User Registration

Endpoint:

POST /api/user/register

Base URL:

http://localhost:4000

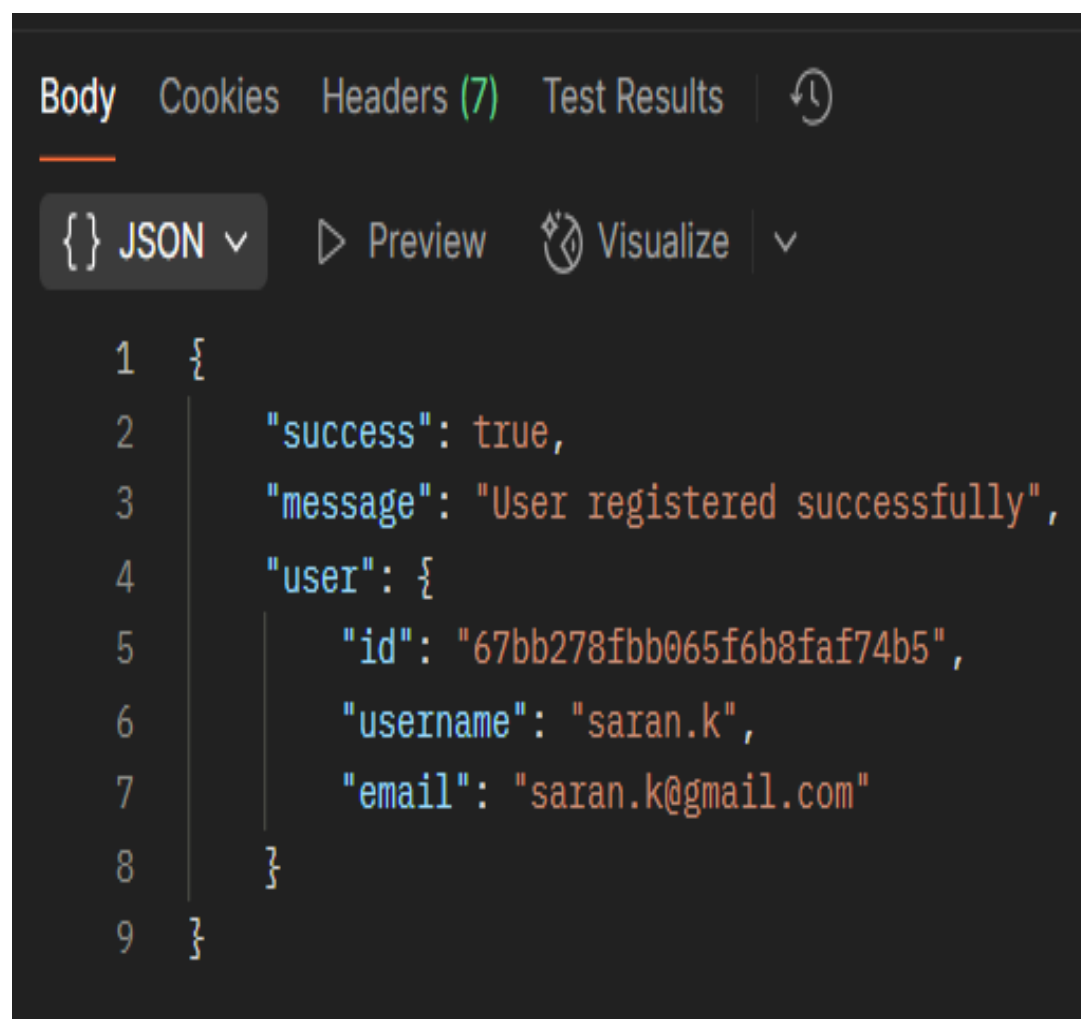
Description:

Registers a new user in the system.

Request Body:


```
{  
  "username": "saran.k",  
  "email": "saran.k@gmail.com",  
  "password": "saran12345"  
}
```

Success Response:



MongoDB:

QUERY RESULTS: 1-1 OF 1

```
  _id: ObjectId('67b8953ab3252c5c17a1fc9d')
  username : "saran"
  email : "saran.k@gmail.com"
  password : "$2b$10$twOBdFHeZ0E7vArtY9jfNeYarkIClrKI6zBUwWda5dnQJysY8udMa"
  isAdmin : false
  createdAt : 2025-02-21T15:01:14.621+00:00
  updatedAt : 2025-02-21T15:04:17.356+00:00
  __v : 0
```

2. User Login

Endpoint:

POST /api/user/login

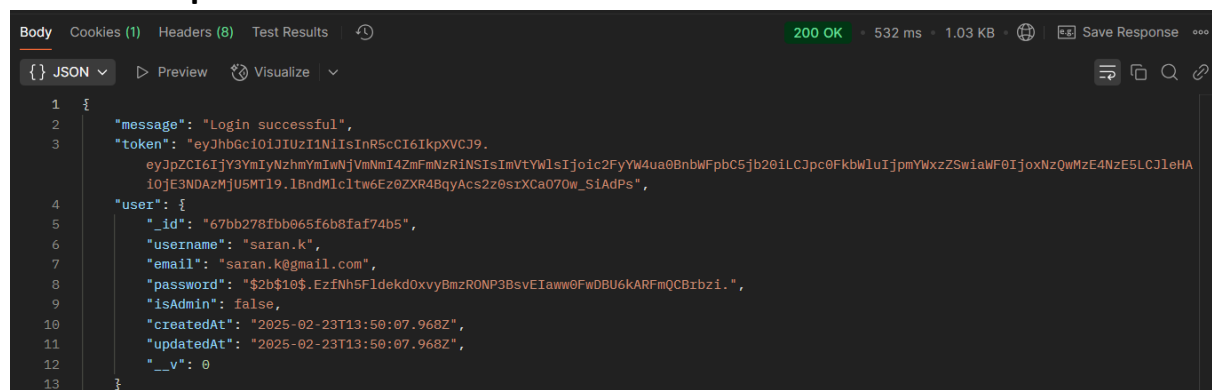
Description:

Authenticates a user and returns a JWT token stored in cookies.

Request Body:

```
{
  "email": "saran.k@gmail.com",
  "password": "saran12345"
}
```

Success Response:



```
Body  Cookies (1)  Headers (8)  Test Results  200 OK  532 ms  1.03 KB  Save Response
{ } JSON  Preview  Visualize
1  {
2    "message": "Login successful",
3    "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6IjY3YmIyNzhmYmIwNjVmNmI4ZmFmNzRiNSIsImVtYWlsIjoic2FyYW4ua0BnbWpCbC5jb20iLCJpc0FkbWluIjpmaWxzZSwiaWF0IjoxNzQwMzE4NzE5LjleHA.i0jE3NDAzMjU5MTl9.1BndM1c1tw6Ez0ZXR48qyAcs2z0srXCa070w_SiAdPs",
4    "user": {
5      "_id": "67bb278fbb065f6b8faf74b5",
6      "username": "saran.k",
7      "email": "saran.k@gmail.com",
8      "password": "$2b$10$.EzfNhsFIdek0xvyBmzRONP3BsvEIaww0FwDBU6kARFmQCBzbi.",
9      "isAdmin": false,
10     "createdAt": "2025-02-23T13:50:07.968Z",
11     "updatedAt": "2025-02-23T13:50:07.968Z",
12     "__v": 0
13   }
}
```

3. Update User(User ONLY)

Endpoint:

PUT /api/user/updateUser/:userId

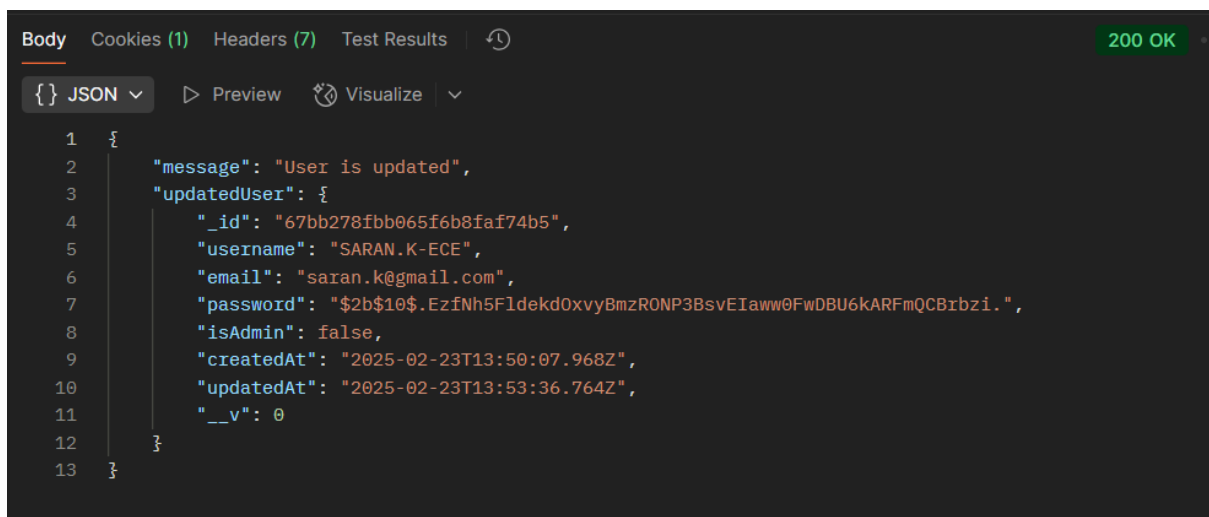
Description:

Updates the user details. Users can only update their own profile.

Request Body:

```
{
  "username": "SARAN.K-ECE"
}
```

Success Response:



MongoDB:

QUERY RESULTS: 1-1 OF 1

```
_id: ObjectId('67b8953ab3252c5c17a1fc9d')
username : "SARAN.K-ECE"
email : "saran.k@gmail.com"
password : "$2b$10$twOBdFHeZ0E7vARtY9jfNeYarkIClrKI6zBUwWDa5dnQJysY8udMa"
isAdmin : false
createdAt : 2025-02-21T15:01:14.621+00:00
updatedAt : 2025-02-22T05:07:32.523+00:00
__v : 0
```

4. Admin Registration

Endpoint:

POST /api/admin/register

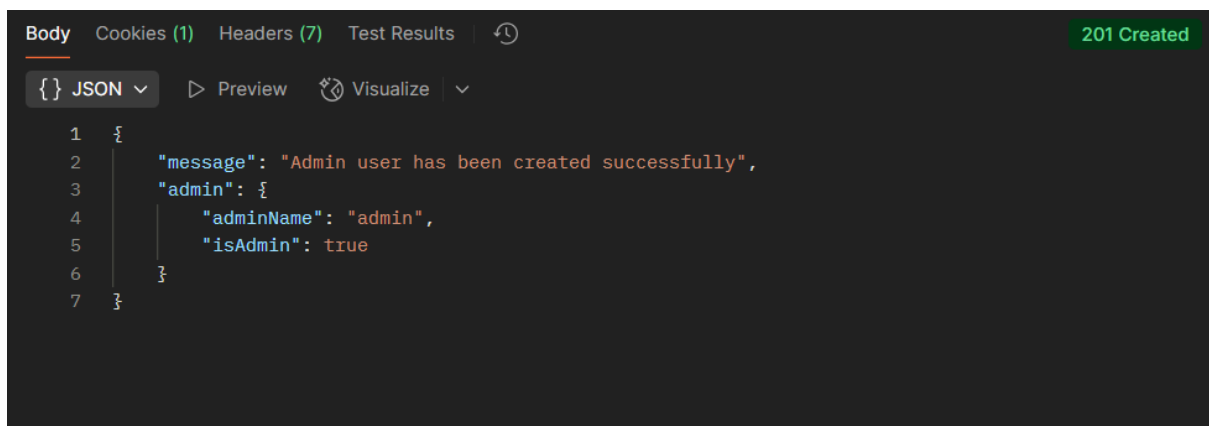
Description:

Registers an admin user.

Request Body:

```
{  
  "username": "admin",  
  "email": "admin@gmail.com",  
  "password": "admin12345"  
}
```

Success Response:



MongoDB:

QUERY RESULTS: 1-1 OF 1

```
▶ {
  _id: ObjectId('67b8966e16e8e2fbe5c4863d')
  username: "admin"
  email: "admin@gmail.com"
  password: "$2b$10$zw5bhGAocuG43CKJJzo9Puf7kDQei/ACa2Zdi1HPtBbZQH0hjfja"
  isAdmin: true
  createdAt: 2025-02-21T15:06:22.495+00:00
  updatedAt: 2025-02-21T15:06:22.495+00:00
  __v: 0
}
```

5. Admin Login

Endpoint:

POST /api/admin/login

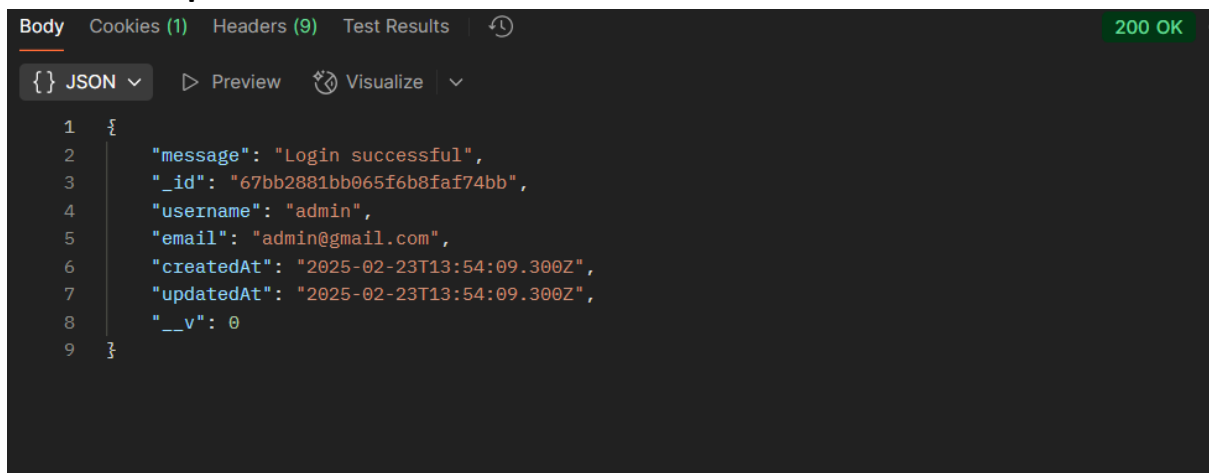
Description:

Authenticates an admin and returns a token stored in cookies.

Request Body:

```
{
  "email": "admin@gmail.com",
  "password": "admin12345"
}
```

Success Response:



6. Add Bus (Admin Only)

Endpoint:

POST /api/bus/addBus

Description:

Adds a new bus to the system. Only admins can perform this action.

Request Body:

```
{
  "name": "Audi AC",
  "number": "TN401",
  "busType": "Sleeper",
  "totalSeats": 38,
  "availableSeats": 19,
  "route": "Salem to Bangalore",
  "departureTime": "9:00 PM",
  "arrivalTime": "8:00 AM"
}
```

Success Response:

```
Body Cookies (1) Headers (7) Test Results 201 Created
{} JSON Preview Visualize
1 {
2   "success": true,
3   "message": "Bus added successfully",
4   "bus": {
5     "name": "Audi AC",
6     "number": "TN401",
7     "busType": "Sleeper",
8     "totalSeats": 30,
9     "availableSeats": 30,
10    "route": "Chennai to Bangalore",
11    "departureTime": "10:00 PM",
12    "arrivalTime": "6:30 AM",
13    "_id": "67bb28e6bb065f6b8faf74bf",
14    "createdAt": "2025-02-23T13:55:50.417Z",
15    "updatedAt": "2025-02-23T13:55:50.417Z",
16    "__v": 0
```

MongoDB:

QUERY RESULTS: 1-2 OF 2

```
_id: ObjectId('67b81b5665b301e8fc2b39a1')
name : "BENZ AC"
number : "TN101"
busType : "Sleeper"
totalSeats : 38
availableSeats : 38
route : "Salem to Bangalore"
departureTime : "9:00 PM"
arrivalTime : "8:00 AM"
createdAt : 2025-02-21T06:21:10.223+00:00
updatedAt : 2025-02-21T06:21:10.223+00:00
__v : 0
```

7. View All Buses

Endpoint:

GET /api/bus/allbus

Description:

Fetches all available buses.

Success Response:


```
Body Cookies (1) Headers (7) Test Results 200 OK
{} JSON Preview Visualize
1  {
2    "success": true,
3    "buses": [
4      {
5        "_id": "67b81b5665b301e8fc2b39a1",
6        "name": "BENZ AC",
7        "number": "TN301",
8        "busType": "Sleeper",
9        "totalSeats": 38,
10       "availableSeats": 38,
11       "route": "Salem to Bangalore",
12       "departureTime": "9:00 PM",
13       "arrivalTime": "8:00 AM",
14       "createdAt": "2025-02-21T06:21:10.223Z",
15       "updatedAt": "2025-02-21T06:21:10.223Z",
16       "__v": 0
17     },
18     {
19       "_id": "67bb28e6bb065f6b8faf74bf",
20       "name": "Audi AC",
21       "number": "TN101",
22       "busType": "Sleeper",
23       "totalSeats": 30,
24       "availableSeats": 30,
25       "route": "Chennai to Bangalore",
26       "departureTime": "10:00 PM",
27       "arrivalTime": "6:30 AM",
```

MongoDB:

QUERY RESULTS: 1-2 OF 2

```
_id: ObjectId('67b81b5665b301e8fc2b39a1')
name : "BENZ AC"
number : "TN101"
busType : "Sleeper"
totalSeats : 38
availableSeats : 38
route : "Salem to Bangalore"
departureTime : "9:00 PM"
arrivalTime : "8:00 AM"
createdAt : 2025-02-21T06:21:10.223+00:00
updatedAt : 2025-02-21T06:21:10.223+00:00
__v : 0
```



```
_id: ObjectId('67b95c711344202fdb19e6c')
name : "Audi AC"
number : "TN401"
busType : "Sleeper"
totalSeats : 30
availableSeats : 30
route : "Chennai to Bangalore"
departureTime : "10:00 PM"
arrivalTime : "6:30 AM"
createdAt : 2025-02-22T05:11:13.325+00:00
updatedAt : 2025-02-22T05:11:13.325+00:00
__v : 0
```

8.Update Bus(Admin Only)

Endpoint:

PUT /api/bus/updateBus/:busId

Description:

Updates the details of a specific bus. Only admins can update buses.

Request Body:

```
{
  "number":"TN101"
}
```

Success Response:

```
Body Cookies (1) Headers (7) Test Results 200 OK
{} JSON Preview Visualize
1 {
2   "success": true,
3   "message": "Bus is updated",
4   "updatedBus": {
5     "_id": "67bb28e6bb065f6b8faf74bf",
6     "name": "Audi AC",
7     "number": "TN101",
8     "busType": "Sleeper",
9     "totalSeats": 30,
10    "availableSeats": 30,
11    "route": "Chennai to Bangalore",
12    "departureTime": "10:00 PM",
13    "arrivalTime": "6:30 AM",
14    "createdAt": "2025-02-23T13:55:50.417Z",
15    "updatedAt": "2025-02-23T13:57:40.405Z",
16    "__v": 0
17  }
18 }
```

MongoDB:

```
_id: ObjectId('67b95c711344202fdb19e6c')
name : "Audi AC"
number : "TN401"
busType : "SemiSleeper"
totalSeats : 30
availableSeats : 30
route : "Chennai to Bangalore"
departureTime : "10:00 PM"
arrivalTime : "6:30 AM"
createdAt : 2025-02-22T05:11:13.325+00:00
updatedAt : 2025-02-22T05:17:03.626+00:00
__v : 0
```

9. Book a Bus

Endpoint:

POST /api/booking/book

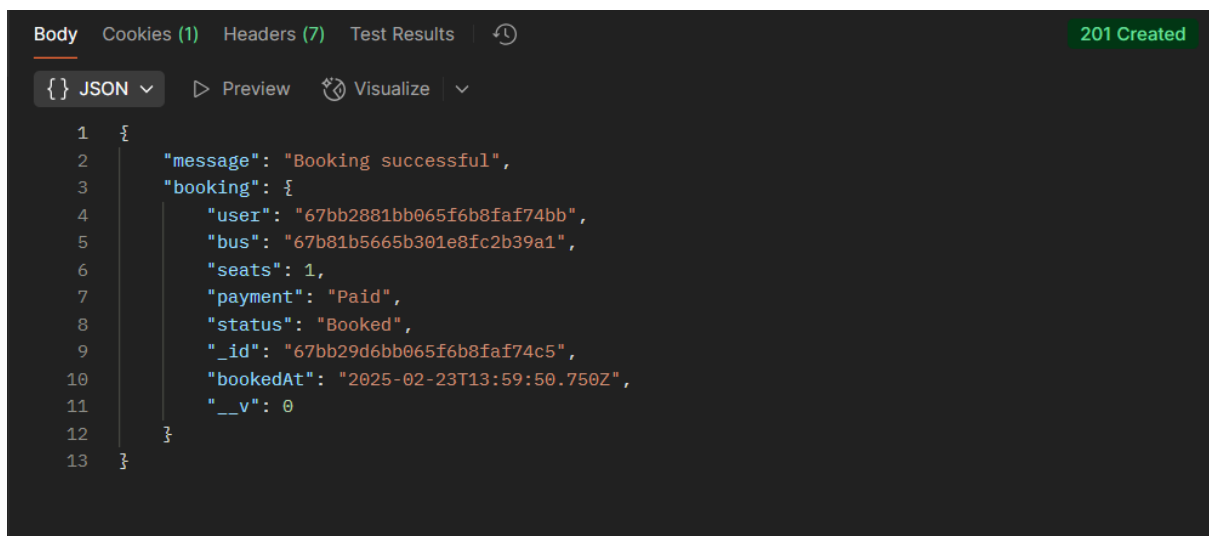
Description:

Books a seat in a bus.

Request Body:

```
{  
  "busId": "67b896f623b0ecd1c782415b",  
  "seats": 1,  
  "payment": "Paid"  
}
```

Success Response:



MongoDB:

QUERY RESULTS: 1-2 OF 2

```
_id: ObjectId('67b81c2365b301e8fc2b39b2')  
user : ObjectId('67b81b5565b301e8fc2b399d')  
bus  : ObjectId('67b81b5665b301e8fc2b39a1')  
seats : 1  
payment : "Paid"  
status : "Booked"  
bookedAt : 2025-02-21T06:24:35.420+00:00  
__v : 0
```

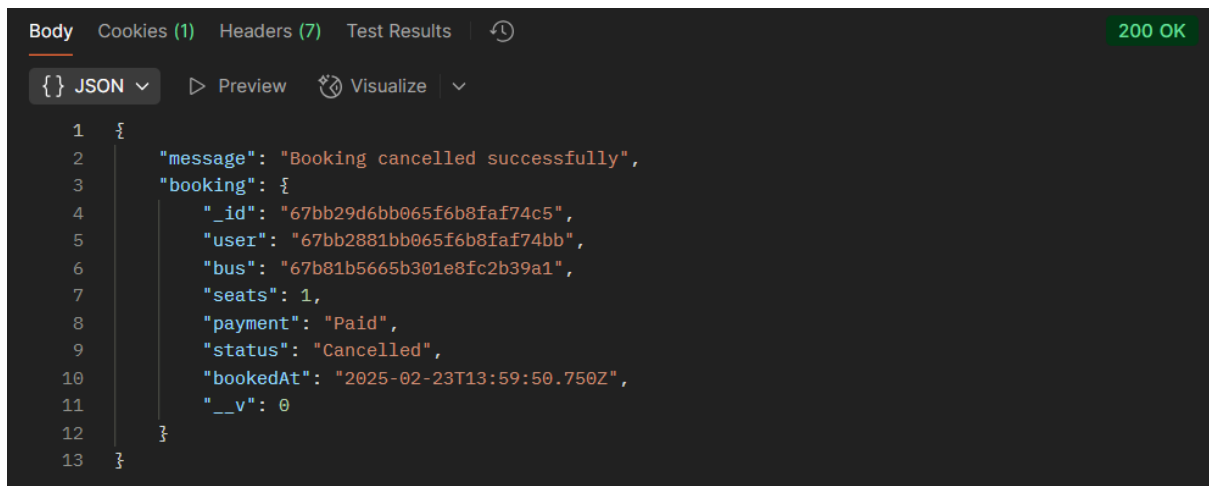
10. Cancel Booking

Endpoint:

DELETE /api/booking/cancel/:bookingId

Description:

Cancels an existing bus booking.

Success Response:

The screenshot shows a REST client interface with the following details:

- Status:** 200 OK
- Body:** JSON
- JSON Content:**

```
1 {
2   "message": "Booking cancelled successfully",
3   "booking": {
4     "_id": "67bb29d6bb065f6b8faf74c5",
5     "user": "67bb2881bb065f6b8faf74bb",
6     "bus": "67b81b5665b301e8fc2b39a1",
7     "seats": 1,
8     "payment": "Paid",
9     "status": "Cancelled",
10    "bookedAt": "2025-02-23T13:59:50.750Z",
11    "__v": 0
12  }
13 }
```

MongoDB:

The screenshot shows a MongoDB document viewer with the following details:

- Document:**

```
{
  "_id": ObjectId('67b89add23b0ecd1c7824161'),
  "user": ObjectId('67b8966e16e8e2fbe5c4863d'),
  "bus": ObjectId('67b896f623b0ecd1c782415b'),
  "seats": 1,
  "payment": "Paid",
  "status": "Cancelled",
  "bookedAt": 2025-02-21T15:25:17.606+00:00,
  "__v": 0
}
```

11. My Bookings

Endpoint:

GET /api/booking/my-bookings

Description:

Retrieves all bookings of the logged-in user.

Success Response:

```
1  {
2    "bookings": [
3      {
4        "_id": "67bb29d6bb065f6b8faf74c5",
5        "user": "67bb2881bb065f6b8faf74bb",
6        "bus": {
7          "_id": "67b81b5665b301e8fc2b39a1",
8          "name": "BENZ AC",
9          "totalSeats": 38,
10         "route": "Salem to Bangalore"
11       },
12       "seats": 1,
13       "payment": "Paid",
14       "status": "Cancelled",
15       "bookedAt": "2025-02-23T13:59:50.750Z",
16       "__v": 0
17     }
18   ]
19 }
```

MongoDB:



```
_id: ObjectId('67b89add23b0ecd1c7824161')
user : ObjectId('67b8966e16e8e2fbe5c4863d')
bus : ObjectId('67b896f623b0ecd1c782415b')
seats : 1
payment : "Paid"
status : "Cancelled"
bookedAt : 2025-02-21T15:25:17.606+00:00
__v : 0
```

QUERY RESULTS: 1-2 OF 2

```
_id: ObjectId('67b81c2365b301e8fc2b39b2')
user : ObjectId('67b81b5565b301e8fc2b399d')
bus : ObjectId('67b81b5665b301e8fc2b39a1')
seats : 1
payment : "Paid"
status : "Booked"
bookedAt : 2025-02-21T06:24:35.420+00:00
__v : 0
```